

NATIONAL SECURITY STANDARDS SUZZA IT

AGENDA

September 19, 2024 0900 - 1600

0900 - 0915 ► WELCOME AND OPENING REMARKS

Kristina Walter, NSA CCC Chief

Atiya Yearwood, NSA CCC D/Chief

0915 - 0945 ► KEYNOTE - SAFEGUARDING STANDARDS FOR CRITICAL AND EMERGING TECHNOLOGIES

Dave Frederick, Assistant Deputy

Director for China, NSA

0945 - 1030 ► THREATS TO STANDARDS
Jessica Fitzgerald-McKay, NSA Center for Cybersecurity Standards Co-Lead Stacey Weiss, NSA

1030 - 1050 ► BREAK

1050 - 1120 ➤ THE "STATE OF THE UNION" FOR 5G
STANDARDIZATION: LESSONS FOR THE FUTURE
Susan Miller, Alliance for
Telecommunications Industry Solutions
(ATIS)

1120 - 1150 > ZERO-TRUST IN TELECOMMUNICATIONS NETWORK
Scott Poretsky, Ericsson, Inc.
Amy Zwarico, AT&T

1150 - 1315 LUNCH AND NETWORKING

KEEP PACE WITH CRITICAL AND EMERGING
TECHNOLOGIES?

Mary Saunders, American National
Standards Institute (ANSI)
Phil Wennblom, Intel Corporation

1345 - 1425 ► THE BUSINESS CASE FOR STANDARDS

1315 - 1345 ► CAN STANDARDS AND STANDARDS POLICIES

ENGAGEMENT — PANEL

Nancy Cam-Winget, CISCO

Brian Daly, AT&T

Dr. Colin Drummond, Case Western

Reserve University

Jason Matusow, Microsoft

1425 - 1445 > BREAK

1445 - 1525 ► OPEN-SOURCE IMPLEMENTATION AS A STANDARDS

ACCELERATOR - PANEL

Muddasar Ahmed, MITRE

Pieter Kasselman, Microsoft

Sean Turner, sn3rd

1525 - 1545 > WHITEBOARDING EXERCISE: STANDARDS-FORUM

SHOPPING

Facilitator: Bret Jordan, Afero

1545 - 1600 ► CLOSING CONVERSATION, TAKE AWAYS & NEXT STEPS

Mike Boyle, and Jessica

Fitzgerald-McKay, NSA Center for

Cybersecurity Standards Co-Leads

A Special Thank You to our Planning Committee!

Nancy Cam-Winget

Lisa Carnahan

Bryan Daly

Laura Lindsay
Kathleen Moriarty
Elaina Nowton

Roman Danyliw









DAVID E. FREDERICK, JR. ASSISTANT DEPUTY DIRECTOR FOR CHINA, NATIONAL SECURITY AGENCY

Mr. David E. Frederick, Jr. serves as the National Security Agency's first Assistant Deputy Director for China. In this position, he sets and directs Agency-wide mission strategy for addressing the People's Republic of China, prioritizes mission investments, and postures NSA to achieve greater near- and long-term mission outcomes.

Most recently, Mr. Frederick served as the Executive Director, United States Cyber Command (USCYBERCOM). In that position he assisted the Commander in leading the cyber mission force with a portfolio focused on strategic management initiatives, including innovation and academic partnerships. His intelligence career started in the United States Army as a signals intelligence (SIGINT) analyst and Korean linguist, before joining the NSA as a language analyst. Mr. Frederick has held a wide array of managerial, strategic planning, and technical positions, with multiple overseas assignments. Among his key positions, Mr. Frederick led the Strategic Counter Cyber Operations Office, and represented NSA at the National Security Council on cyber policy matters. He co-led the design and establishment of NSA's Cybersecurity Directorate as the Deputy Chief.

Mr. Frederick is a two-time recipient of Presidential Rank Awards (Meritorious Executive); earned the National Intelligence Superior Service Medal as well as the NSA/CSS Meritorious Civilian Service Award; won Joint and Army military awards; and was honored by a key foreign partner with a National Security Service Medal.

