









CYBER SECURITY AUTHORITY (CSA)



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Acknowledgement



Dr. Albert Antwi-Boasiako

Authority, I take great pride in the successful execution of the 2024 National Cyber Security Awareness Month (NCSAM). This achievement would not have been possible without the unwavering support and dedication of key stakeholders, partners, and dignitaries. The theme, "Combating Misinformation/Disinformation in a Digitally Resilient Democracy," underscored our collective responsibility in securing cyberspace, particularly in the context of the 2024 presidential and parliamentary elections.

I extend my sincere appreciation to the Second Lady of Ghana, Mrs. Samira Bawumia, for her instrumental role in launching the National Child Online Protection Framework during NCSAM 2024.

My gratitude also goes to the Minister for Communications and Digitalisation, Mrs. Ursula Owusu-Ekuful, for her exemplary leadership and active participation in the NCSAM activities, which have significantly advanced Ghana's cybersecurity agenda. I also acknowledge the Head of the European Union Delegation to Ghana, Ambassador Irchad Razaaly, for his valuable support and insightful contributions during the official launch.

The Cyber Security Authority is grateful to the Ghana Armed Forces, particularly the Chief of Defence Staff, Lieutenant General Thomas Oppong-Peprah, for their collaboration in launching the 2024 edition of NCSAM.

I also extend my heartfelt appreciation to the Ghana Journalists' Association, civil society organisations, and non-governmental organisations that partnered with the CSA to raise awareness on misinformation and disinformation. Your efforts were crucial in amplifying the campaign's impact.

To the members of the Joint Cybersecurity Committee (JCC) and Joint Intelligence Committee (JIC), your continued engagement and support for this annual awareness initiative have been instrumental in strengthening Ghana's cybersecurity posture.

I am equally grateful to our sponsors for their generous contributions, which provided the necessary resources to make this initiative successful. Your investment in cybersecurity education reflects a shared commitment to a safer digital Ghana.

I commend the management of the Cyber Security Authority for their strategic leadership, vision, and dedication, which have been the backbone of this year's success.

To the dedicated staff of the CSA, your tireless efforts—ranging from event coordination and content development to education campaigns and incident response—have driven this initiative forward. Your commitment to protecting Ghana's digital space is deeply appreciated.

The contributions of both public and private stakeholders have not only heightened awareness but also reinforced our national resolve to maintain a secure and resilient digital ecosystem. Thank you for your invaluable support and dedication.

Acronyms

WFP

ΑI Artificial Intelligence BoG Bank of Ghana BRAVE Building Resilience Against Violent Extremism CBAC Capacity Building and Awareness Creation CDD Centre for Democratic Development COP Child Online Protection **CSOs** Civil Society Organisations Computer Emergency Response Team CID Criminal Investigations Department CII Critical Information Infrastructure CSA Cyber Security Authority CEs Cybersecurity Establishments CPs Cybersecurity Professionals CSPs Cybersecurity Service Providers DPC Data Protection Commission EU European Union FIRST Forum of Incident Response and Security Teams GAF Ghana Armed Forces GAB Ghana Association of Banks **GES** Ghana Education Service GHS Ghana Health Service GJA Ghana Journalists' Association GCI Global Cybersecurity Index ISACA Information Systems Audit and Control Association **IDEG** Institute for Democratic Governance IIPGH Institute of ICT Professionals Ghana ISC² International Information System Security Certification Consortium ITU International Telecommunication Union JCC Joint Cybersecurity Committee JIC Joint Intelligence Committee KATH Komfo Anokye Teaching Hospital NCA National Communications Authority CERT- GH National Computer Emergency Response Team NCSAM National Cyber Security Awareness Month NCSIAC National Cyber Security Inter-Ministerial Advisory Council NCSTWG National Cyber Security Technical Working Group NCC National Cybersecurity Challenge NCPS National Cybersecurity Policy and Strategy NIB National Intelligence Bureau NMC National Media Commission NSB National Signals Bureau NGOs Non-Governmental Organisations SDGs Sustainable Development Goals TTX Table Top Exercises UNICEE United Nations Children's Fund UNESCO United Nations Educational Scientific and Cultural Organisation UNODC United Nations Office on Drugs and Crime UPSA University of Professional Studies WAEON West African Election Observers Network WANEP West African Network for Peacebuilding

World Food Programme

Executive Summary

The Cyber Security Authority (CSA) has organised the National Cyber Security Awareness Month (NCSAM) since 2018 to safeguard Ghana's digital landscape and promote cybersecurity awareness.

In 2024, with democracies worldwide grappling with the challenges of digital information manipulation that undermine democratic processes, the CSA organised the NCSAM under the theme: "Combating Misinformation/Disinformation in a Digitally Resilient Democracy—Our Collective Responsibility." This year's initiative aimed to build citizens' capacities to detect and prevent misinformation, safeguarding national security and democratic integrity.

The theme was especially timely as Ghana joined over 60 countries worldwide heading to the polls in 2024, underscoring the shared responsibility of political actors, citizens, civil society, private sector players, journalists, media, and development partners in preserving the nation's democratic processes against the threats of misinformation and disinformation.

NCSAM 2024 commenced successfully on October 1, 2024, at the Burma Hall in collaboration with the Ghana Armed Forces after a media launch which was held on September 1, 2024. The event brought together key stakeholders to enhance awareness and foster collaboration in mitigating cyber threats. The ocassion was also used to launch the revised National Cybersecurity Policy and Strategy.

Following the launch, a series of collaborative events were organised to sensitise the public on detecting and countering misinformation and disinformation. These activities included forums for media professionals, civil society, and local communities. Journalists were trained in ethical reporting and fact-checking techniques to bolster public trust.

Also, the finals of the National Cybersecurity Challenge took place during the month, featuring 4 finalists drawn from 70 senior high schools. St. Peter's SHS emerged as the winner, earning the coveted bragging rights for 2024. The National Child Online Protection Framework was launched as part of event by the wife of the Vice President, H. E. Samira Bawumia.

Additionally, the CSA partnered with Civil Society Organisations (CSOs) to organise cybercrime and cybersecurity sensitisation engagements. These collaborations heightened awareness about the dangers of misinformation and disinformation for varied constituents.

A series of workshops, including a National Cyber Drill and an incident response exercise, further strengthened stakeholders' preparedness to address cyber incidents. Key discussions during these events focused on threats to Critical Information Infrastructure (CII) and strategies for enhanced incident management.

Key highlights of NCSAM 2024 included:

- Launch of the National Cybersecurity Policy and Strategy.
- Launch of the Industry Forum and the inauguration of Independent Assessors.
- Launch of the National Child Online Protection Framework.
- The maiden Cybersecurity Awards and Recognition Night.

NCSAM 2024 showcased Ghana's leadership in cybersecurity within Africa, fostering a culture of awareness and resilience critical for sustaining democratic processes. The emphasis on combating misinformation and disinformation aligns with national priorities for credible and peaceful elections, reflecting the country's robust commitment to securing its digital future.

National Cybersecurity Leadership



H.E. NANA ADDO DANKWA AKUFO-ADDO President of the Republic of Ghana



DR. ALHAJI MAHAMUDU BAWUMIA Vice President of the Republic of Ghana



HON. MRS. URSULA OWUSU-EKUFUL Minister for Communications and Digitalisation



HON. CHARLES ACHEAMPONG **Deputy Minister for Communications** and Digitalisation



MR. ALEXANDER ARPHUL Chief Director, Ministry of Communications & Digitalisation



DR. ALBERT ANTWI-BOASIAKO Director-General, Cyber Security Authority

Overview of the Cybersecurity Act, 2020 (Act 1038)

Section 2-4

Cyber Security Authority Section 5-28

Governance of the
Authority, Administrative
& Financial Provisions

Section 29-34

Cybersecurity Fund

Section 47-48

Cybersecurity Incident Reporting Section 49-56

Licensing of Cybersecurity Service Providers

Section 62-68

Protection of Children
Online and other Online
Sexual offences

Section 69-77

Cybersecurity and Investigatory Powers

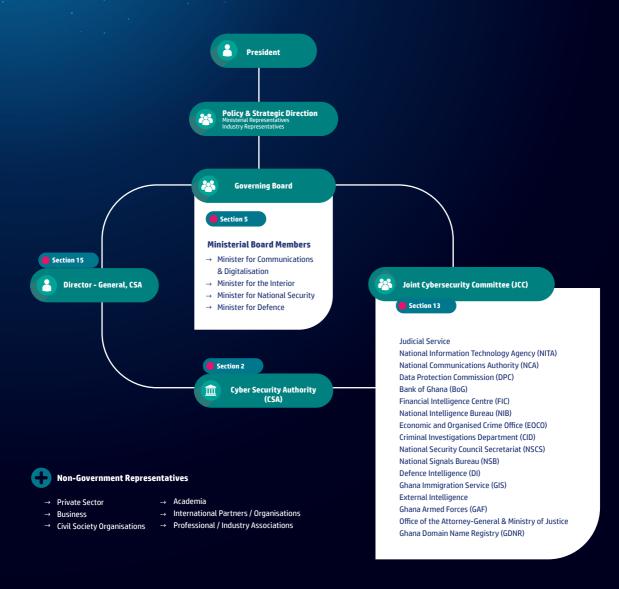




Mandate of the CSA



Cybersecurity Institutional Framework



CSA Governing Board



HON. MRS. URSULA OWUSU-EKUFUL Minister for Communications and Digitalisation (Chairperson)



HON. ALBERT KAN-DAPAAH Minister for National Security



HON. HENRY QUARTEY
Minister for the Interior



HON. DOMINIC NITIWUL
Minister for Defence



DR. ALBERT ANTWI-BOASIAKO Director-General, Cyber Security Authority



AMB. ESTHER DZIFA OFORI President's Representative



MRS. MAVIS VIJAYA AFAKOR AMOA
President's Representative



MRS. ADELAIDE BENNEH-PREMPEH
President's Representative



PROF. BOATENG ONWONA-AGYEMAN Industry Forum



MR. CARL A. SACKEY
Industry Forum



MR. REGINALD BOTCHWEY
Industry Forum

Joint Cybersecurity Committee



DR. ALBERT ANTWI-BOASIAKO Director-General, CSA



SERWAH ASARE-BOTWE Superior Court of Judicature



MR. RICHARD OKYERE-FOSU Director-General, NITA



MR. JOE ANOKYE Director-General, NCA



MS. PATRICIA ADUSEI-POKU Executive Director, DPC



DR. MAXWELL OPOKU-AFARI First Deputy Governor, BoG



Chief Executive Officer, FIC



NANA ATTOBRAH QUAICOE Ag. Director-General, NIB



COP. MAAME YAA TIWAA ADDO-DANQUAH Executive Director, EOCO



DCOP. MR. FREDERICK AGYEI Deputy Director-General, CID



COL. (DR) TIM BA-TAA-BANAH MR. KWABENA ADU-BOAHENE Director, NCTFC



Director-General, NSB



MAJ. GEN. A. Y. NSIAH Chief of Defence Intelligence, DI



MR. LAUD AKWASI AFFRIFAH



AMB. GEORGE ABAKA **BLANKSON** Deputy Director-General, RD





COL. A. K. ODUAH Ag. Director-General (DCIS), GAF



MS. YVONNE ATAKORA OBUOBISA Director of Public Prosecutions



NANA **KOFI ASAFU-AIDOO** Executive Director, GDNR

Overview of the CSA

The Cyber Security Authority (CSA) has been established by the Cybersecurity Act, 2020 (Act 1038) to regulate cybersecurity activities in the country; to promote the development of cybersecurity in the country and to provide for related matters.

