MEDIA CYBERSECURITY
SEMINAR
AN EBU EVENT

SHAPING A MORE SECURE MEDIA INDUSTRY

BIOS

### 09:00 – 09:10 / **Welcome & Introduction**

Antonio Arcidiacono is the EBU's Director of Technology & Innovation. He has extensive experience in conceiving, developing and taking new products and services to market. He is an internationally acclaimed expert in digital television, satellite communications, IP-based multimedia services and mobile telecommunications. With strong knowledge of the European market, he has worked closely with the leading players in the fields of Digital TV and Multimedia Services, and with European institutions at a technical, standardization, regulatory and competition level. Antonio was Director of Innovation, and a Member of the Management Committee, at Eutelsat from 2008 -2018 where he was responsible for launching innovative IP based satellite services. He joined Eutelsat in 1990 and took part in key phases of its development from an international organization to privatization in 2001 and to the IPO in 2005. Before working at Eutelsat, Antonio worked for the European Space Agency and started his career working for Telespazio and Selenia Spazio. He has a Doctorate in Electronics & Telecommunications Engineering from the University of Pisa.

Hans Hoffmann 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 production technologies department until moving to the EBU in 2000. In the EBU he has been leading many activities on media integration, production technologies, video codec evaluations, he established the EBU HDTV testing lab, and work with EBU Members on IT based digital workflows and recently UHDTV. He has been author of many EBU Technical documents; IEEE papers and is a standing speaker and contributor to international conferences. Hans is a fellow of the SMPTE and a member of the SID and FKT and IEEE and was the SMPTE Engineering Vice President from 2011-13.

KEYNOTE

09:10 – 09:40 / **COVID-19 Cybersecurity attacks**
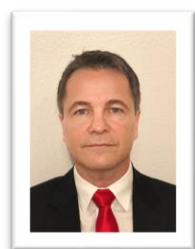
Cybersecurity technologies to identify, protect, detect, respond and recover are extremely important, but not sufficient. HumanOS upgrade is required to safely use the Internet and It is not only about training and awareness. It is about the way users must behave online and IT community must openly acknowledge system vulnerabilities. Humans are the weakest and strongest links in Cybersecurity.

As Chief Information Security Officer (CISO), **Flavio Aggio** is responsible for Information Security and Cybersecurity at the World Health Organization (WHO). Additionally, he represents WHO in key forums focused on Information Security and Cybersecurity. With more than 30 years of experience in specialized chemical manufacturing, semiconductor, consumer product, government, and international organization industries, Flavio brings tremendous technical leadership and operational expertise to WHO. Prior to joining WHO, Flavio was the Chief Technology Officer at the City and County of San Francisco, where he developed technology solutions to modernize and protect the city. Before that, he held technical leadership positions in Enterprise Architecture, Project Management, Telecommunications, and IT operations with Unisys, ASML, Dow Chemical, and Rohm & Haas. In 2014, Flavio enabled the interconnection of the San Francisco and San Jose WiFi networks. The two cities were using a new technology (Hotspot 2.0) allowing smartphones to automatically connect and roam between their two networks as well as provide a layer of security on what would not normally be available in wide-open public hotspots. Flavio holds a Bachelor of Science in Physics from Sao Paulo University in Brazil and an Executive MBA from Temple University in the USA.

SESSION 1: BROADCAST INFRASTRUCTURE

09:40 – 10:00 / **Designing secure media systems**

In this presentation we will show how the new version of the recommendation R143 looks like. This Recommendation suggests a set of security safeguards to be applied when planning and designing media systems, software and services.

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).

10:00 – 10:20 / **Control Plane Security for live IP**

Live IP offers broadcasters new flexibility, but also presents new security challenges for those to traditional facility infrastructure. This includes preventing, and minimising the effect of, control plane attacks to networked media systems. The presentation will look at how best practice for securing web-based systems and APIs can benefit the industry, how this is being put into practice with the AMWA Networked Media Open Specifications, and what it will mean for broadcasters. We will also examine what this may mean for securing hybrid production architectures using cloud-based resources.