Mr. Frederick completed the Defense Language Institute Korean Basic Course before graduating from the University of Maryland University College with a Bachelor of Arts degree in History (Honors)/Minor in Asian Studies. He received his Master's degree in Business Administration (Finance) from Colorado State University. He attended the George Washington University Defense Policy Seminar and Harvard Kennedy School Senior Executives in National & International Security programs.









KRISTINA WALTER DIRECTOR, NSA CYBERSECURITY COLLABORATION CENTER NSA CYBERSECURITY DIRECTORATE

Ms. Kristina Walter is the Director of NSA's Cybersecurity Collaboration Center, in this role she is responsible for leading NSA's open private sector relationships, in collaboration with our government partners to protect our critical government supply chain. Ms. Walter integrates NSA's unique intelligence insights and technical expertise to defend the Defense Industrial Base and our National Security Systems from cyber threats.

With over 15 years of experience at NSA, Ms. Walter has continuously prioritized the strategic overview of NSA's missions. Prior to rejoining the Cybersecurity Collaboration Center, she led NSA's Future-Ready Workforce Initiative highlighting the criticality of NSA's "people-first" mission. As well as serving as the Senior Strategist for NSA, to showcase and implement the Director's visions through meaningful mission outcomes.

Ms. Walter earned her Master's in Business Administration from the University of Maryland, as well as a Bachelor's in Marketing and Logistics & Supply Chain Management. Although she is a Pennsylvania native, Ms. Walter is currently a Maryland resident, alongside her husband and two children.







ATIYA YEARWOOD DEPUTY DIRECTOR, NSA CYBERSECURITY COLLABORATION CENTER NSA CYBERSECURITY DIRECTORATE

Ms. Atiya Yearwood is the National Security Agency Cybersecurity Directorate's Deputy Chief of the Cybersecurity Collaboration Center (CCC). At the CCC, she oversees NSA's engagement in open private sector relationships to secure the Defense Industrial Base and enhance NSA's ability to prevent and eradicate cyber threats.

Ms. Atiya Yearwood has served in a variety of cryptographic orchestration positions during her career at the Agency. She began her career as a resource management officer, and spent a decade playing an integral role in the daily operations of NSA's National Cryptologic School, Intelligence Analysis, and Cybersecurity Directorate. She was then selected for a detail at the Office of the Director of National Intelligence where she helped lead the Intelligence Community's strategy to reconstitute technical capabilities degraded due to unauthorized disclosures.

She returned to NSA as a Legislative Affairs Officer, where she built, managed, and advanced the Agency's priorities through relationships with Congress, with a focus on next-generation technical capabilities. Prior to her current position, she served as the Executive Assistant to General Paul M. Nakasone, USA, Director of NSA, Chief Central Security Services, and Commander of U.S. Cyber Command (USCYBERCOM), where she monitored execution of NSA and USCYBERCOM operations across the global enterprise during the Afghanistan Withdrawal, various international crises, several malicious cybersecurity incidents, and reconstitution and modernization of NSA and USCYBERCOM workforces post COVID-19 amongst other high priority efforts.

As a passionate mentor and explorer, Ms. Yearwood spends her time cultivating and empowering the next generation of NSA's diverse, premier workforce in between her personal world travels to discover and immerse in different cultures.









JESSICA FITZGERALD-MCKAY NSA CENTER FOR CYBERSECURITY STANDARDS CO-LEAD

Jessica Fitzgerald-McKay is the Co-Lead for NSA's Center for Cybersecurity Standards. In this position she drives NSA's standards strategy, leads multi-agency cooperative efforts with industry to improve the interoperability of network security solutions, has authored international open standards, and expanded standards adoption. She started her career at NSA as a cryptanalyst, with experience in network security and computer programming. She has served as a vulnerabilities analyst, using software reserve engineering, code analysis, and fuzzing techniques to evaluate commercial cryptographic products.