The CSA officially started operations on October 1, 2021; starting as the National Cyber Security Secretariat (NCSS) with the appointment of the National Cybersecurity Advisor in 2017 and later transitioned into the National Cyber Security Centre (NCSC) in 2018 as an agency under the then Ministry of Communications.

Core Values





Vision

To ensure a Secure and Resilient Digital Ghana.



Mission

To Build a Resilient Digital Ecosystem; Secure Digital Infrastructure; Develop National Capacity; Deter Cybercrime; and Strengthen Cybersecurity Cooperation.



PART I

Media Launch of the National Cyber Security Awareness Month (NCSAM) 2024 at the Ministry of Information

Introduction

The theme for the 2024 edition of Ghana's National Cyber Security Awareness Month (NCSAM) "Combating was Misinformation/Disinformation in a Digitally Resilient Democracy - Our Collective Responsibility." This theme was especially pertinent as Ghana prepared for the 2024 Presidential and Parliamentary elections, highlighting the importance of safeguarding our democratic processes from the threats of misinformation and disinformation. The awareness month was kicked off with a Media Launch on September 1, 2024, at the Conference Room of the Ministry of Information. The launch was aimed at raising awareness about NCSAM 2024 and to encourage government-sector institutions, businesses, and the general public to actively participate in the month-long celebration for enhanced safety in the digital environment.



Opening Remarks

Hon. Fatimatu Abubakar

Minister, Information

Hon. Fatimatu Abubakar in her speech highlighted that the dialogue on misinformation had become increasingly pronounced, emphasising the collective responsibility to protect the right to information. She noted the potential harm caused by misinformation and disinformation and reminded Ghanaians to avoid amplifying the menace.

Address

Hon. Ursula Owusu-Ekuful

Minister, Communications and Digitalisation

The Minister for Communications and Digitalisation and Member of Parliament for the Ablekuma West Constituency, Hon. Ursula Owusu-Ekuful, stressed the importance of cybersecurity as an integral part of digitalisation, stating that while digital technologies bring significant opportunities, they also come with inherent risks such as cyberbullying, privacy breaches, and the spread of misinformation and disinformation.

The Minister highlighted the achievements of Ghana in mobile connectivity and cybersecurity, noting that the country now ranks third in Africa on the GSMA connectivity index with a score of 55.1%, an improvement from 52.5% in 2022. She mentioned that Ghana has also made strides in online security, with a score of 86.7% on the GSMA index, aligning with its ranking on the International Telecommunication Union's (ITU) Global Cybersecurity Index.

She discussed the dangers of misinformation and disinformation, particularly as Ghana



approaches its elections, emphasising that the misuse of digital platforms can cause significant harm to democracy and societal stability.

The Minister urged all stakeholders, including the public, private sector, civil society, and parents, to collaborate in combating misinformation and disinformation. She emphasised the importance of protecting Ghana's democratic processes and maintaining peace and stability, especially in the lead-up to the elections. She concluded by calling for responsible use of digital tools to ensure informed decision-making by voters and to preserve the country's social fabric.

Presentation

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

The Director-General of the CSA, Dr. Albert Antwi-Boasiako stressed the urgency of tackling misinformation and disinformation, particularly in the build-up to the national elections. He outlined various cyber threats, including the account impersonations of political figures and electoral bodies, as well as the use of AI-generated images and videos to manipulate public perception.



Dr. Albert Antwi-Boasiako acknowledged the critical role that civil societies, bloggers, and media houses play in countering these malicious activities. He pointed to instances where credible media outlets had their websites cloned by malicious actors to disseminate false information. He also stressed the need for collaboration among stakeholders, including government agencies, legal bodies, and the media, to address these challenges.

He added that public awareness campaigns were essential for mitigating misinformation and encouraged the public to report suspicious content through established channels. He concluded by urging all stakeholders to safeguard the integrity of the electoral process and reinforce Ghana's democratic foundations through collective actions.

Remarks

Dr. Emmanuel Akwetey

Executive Director, Institute for Democratic Governance (IDEG)



Dr. Emmanuel Akwetey in his speech stated that while development in technology has triggered introduction of new medium such as the internet, radio and television remained the greatest means of providing information to Ghanaians through programs broadcasted in the local languages. He therefore called for active monitoring of the radio and television stations in Ghana as the nation approaches the electioneering period. He further urged that the local media be given the needed attention as it was effective in addressing violence and issues of misinformation and disinformation.

Remarks

Dr. Kojo Pumpuni Asante

Director, Policy Engagement & Partnership, Centre for Democratic Development (CDD) Ghana

Dr. Kojo Asante highlighted the imperative to implement strategies to combat fake news in



the face of both passive and active technological advancements. He noted that individuals often consume information based on their preferences for certain figures, which has led to increasing contention over the concepts of truth and trust.

Dr. Asante in his remarks advocated for societies to embrace stakeholder engagement and adopt a collaborative approach in addressing the challenges of misinformation and disinformation.

Remarks

Mr. Edmund Kofi Yeboah

General Secretary, Ghana Journalists' Association

Mr. Edmund Kofi Yeboah highlighted the significance of NCSAM and described the theme as appropriate. He underscored the critical issue of misinformation, particularly propagated by political actors and the media, which could distort electoral outcomes.

Mr. Yeboah pointed out the pivotal role of the media, especially social media, in the dissemination of misinformation and disinformation. He urged media platforms to



refrain from providing an avenue for such activities called on political figures and the public to verify information before sharing.

Remarks

Brigadier General Dr. Tim Ba-Taa-BanahDirector, National Counter-Terrorism Fusion Centre
and Member of the JCC



Brigadier General Dr. Tim Ba-Taa-Banah, in his remarks acknowledged the importance of cyber resources and services in today's institutions. He reinforced that cyber threats were real and not exaggerated. He highlighted the deteriorating security landscape in the West African sub-region while reechoing that Ghana was not immune to such threats. He encouraged the citizenry to utilise the "See Something, Say Something" short code (999) to report security threats, and 292 for cyber-related threats. He also appealed to all and sundry to embrace the upcoming National Cyber Security Awareness Month for the mutual benefit of securing the cyber space.

Remarks

Sheikh Aremeyawo Shaibu

Spokesperson, National Chief Imam, & Second Vice President, West African Election Observers Network (WAEON)

Sheikh Aremeyawo Shaibu addressed the growing dangers of misinformation and disinformation in modern society, recounting how a disinformation on the Eid Celebration prayers two years ago led to a series of online threats and damaging comments on his character.

He pointed out that the incident was not an isolated case but rather an example of how misinformation can be weaponised to cause harm. Sheikh Aremeyawo emphasized that such actions are often driven by malicious intent, with the aim of dividing communities and destabilising societies. He warned that as the nation approaches a crucial election, political parties are increasingly using misinformation and hate speech as tools to manipulate public opinion, which poses a serious threat to the peace and democratic stability of the country.

Sheikh Aremeyawo Shaibu stressed that the fight against misinformation is not the responsibility of the media or politicians alone but of society as a whole. He urged everyone



to be conscious of how they erode the core values and principles needed for national unity and democratic governance.

Conclusion

After successful deliberations and media engagements on the subject, the Honourable Minister for Communications and Digitalisation, Hon. Ursula Owusu-Ekuful together with other speakers launched the National Cyber Security Awareness Month 2024.



Official Launch of the National Cyber Security Awareness Month (NCSAM) 2024

Background

The 2024 edition of the National Cyber Security Awareness Month (NCSAM) themed "Combating Misinformation/Disinformation in a Digitally Resilient Democracy - Our Collective Responsibility," was officially opened in Accra, on Tuesday, October 01, 2024. The theme was set to highlight the shared responsibility of all stakeholders, including governments, citizens, media, technology developers, and civil society organisations, in ensuring the integrity of democratic processes in the digital age.

The event, organised by the Cyber Security Authority (CSA) in collaboration with the Ghana Armed Forces (GAF) brought together an array of dignitaries, including the Honourable Minister for Communications and Digitalisation, Mrs. Ursula Owusu-Ekuful; the Chief of the Defence Staff, Lt. Gen. Thomas Oppong-Peprah; the Director-General of the CSA, Dr. Albert Antwi-Boasiako; the European Union Ambassador to Ghana, Mr. Irchad Razaaly; Member of the Council of State, Col. (Rtd) Mohammed Tahiru; representatives from the Diplomatic Corps; members of the Joint Cybersecurity Committee (JCC), and other key stakeholders.

Welcome Remarks

Lt. Gen. Thomas Oppong-Peprah

Chief of The Defence Staff, GAF

In his welcome remarks, Lt. Gen. Thomas Oppong-Peprah, the Chief of the Defence Staff (CDS) of the GAF, emphasised the importance of combating misinformation and disinformation in ensuring national security. He stated that, the GAF constitutional duties of protecting and defending the territorial integrity of Ghana extended to the cyberspace.



He stated that it behooves Ghanaians to play collective roles effectively within the digital space to ensure a free and fair election in December 2024.

The CDS stated that the GAF, as a critical component of the national cyber eco-system, would take measures to ensure personnel live up to their responsibilities in the conduct of mandated tasks.

He cautioned the public, including the media, to be professional and circumspect in their reportage in the lead up to the December 2024 elections. He further urged all security personnels to enrich their skills in cybersecurity and employ best practices to combat any cyber threats. He stated that they must collectively and actively help detect, prevent, and mitigate the spread of misinformation and disinformation. Lt. Gen. Oppong-Preprah expressed the GAF's commitment and readiness to support civil

authorities and other security services to ensure that Ghana remained a beacon of democracy in Africa.

Remarks

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

The Director-General of the CSA stated that the theme for the 2024 edition of the NCSAM was particularly pressing as the national elections were approaching. He emphasised that safeguarding the integrity of the electoral process is a collective responsibility that requires commitment from government, institutions, and individuals.

He stated that there were eighteen countries expected to hold national elections in Africa in 2024, and that Ghana, like many other democratic countries, is exposed to the dangers of misinformation and disinformation. Online misinformation and disinformation campaigns by malicious actors, he added, represented key threats to electoral processes.

He cited awareness creation as one of the strategies in the toolbox of Ghana to confront the menace of misinformation exacerbating due to the lack of sufficient knowledge about political and societal issues for citizens.

Additionally, he noted that the fight against disinformation required digital literacy and promotion of healthy online habits among citizens as myriads of information are being navigated through to make electoral decisions.