Peter Brightwell is a Lead Engineer at BBC R&D, where he is leading work to guide the BBC's transition to IP. Working mostly at R&D but also in other parts of the BBC, Peter has an extensive background in broadcast and technology, in particular video compression, file-based acquisition, networked delivery, and virtual graphics. He is a frequent contributor to industry work on interoperability and currently chairs the Networked Media Incubator and NMOS Security groups of the Advanced Media Workflow Association, and is chair of EBU's Automation and Provisioning project and a vice-chair of the Infrastructure and Security Strategic Programme.

10:20 – 10:40 / Broadcast hardware security: The JT-NM Tested programme

Gerben Dierick (VRT)

**10:40 – 11:00 / Best practices to secure your broadcast infrastructure in the Cloud**

This presentation will be an overview of the security tools available on AWS. We will provide the best practices and customer use cases to illustrate how to secure broadcast infrastructure in AWS

Raphaël Goldwaser is a Senior Specialist Solutions Architect in AWS for the Media & Entertainment industry across EMEA team. He has been working for 15 years in the media industry, working mainly on IPTV headends and streaming architectures.

SESSION 2: SOCIAL ENGINEERING

11:20 – 11:40 / Password policy: a behavioural science perspective
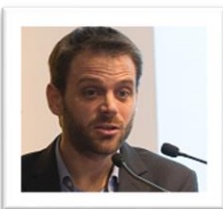
2020 – Security X.0 has not solved the password "problem". The extremely intuitive "LCR Policy" (Length, Complexity, and Renewal), persists despite recurrent findings that deeply challenge it. Have we measured its effectiveness? And given the findings, what are the solutions? And most importantly, what are the behavioural factors that contribute to the status quo? We will explore facts, solutions and cognitive biaises to understand the long lasting "LCR Password Policy".

Gilles FAVIER – CEO ENCELIS - CEO MyPSSI Gilles is a cybersecurity expert and speaker (CESIN, FIC, ANSSI, Banque de France…), 15+ years of experience with large companies (DGAC, Ordre des Médecins, MACSF, VIVESCIA, Industries...). Gilles has developed an innovative approach of cybersecurity based on the latest findings in cognitive neuroscience. Gilles is also specialized in compliance and continuous improvement, and he has designed and co-founded MyPSSI, the 1st Cybersecurity PMO designed to drive and track cybersecurity compliance for CISO's.


11:40 – 12:00 / Managing risk in the real world, the future of passwords

For too long password security policies have been designed for a world of fully compliant employees without taking into consideration psychological factors. This has created policies and authentication factors that do not offer good enough security when confronted with the reality of organizations and created vulnerabilities that hackers exploit. In this talk we will discuss how we got here and how the future looks around authentication factors.

Fernando Rubio is a Cybersecurity digital Advisor at Microsoft, where he works with enterprises improving their security posture. Previously he worked doing incident response and hardening Active Directory based networks. He has previously presented at Rooted 2017 among many other security events.

12:00 – 12:20 / Awareness and the modern media organisation
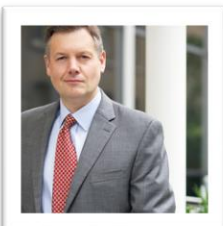
Securing media organisations means securing people who work under constant pressure and are hard-wired to do whatever is needed to meet a deadline. This session will examine some key lessons based on experience as trainer...and trainee.

Martin Turner is Managing Director of Full Frame Technology, a company specializing in cybersecurity for the media sector. Formerly, he was one of the BBC's first multimedia journalists before becoming bureau chief in Johannesburg and then in Washington DC. Following a fellowship at Stanford, he returned to London as Head of Operations for BBC Newsgathering. During his tenure, he devised a major programme to equip journalists with Macbooks and iPhones. Having broken most cybersecurity rules, he specializes in providing awareness training that is based firmly in the reality of producing content – and the knowledge that media people will do whatever is necessary to get the job done.

SESSION 3: RISK ASSESSMENT

13:20 – 13:40 / New risk assessment methodologies: EBIOS Risk manager

David Garcia has been CISO at France Télévisions 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.