STACEY WEISS THREAT INTELLIGENCE LEAD, NSA CENTER FOR CYBERSECURITY STANDARDS

Stacey Weiss is NSA's Center for Cybersecurity Standards Threat Intelligence Lead and has been a cybersecurity threat analyst delivering all-source intelligence to key stakeholders across the US government and industry for over 20 years. She has been a member of NSA for over 35 years, and began her career in cybersecurity in 2000. Focusing on cybersecurity threats to US National Security Systems and Technologies, led efforts to eradicate actor agnostic threats to critical government communications, cryptography, critical infrastructure and weapons and space systems. Current efforts involve developing the threat intelligence mission space for the NSA Center for Cybersecurity Standards with a focus on adversary intentions in the international standards bodies as they pertain to critical and emerging technologies. Ms. Weiss has a MS in Computer Science, Information Systems Management in Telecommunications.







MIKE BOYLE NSA CENTER FOR CYBERSECURITY STANDARDS CO-LEAD

Mike Boyle is the Co-Lead for NSA's Center for Cybersecurity Standards. In this position he creates and resources NSA's strategy for standards development, with a focus on supporting the marketplace of secure, interoperable products that protect US National Security Systems. He has a long history of leading efforts with government and industry partners to tackle difficult cybersecurity problems. Mike began his career as a crypto mathematician at NSA, using his skills to understand how good cryptography can fail in implementation and working with industry to ensure that products purchased by the US government avoid those pitfalls. His focus has evolved to include secure network protocols and he is active in several open standards efforts dedicated to their development.







SUSAN MILLER PRESIDENT AND CEO, ATIS

Susan M. Miller is President and Chief Executive Officer of ATIS -- The Alliance for Telecommunications Industry Solutions and has served in this role since 1999. By bringing an innovative, market-driven approach to the development of technology solutions, she has expanded the organization's activities, reach, and impact. Under her leadership, ATIS redefined how the information and communications technology (ICT) industry collaborates to address its shared solutions-development needs. Key to this approach is engaging a Board of Directors made up of C-level executives from the leading ICT companies to set the organization's priorities.

ATIS' robust agenda addresses leading industry imperatives such as setting the U.S. on the global leadership path for 6G, the global standardization of 5G, leveraging artificial intelligence to advance ICT industry objectives, creating new business opportunities through distributed ledger technologies and self-sovereign identities, Smart Cities, securing government supply chains, mitigation of unwanted robocalling, and spurring cross-industry collaboration by creating solutions that will advance the internet of things with other vertical markets.







SCOTT PORETSKY DIRECTOR OF SECURITY, ERICSSON, NORTH AMERICA

Scott Poretsky is Ericsson North America's Director for Security, Network Product Solutions. He has over 30 years of industry experience in a variety of networking and security technologies. Scott is currently working in the areas of 5G security, Open RAN security, cloud security for critical infrastructure, and zero trust architectures. Scott serves as Co-Chair of O-RAN Alliance's Security Working Group (WG11), Security SME on the ATIS Open RAN MVP, and Advisory Board for the IEEE ComSoc Technical Committee for Communications Quality and Reliability (CQR). He previously served as Co-Chair of ATIS Study Group on Zero Trust for 5G. Scott has represented Ericsson in government-industry collaboratives at FCC CSRIC VII, FCC CSRIC VIII, NSA/CISA sponsored Enduring Security Framework (ESF) study groups, and NSTAC subcommittees. Scott has one patent and numerous published papers and is frequently an invited speaker. Scott is a Certified Information Systems Security Professional (CISSP) and Certified Cloud Security Professional (CCSP). He earned an MSEE from the Worcester Polytechnic Institute (WPI) and BSEE from the University of Vermont.







AMY ZWARICO CYBERESCURITY DIRECTOR, AT&T CHIEF SECURITY OFFICE

Amy Zwarico is a Cybersecurity Director in AT&T's Chief Security office, specializing in 5G, API, software, and open source security. She has worked in the telco industry for 30 years and 25 years in cybersecurity. She is an active security contributor to the O-RAN Alliance and to Linux Foundation Networking. She holds a PhD in Computer and Information Science from the University of Pennsylvania.