He highlighted Ghana's significant strides in building its cybersecurity ecosystem, having been ranked with a Tier 1 status in the Global Cybersecurity Index released by the International Telecommunication Union (ITU) in September 2024. This he noted, positions Ghana as a model for cybersecurity development especially in the Global South where most countries are in formative stages



of establishing cybersecurity systems.

With a score of 99.27%, Ghana is ranked second-highest nation, and one out of five African nations to achieve Tier 1 status. Dr. Antwi-Boasiako stated that the remarkable improvement to the score of 86.69% in 2020 from 32.6% in 2017 to the current score is reflective of the commitment to improving the state of cybersecurity within Ghana.

He urged Ghanaians to remain vigilant and proactive in combating misinformation and disinformation while working together to build a digitally resilient democracy by utilising trustworthy news fact-checking of contents, and refraining from sharing unverified messages. He further encouraged businesses to invest in the appropriate cybersecurity practices and data protection measures, while government institutions integrate prioritise and cybersecurity activities in their operations.

Remarks

Amb. Irchard Razaaly

EU Ambassador to Ghana

The European Union (EU) Ambassador to Ghana, His Excellency (H.E.) Irchad Razaaly, in his speech acknowledged Ghana's leadership in digitalisation and cybersecurity while highlighting the opportunities and challenges presented by digital technologies in



democratic processes. H.E. Razaaly discussed the use of biometric technology to enhance voter verification in Ghana's elections and the successful implementation of online voting in the recent European Parliament elections. He further warned of the dangers of misinformation and disinformation, which could undermine trust in institutions, polarise societies, and manipulate public opinion.

The Ambassador stressed the need for international cooperation to address cybersecurity threats, which could originate from anywhere in the world. He highlighted the impact of cyber-attacks on critical infrastructure, public services, and elections,

emphasising the importance of protecting data and ensuring public confidence in institutions. H.E. Razaaly announced the EU's partnership with Ghana to combat misinformation and disinformation through media monitoring, civic campaigns, and capacity building initiatives.

In conclusion, Ambassador Razaaly reaffirmed the EU's commitment to working with Ghana to create a digitally resilient democracy and to ensure credible and peaceful elections while emphasising the importance of shared efforts to protect democratic values and stability in the digital age.

Keynote Address

Hon. Ursula Owusu-Ekuful

Minister, Communications and Digitalisation

In her keynote address, the Minister for Communications and Digitalisation, Ursula Owusu-Ekuful, highlighted the importance of securing Ghana's digital space, the country becomes especially as increasingly connected. She noted that as of January 2024 about 24.06 million Ghanaians were connected to the internet, with 7.60 million active social media users. She noted further that Ghana had been ranked 15th globally in terms of daily time spent on social media, which presents both opportunities and risks, including exposure to cyber threats like misinformation and disinformation.

She emphasised the significance of combating misinformation and disinformation ahead of Ghana's upcoming elections in December 2024. The Hon. Minister said between 2016 and 2021, 94% of disinformation attacks targeted Elections Management **Bodies** targeted (EMBs). while 2.4% private companies supporting EMBs. Disinformation was particularly prevalent with the following statistics; electoral campaigns (33%), election day and voting operations (24%), post-voting periods (17%), and during the planning and implementation phases (19%).



The minister referenced Section 208(1) of the Criminal Offences Act, 1960 (Act 29) nothing that it a misdemeanor to publish false statements that cause public alarm, while Section 76(1) of the Electronic Communications Act, 2008 (Act 775) penalises the dissemination of false information that endangers public safety, she indicated that misinformation is a criminal offence.

She further cited data from the National Computer Emergency Response Team (CERT-GH), which identified concerning trends such as the rise of YouTube channels spreading politically biased misinformation, the use of encrypted platforms like Telegram for disinformation, and the use of deep fakes to target election processes.

Mrs. Owusu-Ekuful acknowledged Ghana's recent achievement of being ranked a Tier 1 country in cybersecurity by the International Telecommunication Union's (ITU) Global Cybersecurity Index (GCI). This recognition

she reiterated underscores Ghana's commitment to enhancing its digital landscape and maintaining the security of its digital infrastructure.

She urged Ghanaians to play an active role in combating misinformation and disinformation before, during and after the 2024 general elections, stressing that a resilient democracy depends on both strong institutions and the informed participation of citizens.

Launch of National Cybersecurity Policy and Strategy

The Minister together with other dignitaries present launched the National Cybersecurity Policy and Strategy. She explained that the policy outlines five key pillars: Legal, Technical, Organisational, Capacity Building, and Cooperation measures that support the broader goals securing of infrastructure. deterring cybercrime, developing national capacity, building a resilient digital economy, and strengthening cybersecurity cooperation.

The minister averred that the adoption of the NCPS itself represented a strategic response to both existing and anticipated cyber threats that could undermine Ghana's gains in digitalisation.

She indicated that the CSA as the institution responsible for cybersecurity matters in the country, acknowledges its lead role in implementing the NCPS but added that the multi-dimensional nature of cybersecurity required a multi-sectoral response.

She, therefore, emphasized the collective responsibility needed to implement the National Cybersecurity Policy and Strategy.



Conclusion

The Executive Director of the Economic and Organised Crime Office, COP Maame Yaa Tiwaa Addo-Danquah, in delivering the concluding remarks, admonished all to verify information before sharing.

National Cyber Drill

Background

The CSA held a National Cyber Drill on October 10, 2024, at the National Communications Authority (NCA) Conference Room. This brought together representatives of institutions that form the Sectoral CERT ecosystem, civil society organisations, the media and representatives of political parties in Ghana

The activities of the drill focused on incident response coordination among key stakeholders and was led by the National Computer Emergency Response Team (CERT-GH). The objective was to improve the readiness and capabilities of stakeholders to effectively respond to cyber incidents that may occur during the national elections.

In attendance were officials from the NCA, the BoG, the Defence Intelligence unit of the GAF, the DPC, the CID of the Ghana Police Service, the NIB and the NSB.

Opening Remarks

Mr. Stephen Cudjoe-Seshie

Lead, CERT-GH, Cyber Security Authority

Cudjoe-Seshie highlighted the government's digital initiatives such as the e-immigration, e-passport, citizen-app, which aimed at providing citizens with efficient public services. He indicated that cybercrime/cybersecurity contacts made to the National CERT between January and September 2024 were about 9,279, 22% of the contacts being actual cybercrime incidents. He cited that the reported cases included online fraud, unauthorised access, online blackmail and cyberbullying, adding that malicious actors were using the digital initiatives to threaten the progress of the digital economy.

He stated that this year's theme for the NCSAM was carefully selected within the



context of digital developments and their impact on democratic processes.

He, further added that misinformation and disinformation campaigns, potential attacks against political actors, and attacks on Critical Information Infrastructure (CII) posed threats to the country's peace as the elections drew closer.

He urged all stakeholders to work together with the CSA to build an ecosystem for threat information sharing and incident response coordination.

Presentation

Mr. Desmond Israel Esq.

Accredited Cybersecurity Professional (CP)

Mr. Desmond Israel, an accredited Cybersecurity Professional (CP) delivered a presentation on the challenges of misinformation and disinformation in national elections, outlining legal and technical frameworks to address them. He

emphasised that legislation should criminalise deliberate misinformation, ensure data protection, and hold platforms accountable. He noted the crucial essence of monitoring tools, rapid response teams, threat intelligence sharing, and cyber forensics in addressing misinformation.

He proposed an approach for investigating and mitigating disinformation campaigns; identifying and tracking claims of misinformation, investigating the origin and spread of misinformation, implementing measures to address the spread of misinformation, such as content takedowns or public awareness campaigns evaluating the effectiveness of mitigation efforts and adjusting as needed.

He concluded by indicating that collaboration across sectors is vital to building a "digitally resilient democracy" where truth prevails. He also stated the need for a comprehensive



framework for combating misinformation and disinformation in national elections, emphasising the need for both legal measures and technical solutions.

Cyber Drill Tabletop Exercise -Misinformation and Disinformation During National Elections

Mr. Isaac Socrates Mensah

Senior Manager, CERT-GH, Cyber Security Authority

The exercise involved players, observers, facilitators, and note-takers in a multimedia, facilitated exercise. Players actively discussed their roles and responsibilities during the exercise, while observers supported the development of the responses of the players. The facilitators provided situational updates and moderated discussions, while note-takers documented the discussions of players.

exercise focused on detecting misinformation and disinformation related to national elections and handling of confirmed incidents. It covered scenarios such as the spread of fake news on social media, phishing targeting campaigns election officials, coordinated disinformation campaigns, and fake election results. It also covered assessing claim validity, communicating accurate information, fact-checking, and coordination with law enforcement agencies, as well as long-term strategies for future elections.

The exercise was held in an open, no-fault environment, with varying viewpoints expected. The scenario was developed in collaboration with subject matter experts and exercise planners. A debrief session was held to address any ideas or issues that emerged from the discussions.

Conclusion

Ms. Adjoa Tabi-Asiamah, Lead for CIIP Audit, Monitoring and Compliance, at the CSA urged officials to educate their sectoral CERT members who were absent at the drill on the insights gained from the exercise, stating that security is a shared responsibility and hence requires the effort of everyone.







National Cybersecurity Challenge and the Launch of the National Child Online Protection Framework

Background

The mandate of the CSA, pursuant to Section 4(i) of the Cybersecurity Act, 2020 (Act 1038), to promote the protection of children online, organised the third edition of the annual National Cybersecurity Challenge (NCC) to sensitise children on child online provisions in the Cybersecurity Act, 2020 (Act 1038) and to promote best cyber hygiene practices. The NCC, organised under the theme "Empowering Creating Young Minds: Opportunities, Promoting a Safer Digital Ghana" aimed at enhancing the awareness of Senior High School students on the ever-increasing cyber threats and equiping them with the skills needed to interact with digital technology confidently, safely, and responsibly.

Additionally, as part of the event, the National Child Online Protection Framework was launched by the wife of the Vice President of Ghana, Mrs. Samira Bawumia. The launch of the framework marked a significant milestone in Ghana's efforts to safeguard children in today's digital world as it establishes a coordinated approach to resolving the unique challenges associated with the protection of children online. The event was held on Friday, October 18, 2024, at the University of Professional Studies (UPSA), Accra.

The National Cybersecurity Challenge Finals

Commencing with five schools selected from five regions of Ghana to compete in the maiden edition of the NCC in 2022, the event has witnessed progressive growth from fifty participating schools in 2023 to seventy in 2024. The schools were categorised into four zones: Northern, Middle, Eastern and

Southern Zones with each zonal winner advancing to the finals. The finalists were Wa Senior High School (Northern Zone), Serwaa Kesse Girls' High School (Middle Zone), St. Peter's Senior High School (Eastern Zone) and Achimota School (Southern Zone).

The final competition involved four rounds.

- Round 1 A combination of Multiple-choice questions and true or false questions.
- Round 2 Contestants analysed the facts of a cybersecurity case study to answer the questions.
- Round 3 Contestants answer practical questions, applying knowledge and skills acquired during their training.
- Round 4 Riddles on cybersecurity terminologies.