13:40 – 14:10 / Secure whistleblowing platforms

Media organizations face many challenges to keep their sources safe. SecureDrop is an open-source whistle-blower submission system that can be installed by news organizations to anonymously and securely receive documents and tips from sources. As well as the technical side of deploying such a system, there are also a number of organizational decisions that need to be considered to ensure successful implementation. This session covers the experience of 2 media organizations (NRK and BBC) in their approach to implementing SecureDrop.

Vickie Greene CISSP, CCSP Information Security Specialist I have worked at the BBC for the last 7 years. I currently lead on information security policy at the BBC including writing, updating and communicating information security policies and standards as well as advising on their implementation. Prior roles have included reviewing systems architecture and controls and advising on information security risk. Previous experience to the BBC was in local government, where I worked for a number of local council authorities.

Øyvind Bye Skille (Faktisk.no) is a news and investigative journalist with experience from the NRK (Norwegian Broadcasting Corp.). He has a special interest in digital security, and work for and spreads knowledge internally about digital source protection.

14:10 – 14:30 / Cyber Insurance… To boldly go where no insurer has gone before…

Wauthier ROBYNS de SCHNEIDAUER 48, rue Leys, 1040 Brussels, Belgium Phone (+322) 734 0272/ (mobile: +32 477 40 23 83) Wauthier Robyns (°1957) currently serves as a Manager with the Belgian Insurance Companies' association. He is in charge of Information and Publications and acts as the official spokesman of the Association. Born in Etterbeek (Brussels) on 20 April, 1957, married, two children (born 1985 and 1991) Education: Master (Licentie) Law Faculty, Facultés Universitaires Saint-Louis (1976-1979) and Vrije Universiteit Brussel (1979-1982), Brussels Further training in insurance and in public relations, the latter through the Centre Belge de Relations Publiques (now known a 3C) Professional History: Aug. 1982 - March 1983: Trainee, Protocol & Public Relations Department, City of Brussels Since 1983: Assuralia (Union Professionnelle des Entreprises d'Assurances, Brussels), Belgian Insurance Companies' Association Communication tasks include press relations (written and AV), educational material, information for customers and victims, creating understanding with other interest groups Since 1991: lecturer at Economics Faculty of KU Leuven, Brussels, on Insurance and Pensions – he is also invited as a guest speaker at several Bachelor, Master and Postgraduate programs, among others at ICHEC Brussels, Universiteit Gent, Vlerick Management School … 1994: Guest lecturer at the Economics Department of Katolicki Uniwersytet Lubelski, Lublin, Poland, on the International Framework of the Insurance Industry 2006-2010: Member of the European Economic and Social Committee (Group I – Employers) 2011: Board member at Oscare, organisation for victims of burn wounds October 2020 – present: Member of the European Economic and Social Committee (Group 1 – Employers)

SESSION 4: SUPPLY CHAIN SECURITY

14:50 – 15:10 / Best Practises on selecting vendors

Vendors, through the products they sell or the services they deliver are a privileged entry point for cyber attackers in our organisations. It is then a key point to evaluate accurately the risk they bring in our systems.

David Garcia (FranceTV)

15:10 – 15:30 / Origin project: provenance verification system

Project Origin has been exploring how to secure the provenance of media and giving users the confidence that what they are seeing is as the originator intended. It is a project between BBC, CBC (Canada), the New York Times and Microsoft to develop a proof of concept. We will introduce the project and let you know how you can get involved.

Judy Parnall is a passionate advocate of all things media and its positive power for audiences.
As Head of Standards & Industry in the BBC's Transformation Team, Judy coordinates on the strategy for the influencing industry and government for media technology innovation, including the BBC's input to standards and industry bodies across production, broadcast and other media spheres.
Judy has worked in the BBC for a number of years in both R&D and the corporate strategy areas. Her research interests have centred on the interaction of people with technology and services across all media.
Judy has sat on the EBU's Technical Committee since 2015 and chaired it since June 2018.