MARY SAUNDERS

SENIOR VICE PRESIDENT, GOVERNMENT RELATIONS AND PUBLIC POLICY, AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

Mary Saunders is Senior Vice President, Government Relations and Public Policy, at the American National Standards Institute (ANSI). In this position, Ms. Saunders serves as ANSI's spokesperson and liaison to federal, state, and local government agencies and to Congress and congressional staff. She supports the activities of the ANSI National Policy Advisory Group (NPAG) and the ANSI Government Member Forum, working with the members of these groups to develop and advance the Institute's positions and policies at all levels of government. In turn, she identifies and communicates to ANSI stakeholders emerging issues of importance for the standards and conformity assessment community.

Prior to joining ANSI in 2017, Ms. Saunders was the associate director for management resources for the U.S. Department of Commerce's National Institute of Standards and Technology (NIST), and served as a vice chair on the ANSI Board of Directors. She was responsible for all NIST-wide institutional support and administrative offices and their functions, including: workforce management, information technology and services, safety and environmental management, facilities maintenance and construction, accounting and finance, acquisitions and grants management, budget formulation, strategic planning, and emergency response. Ms. Saunders previously served as the director of NIST's Standards Coordination Office. In this capacity, she represented NIST and its significant interests in the standards and conformity assessment community, advising the NIST director and other officials throughout the administration on policy and strategy as they relate to the federal government's role in standardization.

She also served as deputy assistant secretary for manufacturing and services in the International Trade Administration (ITA), managing more than 200 industry specialists, economists, and international trade experts. In that capacity, she helped strengthen the competitive position of U.S. industries globally by coordinating Commerce Department strategies, policies, and programs with U.S. industries in mind.









PHIL WENNBLOM GLOBAL DIRECTOR OF STANDARDS POLICY, INTEL CORPORATION

Phil Wennblom is Global Director of Standards Policy for Intel Corporation. As part of the Global Government Affairs group, he has world-wide responsibility for Intel standards policy positions and activity.

Since 2017, Phil has been the chair of ISO/IEC JTC 1, the joint technical committee of ISO/IEC which develops international standards in the field of information technology. With over 3300 published standards and nearly 600 in development, JTC 1 is among the most active committees in ISO or IEC and the standards it develops support every sector of the global economy.

Phil has participated in INCITS since 2002 and served as chairman of the INCITS Executive Board from 2013 through 2017. He currently chairs the INCITS Technical Committee on Inclusive Terminology.

Phil was active in governance of the IEEE Standards Association from 2004 through 2018, serving on the IEEE Standards Association Board of Governors, Standards Board, and Corporate Advisory Group. Phil chaired the Corporate Advisory Group from 2015 through 2017 and the Patent Committee of the Standards Board from 2017 through 2018.

Phil is a member of the Standardization Policy Committee of the Information Technology Industry Council (ITI) and served as its chair from 2008 through 2017. He also represented Intel on the board of the United States Information Technology Office (USITO) from 2008 through 2016.

Phil holds a BS in Electrical Engineering from the University of Pennsylvania. He is a senior member of the IEEE. Phil was the recipient of the ANSI Edward Lohse Information Technology Medal in 2019, and he received the INCITS Chairman's award in 2010 and 2019. He is the 2023 recipient of the IEEE Charles Proteus Steinmetz Award.









JASON MATUSOW GENERAL MANAGER, CORPORATE STANDARDS GROUP MICROSOFT CORPORATION

Jason Matusow leads an international group of technical diplomats who engage in multi-stakeholder organizations. His work is focused on establishing accountability for the responsible use of modern digital services. His portfolio includes cloud services, privacy, cybersecurity, data, artificial intelligence, IT governance, sustainability, accessibility, and more. Matusow is responsible for Microsoft's position on standardization policy matters.

Matusow is also responsible for Microsoft products and services delivered in the Chinese market to be compliant with compulsory standards. He also oversees Microsoft's strategy and technical standardization work in China.