At the end of the contest, St. Peter's Senior High School emerged the champions of the 2024 NCC, scoring an impressive 76 points. Achimota School claimed second place with 65.5 points, followed by Wa Senior High School with 54 points. Serwaa Kesse Girls' Senior High School rounded off the competition with 38 points.

The Quizmaster for the NCC, Mr. Joseph Quaye educated the students present on the dangers of misinformation and disinformation, using Artificial Intelligence (AI) generated images. He encouraged the audience to embrace this year's NCSAM and actively participate in awareness creation, especially as Ghana approached the 2024 general elections.







Launch of the National Child Online Protection Framework

Remarks

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

Dr. Antwi-Boasiako noted that the rapidly evolving nature of the digital era has presented children with great benefits online but has also exposed them to several threats such as cyberbullying, cyberstalking, and harmful content online.



He stated that the 2022 survey conducted by the Child Online Protection (COP) functional area of the CSA on the online habits of Senior High School students revealed that 64 per cent of respondents had been exposed to pornographic materials while using social media. He emphasised that the findings underscored the need for effective interventions from the government and stakeholders to ensure the protection of children while also supporting their digital rights.

Additionally, he noted that the launch and implementation of the National Child Online Protection Framework is a testament to the commitment to working CSA's stakeholders to improve child online protection as the lead agency of this initiative in Ghana.

Dr. Antwi-Boasiako called on parents, guardians, and teachers to encourage their wards to remain safe online, noting that this can only be achieved through a collective effort.

Remarks

Mr. Fiachra McAsey

Deputy Country Representative, UNICEF Ghana

Mr. Fiachra McAsey expressed UNICEF Ghana's gratitude to be a part of the third edition of the NCC and commended the CSA on its impressive work in ensuring the Ghanaian child is safe online. He noted that Ghana is



among a few countries leading the way to advance safeguards to protect children online adding that despite these benefits, access to the internet presents risks. He alluded to a UNICEF Ghana Report which revealed that four out of every ten adolescents have been exposed to inappropriate images while online and that the implementation of a Child Online Protection Framework was essential to provide a comprehensive approach towards creating a safe online space for children.

awareness and education, technology solutions, policy and legislation, among others. The Deputy minister noted that the Framework will help young people get the needed tools and knowledge needed to navigate the digital landscape safely. He urged students to explore the field of cybersecurity, stating that the NCC initiative is part of broader efforts to develop a robust cybersecurity workforce.



Remarks

Hon. Charles Acheampong

Deputy Minister, Ministry of Communications and Digitalisation

Minister for Representing the Communications and Digitalisation. Deputy Minister, Mr. Charles Acheampong, stated that the theme of the NCC underscored the government's commitment to nurturing and developing the next generation of cybersecurity champions. He further noted that the National Child Online Protection Framework is designed to safeguard Ghanaian children in the digital world through a multi-faceted approach includes that



Keynote Address

Mrs. Hajia Samira Bawumia

Wife of the Vice Pesident of the Republic of Ghana

Mrs. Samira Bawumia reiterated the importance of the theme for this year's NCC noting that it resonates with the government's vision to foster a generation that is not only aware of the threats but also equipped to confront them. She further highlighted that the NCC serves as an important platform for fostering cybersecurity best practices and awareness among young people.

The wife of the Vice President further elaborated that the framework has been

developed in line with the initiatives of the International Telecommunication Union (ITU) and UNICEF, to reflect a comprehensive approach, recognising the diverse aspects of online safety and addressing the unique challenges children face in the digital landscape.

As she launched the National Child Online Protection Framework, she commended the Ministry of Communications and Digitalisation and the CSA for the tireless work done in child online protection.

Solidarity Messages



Ms. Justina Djabah

Director Administration, Ghana Education Service

On behalf of the Director-General of the Ghana Education Service (GES), Ms. Justina Djabah, encouraged the students to continue exploring the field of cybersecurity and to leverage the skills acquired to positively impact their communities. She also called on stakeholders to invest in ensuring

cybersecurity best practices are taught in schools nationwide.



H.E. Berenice Owen-Jones

High Commissioner, Australian High Commission in Ghana

The High Commissioner commended Ghana for establishing the NCC, which she described tremendous achievement commended the country for its recent Tier 1-Role Modelling Status on the ITU's Global Cybersecurity Index. She revealed that, like Ghana, Australia is also making efforts to ensure that children are protected while online, noting key initiatives such as the Online Safety Act. She hinted appointment of an Ambassador for Cyber Affairs and Critical Technology who has the responsibility of exploring areas collaboration with other countries to ensure the safety of cyberspace in Australia. She congratulated the students for their success and urged them to continue the excellent work.



Mr. Bernard H. Asamoah Country Representative, UNODC Ghana

Mr. Asamoah highlighted the significance of launching the National Child Online Protection Framework, noting its importance as the United Nations (UN) has introduced the UN Convention Against Cybercrime. He said the theme for this year's NCSAM underscores the critical need for cultivating awareness, knowledge, and skills to protect digital ecosystems. He commended the CSA for its efforts towards promoting child online protection and pledged the commitment of the UNODC to continue collaborating with the CSA in this regard. To the students, Mr. Asamoah stated that their participation in the challenge had established them as advocates for safer online practices, helping to protect themselves and their communities.

Awards Ceremony

A brief awards ceremony was organised for the winners and participating schools of the NCC finals. The Canadian High Commisisoner, presented awards to the contestants from Serwaa Kesse Girls' High School with a cash prize of GHs2,000, a laptop as well as branded souvenirs from the sponsors of the event. The second runner-up of the challenge, Wa Senior High School, was presented with a cash prize of GHs 3,000.00, a laptop, medals, certificates, and branded souvenirs. The award was presented by Mr. Fiachra McAsey, the Deputy Country Representative of UNICEF Ghana.

The Deputy Minister of Communications and Digitalisation, Mr. Charles Acheampong, presented Achimota School with their awards as the first runner-up. They received a cash prize of GHs 5,000.00, a laptop, medals, certificates, as well as branded souvenirs from sponsors of the event.

The Second Lady, presented to St. Peter's Senior High School, the winners with the NCC trophy, a cash prize of GHs 7,000.00, medals, certificates, as well as branded souvenirs.

Conclusion

Ms. Joyce Odame, Child Protection Officer at UNICEF Ghana, concluded the event by acknowledging and appreciating sponsors, and stakeholders, for their efforts in protecting children online. She gave special recognition to Mrs. Bawumia for her dedication to issues concerning children and commended her for her contributions. She further expressed gratitude to the Minister for Communications and Digitalisation, Mrs. Ursula Owusu-Ekuful, for her continuous support, commitment, and leadership to ensuring children are safe online. She further acknowledged the support of all dignitaries and the students for their participation.

Launch of the Industry Forum and Inauguration of the **Independent Assessors**

Background

The CSA, pursuant to Section 81 of the Cybersecurity Act, 2020 (Act 1038), is mandated to establish an Industry Forum to create a platform that brings industry together to discuss matters of common interest. Through the forum, Ghana's cybersecurity industry can identify and resolve critical cybersecurity challenges and create best practices, procedures, and solutions that are geared towards securing a resilient digital ecosystem.

The forum is expected to work towards enhancing the cybersecurity development of Ghana and driving innovation while employing a collaborative approach to the regulatory mandate of the CSA. The launch of the Industry Forum was held at the Ghana Shippers House, Accra on October 22, 2024, as part of the 2024 NCSAM activities.

Opening Remarks

Ing. Dr. Kenneth Ashigbey

Chairman, Facilitating Committee on the Establishment of the Industry Forum

Ing. Dr. Kenneth Ashigbey provided insights on the facilitating committee's contribution to the establishment of the Industry Forum and the importance of the establishment. He highlighted the establishment of the forum, as a significant initiative aimed at ensuring industry representation in national cybersecurity governance. The provides for three dedicated seats for industry representatives on the governing council of the CSA, reflecting a commitment to inclusive and collaborative decision-making.

To operationalise Forum. the multi-stakeholder team was constituted,



bringing together representatives from nine key organisations. They included the Ghana Association of Banks (GAB), the Ghana Chamber of Telecommunications, Institute of ICT Professionals Ghana (IIPGH), the International Information System Security Certification Consortium (ISC2), Information Systems Audit and Control Association (ISACA), three CSA Board Members, and the Lead of the Joint Cybersecurity Committee (JCC) at the CSA. The team was tasked with drafting the Forum's constitution and developing an industry code that aligns with Ghana's regulatory framework and cybersecurity priorities.

He mentioned the role of the committee in developing the forum's constitution and an industry code of conduct, both of which have been completed and refined with industry

feedback. These foundational documents establish standards for ethical practices and aim to build a robust cybersecurity community in Ghana.

Ing. Dr. Ashigbey highlighted the challenges encountered during the process, including the absence of African benchmarks for industry codes and the need to adapt to the specific context and maturity of Ghana's cybersecurity ecosystem.

He commended the extensive stakeholder engagements and collaboration that drove the significant progress made. Ing. Dr. Ashigbey particularly lauded the CSA for its leadership in fostering a participatory process and emphasised the importance of industry ensuring the ownership in sustainability and impact. He concluded by encouraging all stakeholders to actively support the Forum's growth and success, ensuring it becomes a platform for meaningful contributions to policies, regulations, and laws shaping Ghana's cybersecurity landscape.

The Industry Forum, Ing. Dr. Ashigbey noted, will serve as a platform for discussing trends, threats, and best practices, ultimately strengthening Ghana's cybersecurity ecosystem and fostering a supportive community of professionals. He lauded the CSA's commitment in incorporating private sector expertise into the governance structure and urged industry members to actively participate in the Forum to ensure its vibrancy.

Opening Remarks

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

Dr. Albert Antwi-Boasiako, Director-General, CSA, began his address by acknowledging the work of industry leaders whose contributions have significantly shaped the Authority's initiatives.

He noted that in March 2023, the CSA advanced efforts to licence and accredit



Cybersecurity Service Providers Cybersecurity Establishments (CEs) and Professionals (CPs) Cybersecurity and reported that the CSA had at the time registered 266 CSPs, 73 CEs, and 1,677 CPs. Dr. Antwi-Boasiako emphasised that Ghana's regulatory approach is unique, such that other countries, like Rwanda, were observing and learning from Ghana's model. He conveyed an upcoming agreement with Rwanda that would allow certified Ghanaian CPs to work in Rwanda, underscoring Ghana's leadership in the field.

announced He the inauguration of "Independent Assessors," where experienced professionals will support the CSA's audit and accreditation efforts. These assessors. working alongside CSA officers, will assist in verifying CEs to operate with the highest standards, especially within the designated critical information infrastructure sectors. The collaboration he noted, reflects Ghana's focus on incorporating private sector expertise into government-led cybersecurity initiatives—a rare approach on the continent.