15:30 – 15:50 / Mediapro business resiliency thanks to a Global Cybersecurity Strategy

Roberto Israel Alunda Espinosa (Mediapro),

Marco Gasperoni (Cisco)

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15:50 – 16:10 / Technology Foundations of Blockchain in Media and a New Substrate Enabling - Dynamic, Rights Controlled Content

Decentralized media supply chain: Technology foundations of blockchain in media, and a new substrate enabling dynamic rights controlled content.

Michelle Munson (Eluv.io)

WEDNESDAY 21 OCTOBER (09:00 – 14:20 CET)

KEYNOTE

09:00 – 09:30 / Digital Security for Journalists Requires an Adaptable Toolkit

Verifying information in the field, from reliable sources, while preserving one's security, has become a real challenge in an era where the rise of digital technology makes it easier to put information under surveillance. In some repressive countries,it is a matter of life and death. N2H works on regular basis with journalists facing problems of censorship or surveillance. During this conference we will illustrate with some concrete use cases the solutions we have been able to implement with information professionals facing these challenging situations.

Grégoire Pouget (Nothing2Hide) has been working for ten years in several medias as a journalist, web editor and developer. He then joined the NGO Reporters Without Borders and got involved in projects aiming at combating online surveillance and censorship. After 5 years, and several digital security workshop around the world (Pakistan, Afghanistan, Thailand, Senegal, Tunisia, Ukraine, Turkey,etc.) with bloggers, activists and journalists, he joined Library Without Borders where he worked two years as a CTO to build free and open source software. He is the co-founder and current president of Nothing2Hide, an organization which purpose is to help journalists, lawyers, human rights activists, NGO workers, etc. to protect their information and communication.

Jean-Marc Bourguignon,

SESSION 5: COPING WITH A CRISIS

09:30 – 09:50 / Business continuity vs. security in a crisis Finding a balance that works

Karsten Jefsen (TV2) is working with practical cybersecurity implementations and architecture to create defendable and explainable infrastructures. He is crazy about defending and protecting stuff. Public? Private? Media? - If it is worth something - it is worth defending. Mostly, he never misses an opportunity to help users help him improve security. Link with him at: https://www.linkedin.com/in/karstenjefsen/

09:50 – 10:10 / Covid-19 and how it will change broadcast

Willem Vermost (VRT) recently move to VRT as a Design & Engineering Manager. Prior to this role, he was the topic lead on the transition to IP based studios at EBU. With 20 years of experience in broadcast, he is an expert and project manager of international strategic, expert groups and events. Willem has a master degree in electronic engineering and a master in applied computer science. He worked on various projects, including the multiple award-winning VRT Live IP proof of concepts, the JT-NM Tested Program and started the open source project EBU Live IP Software Toolkit project (LIST) which has grown to an international project.

SESSION 6: CORPORATE IT

10:30 – 10:50 / The BBC Identity Classification Strategy for MFA and Risk Based Authentication

The BBC have developed an enterprise and business ecosystem level identity classification, not a "user type" model but instead a structure based on the origin of the identity record. This is now at the base of all our work in user authentication, authorisation and provisioning.

Carlos Trigoso is the BBC Identity and Access Management Lead Architect. Carlos started in the "user management" area when when this specialty was in its beginnings. He moved through all Identity Management specialties in the past 20 years, including software development, pre sales, consultancy, service delivery, project management, enterprise architecture, information security, business consultancy and audit, role and attribute-based access controls, identity data management and governance. Carlos has worked in a wide variety of industries and in the public sector in Europe, Asia, America and the Middle East. He finds himself at home in the challenging but extremely dynamic and professional BBC Design and Engineering division.

10:50 – 11:10 / Getting by without E5": IT Security when you can't have the best toys

Karsten Jefsen (TV2)

11:10 – 11:30 / Active Directory security assessment

Jean-Baptiste Galet (ANSSI)

SESSION 7: LEARN FROM OTHER PEOPLE'S MISTAKES

13:00 – 13:30 / Cybersecurity horror stories from media companies

Tools to overcome resistance against cybersecurity

Gerben Dierick (VRT) and guests

13:30 – 14:00 / What's next for the group – join us

MCS activities next year and vote for topics to be covered during the year, in webinars or round tables.

Lucille Verbaere has recently 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 – 14:20 / *Wrap-up – end of the event*