In 2022, Matusow became the executive sponsor for the ongoing working relationship between Microsoft and U.S. National Institute of Standards and Technology (NIST). He became a member of the NIST Visiting Committee on Advanced Technology (VCAT) and in 2024, was named as chair of the committee.

Matusow has presented at hundreds of industry events, has been published in academic journals and curated collections of essays, and authored a high-profile industry blog in the mid-2000s. He held spokesman roles for more than a decade and represented Microsoft in print, television, radio, and podcast mediums.

Matusow has been in the software industry since the early 1990s and joined Microsoft in 1995. He is a graduate of Boston University and currently lives in Portland, Oregon with his wife. They have two adult children who live in Europe.







NANCY CAM-WINGET CISCO FELLOW CTO TEAM, CISCO SECURITY BUSINESS GROUP

Nancy Cam-Winget is a Cisco Fellow in the CTO team for the Cisco Security Business Group. She focuses on ensuring we can secure our customer users and enterprises. Nancy currently drives security innovations and architectural strategies for Cisco's security portfolio.

Nancy has been in the Cybersecurity field for over 20 years. She has helped shape WiFi security and Zero Trust concepts in both the Cisco security products as well as standards in the IEEE, IETF and the OpenID Foundation. She remains active in the standards community focused on trustworthy computing where she chairs several working groups at the IETF and is also the board treasurer for the OpenID Foundation.







BRIAN DALY FELLOW AND ASSISTANT VICE PRESIDENT FOR STANDARDS & INDUSTRY ALLIANCES, AT&T SERVICES, INC.

As an AT&T Fellow and Assistant Vice President for Standards & Industry Alliances for AT&T, Brian oversees AT&T's strategy and leadership in global industry standards. Brian is a technology visionary and thought leader with knowledge of the global standards industry landscape/leadership. Brian has a broad technology perspective including 5 to 10-year trends, with focus on emerging technologies for 5G and beyond including public safety/mission critical services for FirstNet; wireless emergency alerts and earthquake early warning; C-V2X and UAS/UAVs; cybersecurity, NSEP, and critical infrastructure protection. Brian is engaged in programs with the DHS, DISA, and DoD, and is a leading contributor to the Alliance for Telecommunication Industry Solutions (ATIS) Board, TOPS Council and Standards Committee initiatives, resulting in the implementation of key industry standards. Brian has held appointments to the FCC's Technological Advisory Council (TAC) and Communications Reliability, Security, and Interoperability Council (CSRIC). Brian also is a member of the FBI's Infragard partnership. Brian's industry leadership roles include co-chair of the O-RAN Alliance Technical Steering Committee, co-chair of the Next G Alliance Steering Group, co-chair of the O-Ran Alliance Standards Development Focus Group, Chair of the GSM Association's North American Fraud Forum and Security Group, and former co-chair of the ANSI Unmanned Aircraft Systems Standardization Collaborative Critical

Brian received the B.S.E and M.S. degrees in electrical engineering from Arizona State University with a focus on communication systems and advanced electromagnetic engineering. He holds an FAA Part 107 remote pilot certification. As a Senior Member in the U.S. Air force Auxiliary /Civil Air Patrol, Brian holds the duty positions of Assistant Aerospace Education Officer and Assistant Communications Officer for his squadron. Brian is the AT&T coordinator for the Department of Homeland Security SHAred RESources (SHARES) High Frequency (HF) Radio Program, and an Army Auxiliarist. Brian received the ATIS President's Award and the ANSI Meritorious Service Award in recognition of his career creating standards across the communications spectrum including 3GPP, and the NG911 Institute Industry/Private Sector Award for his leadership in emergency communications. Brian holds over 180 issued patents in telecommunications, public safety, and cybersecurity.

Infrastructure & Environment working group.