Address

H.E. Rosemary Mbabazi

High Commissioner, Rwanda to Ghana and Guest of Honour

H.E. Rosemary Mbabazi, the High Commissioner of Rwanda to Ghana, opened her address by expressing gratitude for being invited to Ghana's launch of the Industry Forum and the inauguration of Independent Assessors. She pointed out Africa's increasing reliance on digitalisation through a story of how Rwandan products are shipped to Ghana, underscoring the significant role of digital platforms in modern life and how essential cybersecurity has become in safeguarding all digital interactions, from commerce to healthcare.



She commended the CSA on the launch of the Industry Forum, which will foster this collaboration and uphold high standards. She noted her recent participation in the Africa Cyber Defence Forum in Kigali, where industry experts gathered to exchange best practices and address challenges—a collaborative model she views as essential for tackling cyber threats.

Reflecting on Ghana-Rwanda relations, Ms. Mbabazi praised the two nations' partnership, particularly in cybersecurity. She cited the Memorandum of Understanding 2023 between the Cyber Security Authorities of both countries, facilitating skills technology exchanges. Further. mentioned that visits between the agencies since increased, reinforcing the commitment to mutual growth in cyber security.

She addressed the need for human capital development, recounting the success of events like the African Cyber Olympics in Kigali and Ghana's National Cvbersecurity Challenge. She encouraged further engagement with young tech enthusiasts, noting their vital role in developing the continent's cybersecurity talent pool. She optimism for expressed continued collaboration and expressed confidence that Ghana's Industry Forum will strengthen Ghana and Africa's cybersecurity landscape.

Keynote Address and Official Launch of the Industry Forum

Hon. Ursula Owusu-Ekuful (MP)

Minister, Communications and Digitalisation

The Minister for Communications and Digitalisation, Mrs Ursula Owusu-Ekuful, in her speech, traced Ghana's cybersecurity journey from its initial steps in 2017, when the then Ministry of Communications was tasked by the President of the Republic of Ghana to spearhead cybersecurity initiatives. Dr. Albert Antwi-Boasiako was appointed as the National Cybersecurity Advisor, a decision that laid the groundwork for establishing the CSA and the nation's overarching cybersecurity framework.

Building on these foundations, Ghana introduced significant policies and initiatives, including the Cybersecurity Act, 2020 (Act 1038), the launch of the Safer Digital Ghana Campaign, and the development of a



Computer Emergency Response Team (CERT) ecosystem and more recently the launch of the revised National Cybersecurity Policy and Strategy as well as the National Child Online Protection (COP) Framework. The government has also ratified international conventions like the Budapest and Malabo Conventions to align with global best practices.

Ghana's cybersecurity efforts gained international recognition, with the country's Global Cybersecurity Index score soaring from 32.6% in 2017 to 99.27% in 2024, placing it in category globally. top-tier This achievement has positioned Ghana as a regional leader and highlighted its commitment to a resilient digital future.

Recognising the importance of collaboration, Ghana established the Joint Cybersecurity Committee (JCC), enabling coordination among public sector leaders and facilitating rapid, high-level responses to cyber threats. The launch of the Industry Forum will further promote public-private partnerships, enabling diverse stakeholders to work together on building a sustainable ecosystem,

fostering innovation, and addressing the national cyber skills gap.

The Minister in launching the forum also acknowledged the contributions of industry stakeholders in drafting essential documents to guide the forum's standards and operations.

The Minister highlighted the inauguration of Independent Assessors and stated that cybersecurity is a shared responsibility and called for continued collaboration to protect Ghana's digital ecosystem and to maintain its leadership position in cyber resilience. Through sustained efforts, Ghana is set to strengthen its cybersecurity framework and create a secure digital future, the Minister indicated.

Presentation of Draft Industry Code

Ms. Adelaide Benneh Prempeh

Member, CSA Governing Board

Ms. Adelaide Benneh Prempeh outlined the launch of Ghana's first cybersecurity Industry code. The code, she said, sets ethical and professional standards, with the aim of



aligning with existing laws and enhancing cybersecurity practices across public and private sectors. The key areas covered in the ethics. code include governance. accountability, asset protection, certification, and incident reporting.

She emphasised the code's complementary role to legislation, clarifying that adherence to the law supersedes any potential conflict with the code. The code is broad, applying to licensed cybersecurity professionals and stakeholders. It will undergo regular review, with a standard five-year revision cycle. although earlier reviews may occur due to industry developments. The Facilitating Committee developed the code pursuant to Section 82 of Act 1038, as a clear standard while supporting the evolving cybersecurity needs of Ghana.

Introduction and Swearing in of **Independent Assessors**

Justice Dr. Bridget Kafui Antonio-Apedzi

Ladyship Bridget Dr. Antonio-Apedzi, Justice of the High Court of the Republic of Ghana swore in thirteen



Assessors. The Independent Assessors were Mr. Abdul Mumin Iddrisu, Ms. Blessing Obeng, Mr. Columbus K. Bruce, Dr. Muhammed Siraj, Dr. Nana Kofi Annan, Dr. Patrick K. Kudio, Mr. Emem Umoh, Mr. James Tankia, Mr. Johnson Tamakloe, Ms. Joy Aigbe, Prof. Kester Quist, Mr. Lewis Duah and Mr. Yakubu Abdulai.

Closing Remarks

Mr. Carl Sackey

Member, CSA Governing Board

Mr. Carl Sackey expressed great contentment for the day's achievement, noting it as an important milestone for the cybersecurity community. He highlighted that the Industry code of conduct for the professional body was essential in ensuring high standards in the



industry. He also congratulated the newly inducted Independent Assessors who will support the CSA's audit and accreditation efforts on a voluntary basis. He urged all attendees to be involved in promoting service quality and advancing cybersecurity in Ghana. He reiterated the vision to export local talent and influence national policies.

Forum of Incident Response and Security Teams (FIRST) Workshop on "Securing Ghana's Digital Landscape: Safeguarding Critical Information Infrastructure (CII)

Background

The digital transformation of democratic processes has reshaped how citizens engage, participate, and exercise their rights. The rapid dissemination of misinformation and disinformation can erode trust in democratic institutions, destabilise governance, and hinder effective public engagement. As digital threats grow, so does the need for robust cyber resilience, particularly in safeguarding the CII upon which Ghana's national security and socio-economic stability depend.

To address these challenges, the CSA, in collaboration with the Forum of Incident Response and Security Teams (FIRST), with support of the GAF organised a workshop on "Securing Ghana's Digital Landscape: Information Safeguarding Critical Infrastructure (CII)." The event, held as part of the National Cyber Security Awareness Month (NCSAM) 2024, focused on equipping CII Points of Contact (PoCs) with the skills necessary to handle cybersecurity incidents through practical tabletop exercises (TTX).

The workshop which was held in two (2) sessions at the Signals Training School in Burma Camp, Accra, to strengthen Ghana's cyber resilience had 143 participants drawn from government and private sector institutions including; ICT, Energy, Water, Transportation, Food and Agricultural, Manufacturing, Mining and Education.

Welcome Remark s

Mr. Benjamin Ofori Lead CIIP, Cyber Security Authority



Mr. Benjamin Ofori, the Lead for the CIIP functional area at the CSA, delivered the welcome remarks on behalf of Dr. Albert Antwi-Boasiako, Director-General of the CSA. He emphasised the importance of protecting Ghana's critical information infrastructure and noted the significance of NCSAM 2024 and the importance of safeguarding critical including healthcare, sectors, finance, transportation, and energy. The CSA's progress was outlined, noting the recent licensing and accreditation process which had at the time recorded the registration of 266 CSPs, 1,677 CPs and 73 CEs for licenses and accreditation. This licensing and accreditation process, according to Mr. Ofori will ensure cybersecurity functions are adequately managed by certified entities and individuals,

bolstering Ghana's security and national resilience.

He underscored that as digital threats become more sophisticated, collaboration is essential. The CSA's CII registration process enables a robust defence through measures like early prioritisation, incident warnings, international partnerships. He addressed challenges, such as resource limitations and regulatory needs, while highlighting the role of all stakeholders — government, private sector, academia, and civil society in fostering a culture of cybersecurity. He encouraged active engagement, knowledge sharing, and continuous training to build a secure and resilient digital future for Ghana.

Presentation - Securing Digital Infrastructure

Mr. Alexander Awere-Kvere

Senior Manager, CIIP, Cyber Security Authority

Alexander In his presentation, Mr. Awere-Kyere an official of the CSA outlined Ghana's strategies for securing its digital infrastructure, addressing key areas such as cvbersecurity threats. compliance requirements, and collaborative efforts with stakeholders.

He highlighted that globally, CIIs are increasingly targeted by various threats, including ransomware, **DDoS** attacks, adversarial tactics, and supply chain vulnerabilities. He shared data showing that ransomware constitutes 46% of global CII attacks, with an average cost of \$3.32 million per incident. These costs, impacting finances, system recovery, and reputation, have been on the rise.

Specific to Ghana, he said 48% of phishing target the banking, finance, government, and manufacturing sectors. According to CERT-GH, ransomware attacks account for 20% of cyber incidents, impacting sectors like energy, banking, finance, and national security. Other notable threats include attacks on ICT and government



sectors (15%), website defacements (10%), and malware incidents (7%). This data underscore the pervasive nature cybercrime affecting CII owners in Ghana and globally.

Mr. Awere-Kyere emphasised that the workshop's theme sought to point out the role of Points of Contact (PoCs) as CII owners and the initiatives led by the CSA. He said that the CSA is responsible for identifying CII owners under the Cybersecurity Act, 2020, collaborate with international and local partners to gather intelligence and advise CII owners on addressing vulnerabilities. The CSA is also developing a Risk Assessment Framework to monitor CII owners' compliance and maturity levels.

Additionally, he stated that CII owners are to engage with only licensed and accredited tier-one CSPs, CEs and for critical systems, conduct periodic self-assessments submit reports to the CSA as needed.

Question and Answer

During the Q&A segment, a representative from First Atlantic Bank inquired about conflicting incident reporting requirements between the CSA and the Bank of Ghana, which also demands notification within 24 hours.

Mr. Awere-Kyere clarified that in sectors with established sectoral CERTs, incident reports should be directed there first otherwise the National CERT should be the initial contact point.

A participant asked about audit timelines for CII owners.

In response, an Assistant Manager at the CIIP functional area, Mr. Eugene Sackey explained that following an attack, the CSA may immediately require an incident audit or request a previous audit report to verify compliance. He added that CII owners could have their own audit schedules, whether monthly, quarterly or annually, to ensure compliance to the Directive and share the outcome with the CSA.

Questions were asked about Ghana's long-term goals for cyber monitoring.

Mr. Gerald Awadzi, a Senior Manager, CIIP functional area, responded by referencing the revised National Cybersecurity Policy and Strategy launched on October 1, 2024. He said this policy focuses on creating a resilient digital ecosystem and cleaning up cyberspace to ensure only safe, appropriate content is shared. He also mentioned Ghana's collaboration with the Internet Watch Foundation (IWF) and UNICEF to manage the take down of Online Child Sexual Abuse Material and highlighted additional laws beyond Act 1038 that help manage harmful online content.

Simulation Exercise on Crisis Management

Mr. Lawrence Muchilwa

Africa Regional Liaison, FIRST.