COLIN K. DRUMMOND, PHD, MBA PROFESSOR AND ASSISTANT CHAIR, DEPARTMENT OF BIOMEDICAL ENGINEERING, CASE WESTERN RESERVE UNIVERSITY

In January 2015, Colin re-joined the Department of Biomedical Engineering as Professor and Assistant Chair, having previously spent a year in the School of Nursing. From 2008-2013, Colin was the Director of the Coulter-Case Translational Research Partnership (CCTRP) in the Department of Biomedical Engineering. Prior to joining CWRU, Colin spent about 20 years in Industry on product development. Dr. Drummond's research interests are on the practical application of healthcare information technology to support clinical decision-making, including advances in understanding wearable analytics for human performance assessment. Current projects involve clinical studies to obtain primary data-based for human performance modeling and simulation studies, the use of conversational agent technology to improve the activities of daily living for polypharmacy patients in isolated living situations, and the development of standards curricula.







PIETER KASSELMAN MICROSOFT IDENTITY TEAM

Pieter Kasselman is a member of Microsoft's identity team where he focuses on standards based identity products. Pieter has over 25 years' experience as a technologist and engineer, working on bringing new technologies and business models to market. Pieter's first encounter with identity was his final year project which used neural networks to identify users based on typing patterns. Since then he worked in a number of roles as an information security analyst, software engineer and program manager in industries that include finance, software, silicon and cloud. His diver background gives him a unique perspective of the importance of identity and the role of identity standards as both a business enabler and the first line of defense for organizations.







MUDDASAR AHMED MITRE, PRINCIPAL ARCHITECT

Muddasar is a Principal Architect at MITRE specializing in architectures and security of Cloud and Modern Networks, including 5G. Muddasar is currently serving LFN Technical Advisory Council as a Vice Chair and engaged in advancing LFN Quality and Security Goals, 5G Super Blueprint, Open Network Automation Platform as well as in LFN AI Task Force.

Muddasar is also active in improving the standards, often supports his colleagues on Key Issues/Solutions making into Technical Specs in 3GPP, ORAN Alliance, GSMA, and ETSI. Muddasar is a founding member of team that developed FiGHT, a 5G threat model for Mobile Operations.

He is a graduate of The George Washington University and has over 20 years of Information Technology (IT) and Cyber Security related experience in enterprise and service provider environment.







SEAN TURNER SN3RD LLC

Sean Turner has been involved in the IETF since IETF 34 and has authored or co-authored over 55 RFCs. He has served on the IESG as the IETF Security Area Director and over the years Sean has chaired the RTCWEB, SMIME, WPACK, and XMPP WGs. Currently, Sean is chair of the TLS, MLS, DULT, and WISH WGs. He has also served on the Internet Society's Board of Directors and currently is the Treasurer of the IETF Administration LLC.

He is founder of sn3rd IIc, which focuses on policy, design, and implementation of security solutions, and is author of the Implementing Email and Security Tokens: Current Standards, Tools, and Practices (John Wiley and Sons, 2008).







BRET JORDAN CHIEF SECURITY STRATEGIST, AFERO

Bret is currently Chief Security Strategist at Afero. His past work experience includes CTO of Emerging Technologies for Broadcom and various CTO leadership positions at Symantec, Blue Coat Systems, and Solera Networks.

His current research projects include threat intelligence, IoT and the hyper-connected edge, automated and collaborative cyber security playbooks, and the impacts of upcoming technology on cyber security, privacy, and society.

He has extensive experience collaborating with government agencies, critical infrastructure, industry thought leaders, and academic researchers from around the world to drive creative new ideas, technologies, and solutions that can have material impact on protecting systems and data crucial to our way of life.

Bret has over 30 years of experience and held many leadership roles in large global enterprise companies, startups, non-profits, and academic institutions. He started his career as Director of Networking at the University of Utah where he helped design and implement the first wide-scale 802.1X network with distributed authentication which later formed the basis of EduRoam. He has also led several international standards including STIX, TAXII, CACAO, and OpenC2 and has presented numerous times at RSA, ISC2 Security Congress, FS-ISAC, ITU, FIRST, ETSI TC-Cyber, and ENISA conferences. He enjoys working on hard problems and helping design solutions that can change the world.