This section featured Table Top Exercises (TTX) centred on cyberattack scenarios, where participants worked in pairs to collaboratively tackle the questions presented. The exercises focused on assessing participants' readiness for cybersecurity crises and the goal was to

evaluate their ability to manage and respond to cyber incidents effectively. Participants concluded the section by sharing their diverse perspectives on potential solutions.

Closing Remarks

Ms. Adjoa Tabi-Asiamah

Lead, CIIP Audit

In her concluding remarks, Ms. Adjoa Tabi-Asiamah, Lead for the CIIP Audit, Monitoring and Compliance expressed her



sincere gratitude to the FIRST for facilitating the TTX and the insightful discussion on crisis management. She extended her thanks to all participants for their valuable time and contributions to the workshop. Ms. Tabi-Asiamah urged everyone to prioritise the protection of CII.

Cybersecurity Awards and Recognition Night

Background

In recognition of individuals and institutions who have significantly contributed to the institutionalisation of Ghana's cybersecurity development and achievements, Cybersecurity Awards and Recognition Night was held as part of the activities scheduled for the 2024 edition of the (NCSAM). The maiden event gathered stakeholders, individuals, local and international partners, institutions, sponsors, and collaborators to celebrate these achievements and recognise the exceptional contributions of those committed to securing our digital future.

The event also served to acknowledge the dedication and commitment of members of the then National Cyber Security Technical Working Group (NCSTWG) and the Joint Cybersecurity Committee (JCC) in enhancing Ghana's cybersecurity landscape. ceremony took place at the Movenpick Ambassador Hotel in Accra on Friday, November 01, 2024.

Participation

The President of Ghana, Nana Addo Dankwa Akufo-Addo was the special guest of honour at the event. The Minister for Communications and Digitalisation, Mrs. Ursula Owusu-Ekuful, the Minister for National Security, Mr. Albert Kan Dapaah, Members of the governing board of the CSA, the Director-General of the CSA, Dr. Albert Antwi-Boasiako, ambassadors and diplomatic members of the representative of local and international organisations, members of the Intelligence Committee, members of the Joint Cybersecurity Committee, heads of state agencies, the media and staff of the CSA were in attendance.

Video Documentary

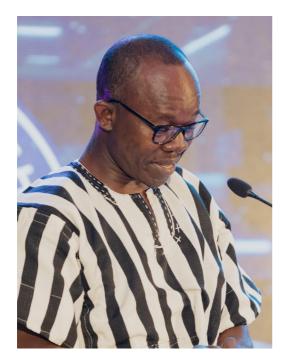
An insightful ten-minute video documentary captured the nation's impressive journey to strengthening its cybersecurity capabilities culminating in achieving Tier 1 status in the Global Cybersecurity Index (GCI) by the International Telecommunication Union (ITU) in September 2024. The documentary traced the story back to 2017, when foundational measures were first established, addressing initial challenges and laving the groundwork through initiatives like the Cybersecurity Policy and Strategy and the formation of a National Computer Emergency Response Team (CERT-GH). The narrative highlighted the nation's steady progress, focusing on key partnerships, strategic legislation, and public awareness campaigns that fostered a strong cybersecurity culture. It showcased crucial advancements that led to the Tier 1 status, including significant investments in advanced technologies, the development of threat intelligence platforms, the enactment of the Cybersecurity Act. 2020 (Act 1038), and advancement of international cooperation through the ratification of the Budapest and Malabo Conventions. By highlighting collaborative efforts among government bodies, private sectors, and international partners, the documentary celebrated this global recognition as a testament to years of dedicated work. It concluded with leaders reaffirming the importance of a forward-thinking approach to protect digital assets and national security.

Remarks

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

The Director-General of the CSA, Dr. Albert Antwi-Boasiako, welcomed all guests to the event and highlighted the need to celebrate Ghana's achievements in cybersecurity



development over the years. He added that the historic event is expected to become an annual tradition, serving as both a recognition of progress and an inspiration for the continued advancement of cybersecurity in Ghana.

He expressed profound gratitude to the President of the Republic for his visionary leadership, that has positioned Ghana as a cybersecurity leader, particularly among nations in the Global South. He also commended the Minister for Communications and Digitalisation, for her pivotal role in advancing the President's vision. This vision, which began in 2017 when Ghana's cybersecurity maturity was at 32.6% on the ITU Global Cybersecurity Index, has propelled Ghana to its current position as the second-highest ranked country in Africa with a maturity rating of 99.27%. Ghana is now one of only five Tier-1 countries on the continent a monumental achievement as the President's tenure nears completion.

Dr. Antwi-Boasiako acknowledged the critical contributions of stakeholders, including the National Cyber Security Inter-Ministerial Advisory Council (NCSIAC), the NCSTWG, the JCC, and international partners. He also commended the 7th and 8th Parliaments for their bipartisan support, which has been vital to the successful realisation of the President's cybersecurity vision.

The awards night served to recognise the collective efforts of CSA staff, technical experts, and partners across sectors who have shown exceptional commitment to Ghana's cybersecurity progress. He emphasised that the event not only celebrated individual highlighted excellence but also collaborative spirit essential for addressing cyber threats in an ever-evolving digital landscape. He reaffirmed that continuous learning, innovation, and partnership are key to building a resilient cybersecurity ecosystem that will protect the nation and enable citizens and businesses to thrive.

In conclusion, Dr. Antwi-Boasiako expressed appreciation to all cybersecurity partners and reaffirmed the shared commitment to securing Ghana's digital future.

Remarks

Hon. Mrs. Ursula Owusu-Ekuful

Minister, Communications and Digitalisation

The Minister for Communications and Digitalisation, Hon. Mrs. Ursula Owusu-Ekuful, expressed gratitude to the CSA for elevating the National Cyber Security Awareness Month (NCSAM) with the maiden Cybersecurity Awards.

She highlighted the recent launch of the National Cybersecurity Policy and Strategy, designed to proactively address cyber threats. With global cybercrime costs expected to surpass \$10.5 trillion by 2025. The policy establishes a clear roadmap to create a resilient cyberspace that supports innovation, growth, and citizen protection. The strategy underscores the need for continuous risk assessments and advanced technologies to secure the nation's digital landscape.



The Minister expressed appreciation for the commitment of stakeholders government, private sector, academia, and civil society. Their collaboration has been instrumental in strengthening cybersecurity framework, fostering a culture of awareness and responsibility that is vital in today's digital age. This collective effort has positioned Ghana as a global leader in cybersecurity.

Mrs. Owusu-Ekuful also commended the CSA for its licensing and accreditation initiatives, which have raised the standard of cybersecurity services in the country. These initiatives ensure a pool of qualified professionals protecting Ghana's digital infrastructure, thereby enhancing among consumers and businesses.

The CSA received further praise for organising this year's NCSAM, on the theme, deemed highly relevant, especially in the lead-up to the national elections. She encouraged stakeholders to educate communities on the importance of verifying information before sharing it, emphasising the need to combat misinformation to create a well-informed electorate.

In conclusion, Mrs. Owusu-Ekuful called for ongoing collaboration to tackle emerging cyber threats and urged all stakeholders to continue championing cybersecurity best practices within their sectors. She congratulated the award recipients, acknowledging their vital contributions to Ghana's cybersecurity efforts, which bolster both national security and the resilience of the digital economy.

Keynote Address

His Excellency Nana Addo Dankwa Akufo-Addo

President, Republic of Ghana

In his keynote address, the President, Nana Dankwa Akufo-Addo, expressed gratitude to the CSA for its focus on this year's NCSAM, particularly for the inclusion of the maiden Cybersecurity Awards Recognition Night.

He emphasised his government's early recognition of digital transformation as a critical driver for national development, economic growth, and improving the quality of life for citizens. Since 2017, Ghana has made significant strides in its digital landscape, backed by strategic policies such as the Cybersecurity Act, 2020, and updates to the National Cybersecurity Policy and Strategy. The policies provide a solid foundation for protecting Ghana's cyberspace.

The President highlighted the vital connection between cybersecurity and the Sustainable Development Goals (SDGs), noting that robust cybersecurity frameworks directly contribute to national growth and resilience. He further emphasised Ghana's leadership role in integrating cybersecurity within the broader context of sustainable development, pointing cybersecurity out that investing in infrastructure helps build resilience and promotes a culture of digital awareness.

President Akufo-Addo also underscored the



importance of cybersecurity in fostering peace, justice, and strong institutions, particularly by strengthening democratic processes and building citizen trust in his digital space. He reiterated the government's commitment enhancing to cybersecurity awareness and investing infrastructure, training. collaboration to secure Ghana's digital environment.

As Ghana approached the 2024 elections, President Akufo-Addo urged citizens to combat misinformation and promote responsible digital citizenship, which is crucial for ensuring peaceful and fair elections. In his concluding remarks, the President reaffirmed his commitment to peace and called on all Ghanaians to act responsibly in safeguarding the integrity of the democratic process.

Presentation of Awards

The CSA honoured President Nana Addo Dankwa Akufo-Addo with Cybersecurity Visionary Award, for his pivotal role in advancing cybersecurity Ghana. The Minister Communications and Digitalisation, Hon. Ursula Owusu-Ekuful, was also recognised with the Exemplary Leadership Award, for her commitment implementing the President's cybersecurity vision.

In addition to the President and the Minister, selected media partners were acknowledged for their significant contributions to promoting cybersecurity awareness and providing widespread publicity for CSA's initiatives. Various stakeholders such as international partners, exemplary industry players, NCSTWG, JCC among others were also recognised for their in advancing Ghana's cybersecurity landscape.

Ms. Emmanuella Dankwah, Mr. Isaac Socrates Mensah, and Mr. Felix Afedi, were awarded overall Best Staff, Best Staff - Non-Technical and Best Staff - Technical respectively. Additionally, CSA staff members who had attained five years of service were honoured for their commitment to cybersecurity development in Ghana. Certificates of Recognition were presented to seconded staff, acknowledging their valuable contributions to the CSA's operations and activities.





Book Pre-Launch

Commandments
for Sustainable
National
Cybersecurity
Development;
Africa in Context
Practical Lessons &
Good Practices

A book entitled "The 10 Commandments for Sustainable National Cvbersecurity Development - Africa in Context Practical Lessons & Good Practices" authored by Dr. Albert Antwi-Boasiako, Director-General, CSA was pre-launched by the Hon. Minister for Communications and Digitalisation. The Minister celebrated his work over the past eight years of institutionalising cybersecurity development. The book, which documents Ghana's cybersecurity journey and provides practical guidance for digital resilience, is to serve as an essential resource for policymakers and industry leaders. The Director-General shared his motivation for authoring the book, highlighting its importance in recording Ghana's achievements and offering a model for other nations confronting similar digital challenges. The Minister described the book as timely and insightful, emphasising its role in educating citizens and strengthening institutional cybersecurity knowledge. She noted that the

publication reflects the Director-General's leadership and serves as a valuable blueprint for navigating cyber threats in today's interconnected world.

Closing Remarks

Dr. Albert Antwi-Boasiako, extended his heartfelt appreciation to all guests for their contributions to Ghana's cvbersecurity progress. He noted that the evening celebrated the exceptional efforts of individuals and organisations who have advanced the nation's digital security, helping to establish Ghana as a leader in global cybersecurity. He expressed appreciation to President. the Minister the Communications and Digitalisation, and all partners for their steadfast support in realising the shared vision of a Safer Digital Ghana.

He further congratulated the awardees for their outstanding dedication and urged the citizenry to remain committed to working together for a safer, more secure digital future for Ghana.



COLLABORATIONS & PARTNERSHIPS

PART II

Background

As part of the 2024 National Cyber Security Month (NCSAM). Awareness the collaborated with Civil Society Organisations health institutions (CSOs). and non-governmental organisations (NGOs) to implement a series of events addressing the challenges οf misinformation disinformation, particularly within the context of Ghana's upcoming elections. collaborative events underscored the CSA's commitment to fostering a secure and informed digital environment while aligning with its overarching mission to strengthen Ghana's cybersecurity landscape.

A. Komfo Anokye Teaching Hospital (KATH) Cybersecurity Awareness Symposium

Introduction

The Komfo Anokye Teaching Hospital (KATH) collaborated with the CSA for its maiden Cybersecurity Awareness Week under the theme, "Securing Health Data in the Age of Misinformation - A Collaborative Approach to Digital Resilience" on October 07, 2024.

The event which was held at the A & E Disaster Block at the KATH had about 75 hospital staff participating. Dignitaries present included Prof. Otchere Addai-Mensah, CEO, KATH; Nana Prof. Oheneba Boachie Adjei Woahene II, President and Founder of FOCOS Orthopedic Hospital; Mr. Stephen Cudjoe-Seshie, Lead, National Computer Emergency Response Team (CERT-GH), CSA; and Mr. Alexander Oppong, Director, Capacity Building and Awareness Creation (CBAC), CSA. The objective of the week-long event was to heighten staff awareness of cybersecurity issues and ensure adherence to regulations to mitigate risks in line with the global campaign to raise and deepen public knowledge and awareness about the importance of cybersecurity worldwide.

Welcome Address

Prof. Otchere Addai-Mensah CEO. KATH

Prof. Otchere Addai-Mensah noted that the health sector had gone digital with all patient information now taken, stored, managed, and retrieved electronically, following the rollout of the Electronic Medical Records System (EMRS) by the Ministry of Health.

He therefore highlighted that the



management, and staff had a duty to ensure that systems are safeguarded to curtail any catastrophic interruption to patient care, and mistrust from patients. He stated that the theme, was timely in an age where online misinformation is increasing rapidly, adding that misinformation in the health sector leads to poor health decisions, distrust in medical guidance and reluctance to seek health care.

Prof. Otchere Addai-Mensah extended appreciation to the CSA for the collaboration and urged the staff of KATH to actively engage in the discussions and equip themselves to safeguard digital systems from cyber attacks.

Address

Nana Prof. Oheneba Boachie Adjei Woahene II

President and Founder, FOCOS Orthopedic Hospital

Nana Prof. Oheneba Boachie Adjei Woahene II, the chairman of the event highlighted the significance of cybersecurity awareness, noting that cyber threats are increasing across all critical information infrastructure including the health sector.

He emphasised the need for robust cybersecurity measures, guidelines and best practices to ensure the safety of patient data and to reduce cybersecurity risks in health institutions.

Nana Prof. Woahene II intimated that the weeklong event was an avenue to exchange best practices to mitigate cybersecurity threats, develop innovative solutions, and collectively prioritise actions and investments to improve cybersecurity across the Hospital.

He concluded by calling for a collaborative approach that fosters partnerships among healthcare providers, technology experts and regulators to enhance resilience against cyber threats and misinformation.



Keynote Address

Mr. Stephen Cudjoe-Seshie

Lead, CERT-GH, Cyber Security Authority

The Lead, National Computer Emergency Response Team (CERT- GH) at the CSA, Mr. Stephen Cudjoe-Seshie, speaking on behalf of Dr. Antwi-Boasiako, the Director-General, CSA highlighted the remarkable transformation in the health sector with approximately 60% of health systems utilising electronic health records systems to manage patient information according to the - World Health Organization (WHO). He stated that online misinformation presents serious public health risks adding that the WHO reported misinformation that about treatments led to over 1.5 million cases of vaccine refusals.



Mr. Cudjoe-Seshie further disclosed that an assessment by the CSA in the last 18 months, indicated that fifteen entities consisting of eight public hospitals, three private hospitals and four medical labs identified issues of no password encryption, outdated software and denial of service web server misconfiguration.

Other vulnerabilities such as unsecured weblinks and verbose error messages were found during the exercise, making the cybersecurity maturity level of the health sector comparatively the lowest among other Critical Information Infrastructure sectors, indicating the need for significant enhancements.

He further underscored the importance of capacity building and awareness programmes to provide health workers with the knowledge to use or manage the various digital platforms in the health sector safely. Commending KATH for the Cybersecurity Week initiative, Mr. Cudjoe-Seshie also announced that the CSA has collaborated with the Ghana Health Service (GHS) in the development of a cyber hygiene curriculum that will leverage the e-learning platform of the Service to deliver sessions on cyber hygiene practices, common threats, and data protection.

Panel Discussion

A panel discussion was moderated by Dr. Emmanuel Ahene, a Senior Lecturer, Department of Computer Science, KNUST & Co-Founder of Cyberpass Consult on the topic, "Team Effort in Safeguarding Patient Data - Best Practices and Collaborative Strategies to Adopt". The panellists for the session were;

- Mr. Dunstan Guba Cyber Intelligence Lead, Cybercrime Unit & Digital Forensic Laboratory, Ghana Police Service
- Mr. Phanuel Seli Kwadzo Asense Deputy Director, Information Security and Technology Assurance Division, KNUST
- Dr. (Mrs) Frances Dufie Azumah Esq. -Senior Lecturer, Department of Sociology & Social Work, KNUST
- Mr. Isaac Socrates Mensah Senior Manager, CERT-GH, CSA
- Mr. Frank Anati Regional IT Manager,
 Ghana Health Service, Ashanti Region

Recommendations

Below are some recommendations from the session;

- Management of health institutions must prioritise investments in cybersecurity capacity building for staff and technology to safeguard the systems that hold patients' data.
- Health institutions must adhere to the CII Directive to help safeguard digital systems and share information on cyber incidents to help protect the ecosystem.
- Enforcement of personnel assess restriction protocols to prevent insider threats.
- IT managers must frequently update network protocols to fix any vulnerabilities.
- Health workers must familiarise themselves with legislations on data privacy such as Data Protection Act, 2012 (Act 843), and other relevant legislation such as the Cybersecurity Act, 2020 (Act 1038) and the Children's Act, 1998, (Act 560) given that ignorance of the Law is no excuse.

B. Youth Against Disinformation Conference 2024

Background

Youth Against Disinformation is a movement that empowers young people to combat the spread of false and misleading information online. The movement aims to create a more informed and resilient digital landscape by providing education, fostering collaboration, and leveraging on technology.

The CSA partnered with Penplusbytes, DW Akademie, UNESCO Ghana. YouthKommunity.Org to organise the Youth Against Disinformation Conference 2024 on October 24 at the Mikaddo Conference Centre in Accra.

The objective of the conference was to enhance young people's decision-making and participation in Ghana's democratic process by facilitating discourses and capacity building on the adequate use of Media and Information Literacy (MIL) skills to combat disinformation issues in elections.

Keynote Address

Mr. Carl Ampah

Culture Program Officer, UNESCO

Mr. Carl Ampah, on behalf of the UNESCO Representative in Ghana, stated that Youth Against Disinformation helps individuals distinguish facts from fiction and engage responsibly in online discussions, a vital skill in today's digital age. He further mentioned that there was a need for stronger regional and national policies to address online risks, misinformation, disinformation, and digital privacy violations. He highlighted the pivotal role of media, information literacy and digital competencies in navigating the evolving digital landscape. He further stressed how critical it was to raise awareness on innovative media, information literacy initiatives and best practices worldwide. Mr. Ampah emphasised concern over the rise of misinformation and disinformation, especially during election years. He stressed the importance of accurate and timely information and encouraged the use of digital tools for fact-checking and cross-referencing.

He concluded by highlighting the need for media literacy among young people to enable them to understand social media and practise digital security which are essential for online safety.

Panel Discussion

The panel discussion, moderated by Mr. Malise Omoloye, featured Mr. Espoire Amedorme President, MIL UNIMAC-IJ; Dr. Imbrana Mohammed, Director of Programmes, National Commission for Civic Education (NCCE); and Mr. Jerry Sam, Executive Director, Penplusbytes.

Discussions centred on disinformation and explored specific contexts for the spread of disinformation, its impact on young people's decisions and actions during elections. The panel also discussed youth engagement on peace and security threats that may arise due to the spread of disinformation during the elections and youth civic responsibilities to address related concerns.

Presentation

Mr. Kwaku Sarpong Manu

Assistant Manager, CERT-GH, Cyber Security Authority

Mr. Kwaku Sarpong Manu noted that false information, both unintentional intentional, has become widespread in the digital world, causing significant problems including weakening trust in organisations, encouraging extreme views while creating divisions in society. Additionally, such spread of false information, can result in financial losses and market instability. He pointed out some methods used to spread misinformation and disinformation, such as using advanced technology to create fake images or videos and the usage of social media to promote these false stories.

He emphasised that a comprehensive approach is needed to fight the spread of misinformation and disinformation. This includes teaching people to carefully check the sources of information, encouraging them to verify facts from reliable sources, and promoting digital literacy skills.

Conclusion

Okoh Mr Armah, representing YouthKommunity.Org, gave the vote of thanks while emphasising the collective potential to build a future where truth conquers disinformation. He envisioned a world where critical thinking reigns, supreme and young voices pave the way for a brighter tomorrow. Partners and sponsors for this event were, Commission for Ghana UNESCO. YouthKommunity.org, DW Akademie, the National Commission for Civic Education, National Peace Council, Amnesty International Ghana and media houses including Media General Ghana (TV3/3FM), CITI FM/ChannelOne TV and Despite Media (UTV/Peace FM).

C. Institute of ICT Professionals, GH Webniar on Fighting Misinformation and Disinformation - The Role of Netizens

Background

The Cybersecurity Working Group of the Institute of ICT Professional Ghana (IIPGH) in collaboration with the CSA held a webinar dubbed "Fighting Misinformation and Disinformation - The Role of Netizens" on October 24, 2024. The moderator for the workshop was Ms. Rachel Popoola.

Opening Remarks

Mr. Emem Umoh

Head of IIPGH Cybersecurity WG

Mr. Umoh mentioned recent collaborative cybersecurity initiatives undertaken by the CSA, such as the launch of the Industry Forum, the Industry Code, the launch of the National Cybersecurity Policy and Strategy, which seeks to address emerging threats, and the inauguration of the Independent Assessors.

He discussed the establishment of industry standards and regulations to enhance cybersecurity efforts, particularly with respect to misinformation and highlighted specific challenges faced in Ghana and other African countries, including language barriers and cultural references that makes it difficult to identify misinformation. He stated the need for localised approaches to address these challenges effectively.

Mr. Umoh outlined the importance of both technical and organisational measures, such as early warning systems and emergency response teams, as well as digital literacy programs aimed at creating a resilient ecosystem. He recognised the collaborative role of organisations like the Institute of ICT Professionals Ghana (IIPGH) and others in cybersecurity awareness initiatives, underlining the value of partnerships in tackling misinformation effectively.

Presentation

Mr. Isaac Socrates Mensah

Senior Manager, CERT-GH, Cyber Security Authority

Mr. Isaac Socrates Mensah noted that NCSAM was an opportunity for the CSA to engage in enhanced public awareness campaigns and collaborations. He discussed the launch of the revised National Cybersecurity Policy and Strategy which outlines Ghana's approach to addressing emerging cyber threats and national guide in improving cybersecurity across various sectors. He highlighted the importance of child online protection which focuses on safeguarding young internet users from online risks. He emphasised the need for various stakeholders to collaborate to protect children while enabling their participation in the digital space. Mr. Mensah outlined some key cybersecurity initiatives being undertaken by the CSA, including capacity building for professionals in the field which aims to ensure that there are enough skilled experts to tackle growing cyber challenges. Mr. Mensah

mentioned that laws such as the Electronic Communications Act, 2008 (Act 775), and the Criminal Offences Act, 1960 (Act 29), exist to address cybercrimes, misinformation, and disinformation that could endanger national security. He encouraged participants to report misinformation and disinformation. particularly if it poses a threat to national security. He concluded by highlighting the importance of collaboration between the government, private sector, and other stakeholders in implementing cybersecurity initiatives while urging participants to be and proactive in protecting themselves and the broader digital ecosystem.

Presentation

Mr. Isaac Apenteng

Deputy DPS, IIPGH

Mr. Apenteng presented on the role of netizens misinformation fighting disinformation, focusing on the impact of false information and how individuals can help mitigate these challenges. Speaking about the potential harm misinformation and disinformation could cause to governments. including undermining trust in newly elected officials, creating unrest, and potentially leading to protests or hate crimes, Mr. stressed Apenteng that as netizens, individuals have a responsibility to ensure they share verified information. He further encouraged participants to report misinformation and suggested using fact-checking tools like Google Fact Check, Snopes and BBC Verify to verify the accuracy of information prior to sharing. He stressed that media literacy and digital education are key to equipping people to better recognise and respond to misinformation.

Conclusion

In closing, participants were urged to continue educating themselves, stay informed, report misinformation, and engage in ongoing cyber awareness and skills development efforts. The webinar ended with a call to stay connected via IIPGH's online platforms and follow updates on cybersecurity developments through the CSA's online platforms.

D. Genius IT Foundation Cybersecurity Awareness Conference in the Volta Region Background

The CSA in collaboration with Genius IT Foundation held a conference under the theme "Combating Misinformation/ Disinformation in a Digitally Resilient Democracy- Our Collective Responsibility" at the forecourt of MTN Ghana, Ho in the Volta Region as part of the activities scheduled for the 2024 edition of the National Cyber Security Awareness Month (NCSAM).

Welcome Address

Mr. Desmond Kitsi

Executive Director, Genius IT Foundation

Mr. Desmond Kitsi in his welcome address stated that there was a need to bridge the digital divide hence the conference, which provided a platform for everyone to learn more about misinformation and disinformation in cyberspace.

Speech

Mr. Victor Worlanyo Gbedawo

Lecturer, Department of Computer Science, Ho Technical University

Mr. Victor Worlanyo Gbedawo spoke largely on the issue of misinformation and disinformation and its attendant risks. He encouraged the participants to take up the effort of digital literacy. He lauded the fact that the educational curriculum now had elements of cybersecurity and digital literacy. In conclusion, he admonished participants to be mindful in posting any information on social media without verification.

Speech

Mr. Jones Kwesi Tagbor

National Executive Committee Member, Ghana Psychological Association

Mr. Jones Kwesi Tagbor educated participants largely on the psychological effects of falling prey to cyber fraud and misinformation. He outlined anxiety and depression as some of the effects. He also advised that these effects could have far reaching consequences of a psychological and emotional nature. He gave the example of the Rwandan genocide which occurred because of misinformation and cautioned the participants to be mindful of publishing information that may affect people psychologically.

Presentation

Ingrid Serwah Asare, Esq.

Manager, Legal and Compliance, Cyber Security Authority

Ms. Asare mentioned Government of Ghana's dedication towards building a secured digital ecosystem for economic growth. She spoke about the various legal frameworks that regulate the cyberspace in Ghana. In her presentation, she stated that cybersecurity being multidisciplinary in nature required collaboration across all sectors and discussed the deterrents which are applicable to anyone found to be in contravention of the law.

She touched on various interventions engaged in by the CSA to sanitise cyberspace which included the launch of the revised National Cybersecurity Policy and Strategy, the role of the Joint Cybersecurity Committee (JCC) and the development of the Directive for the Protection of Critical Information Infrastructure. She further discussed the role

of the National and Sectoral Computer Emergency Response Teams (CERTs), the ongoing licensing of Cybersecurity Service Providers (CSPs), accreditation Cybersecurity Establishments (CEs) Cybersecurity Professionals (CPs), and the launch of the Child Online Protection Framework.

Highlighting the capacity building and awareness creation efforts of the CSA, she mentioned the initiative of the National Cybersecurity Challenge (NCC) for Senior High Schools to enhance capacity building and create awareness in second cycle schools and informed the participants the Cybercrime/Cybersecurity Incident Reporting Points of Contacts.

Speech

Mr. Kossi Azoumaro

MS, CISA, CISSP, OCIH, CEH, AWS Certified Architect

Kossi Azoumaro commended Mr. collaborative initiative by the Genius IT Foundation and the CSA. He spoke about the necessity to identify misinformation and also touched on the financial and negative impact of misinformation on brands. He stated the need to create more awareness as the weakest link in any cyber protective infrastructure is the human being. He concluded by encouraging the participants to always update their software, use very strong passwords and always think before clicking on any forwarded links.

Speech

Hon. Etornam James Flolu

DCE, Afadjato-South

Hon. Etornam Flolu spoke largely on the issue of misinformation and disinformation and related risks which affects all people.

He stated that although there have been many

benefits of IT and digitalisation especially to democracy, the rise of misinformation and disinformation could erode the trust placed in our democracy and therefore have become critical threats. He elaborated on the fact that deep fakes have become more prevalent and are used as tools to influence elections. He said that it was, therefore, imperative to nip this in the bud. He lauded the efforts of the CSA in ensuring digital safety.

In conclusion, he stated that combating misinformation and disinformation is a collective responsibility and encouraged all and sundry to continue to foster discussions on cybersecurity to ensure a safe digital space.

Further Discussion

Regarding passwords and online security, participants were advised to use strong and varied passwords for different accounts given that even with a two-step authentication set there is always room for residual risk. It was also discussed that the protection of data with e-commerce websites lies within the mandate of the Data Protection Commission (DPC) pursuant to the Data Protection Act, 2012 (Act 843).

Concluding Remarks

Mr. Desmond Kitsi expressed appreciation to the partners and sponsors who made the conference a success. He emphasised the positive attributes of Information Technology and digitalisation and admonished that more attention ought to be paid to curb cyber threats.

Mr. Kitsi reiterated the need to secure one's digital space invariably protects everyone. He entreated parents to monitor the activities of their children online so as to prevent them from falling prey to online predators and scammers.

E. Ghana Speaks Series 2024 Forum: "Moderating the Airwaves For Peaceful and Credible Elections 2024"

Background

The Institute for Democratic Governance (IDEG) in collaboration with the Cyber Security Authority (CSA) organised "Ghana Speaks Series 2024" to forge a collaboration with the key media regulatory institutions to inform the public about their shared role in moderating the airwaves for peaceful and credible elections. The event was to promote and enhance collaboration among media regulatory institutions, Civil Society Organisations (CSOs), and relevant non-state actors to collectively identify the challenges associated with media space abuse during electoral periods. The CSA collaborated with IDEG as part of the National Cyber Security Awareness Month 2024.

Opening Remarks

Dr. Emmanuel Akwetey

Executive Director, IDEG

Emmanuel Akwetey conveyed appreciation to all participants for their active engagement. He emphasised the distinctive nature of Ghana's upcoming 2024 elections, drawing comparisons to previous elections in 2008, 2012, and 2016. Dr. Akwetey observed an evolution in the tactics of contesting parties, noting a shift from the use of "foot soldiers" to armed vigilante groups, which presents new challenges for maintaining a peaceful electoral environment. highlighted Ghana's established reputation for peaceful elections and referenced the which Peace Pact, was previously securing post-election instrumental in stability. He further cited the prolonged eight-month judicial adjudication of the 2012 election results as an example of the country's commitment to democratic processes.



In concluding, Dr. Akwetey underscored the importance of keeping the airwaves free from hate speech and the activities of malicious actors. He remarked that forums like this offer Ghanaians confidence in the proactive measures being taken by regulatory authorities like the National Communications Authority (NCA), the National Media Commission (NMC), and the CSA to secure both traditional and digital media spaces against emerging threats.

Presentation

Mr. George Sarpong

Executive Secretary, NMC

Mr. George Sarpong discussed a report that reviewed Ghana's current broadcasting regulatory structure. The regulatory structure operates under a two-tiered framework: technical standards governed by the NCA and content standards overseen by the National Commission Media (NMC). While Electronic Communications Act, 2008 (Act 772) adequately regulates technical aspects such as frequency and transmitter range. He stated that there is a critical gap in content regulation noting that efforts to pass a comprehensive broadcasting law addressing content standards have faced legal and



constitutional challenges and the lack of unified regulation has led to jurisdictional conflicts, especially as global models like those in the United States and United Kingdom demonstrate the advantages of a converged regulatory system.

He stated that to address these gaps, Ghana could adopt three potential policy approaches: pursuing a comprehensive broadcasting law to unify content and technical standards, amending the Electronic Communications Act, 2008 (Act 775) to incorporate content oversight, reintroducing a separate content standards instrument. The report underscored the importance of informed discussions among stakeholders to determine whether Ghana should maintain its dual regulatory model or move toward a single, cohesive framework. He concluded by stating that such dialogue position Ghana to align its broadcasting policies with international trends in media accountability, helping to create a robust regulatory environment capable of adapting to the evolving media landscape.

Presentation

Mr. Joseph Attoh Antwi

Deputy Manager, CERT-GH Cyber Security Authority

Mr. Joseph Attoh Antwi in his presentation provided a comprehensive analysis of Ghana's internet landscape and the cyber threats it faces, particularly regarding the electoral process. He highlighted the increasing misinformation prevalence of and disinformation, caused by Ghana's high social media usage. Citing Meltwater's 2024 Global Digital Report, Mr. Antwi noted that Ghana ranked 15th globally for time spent on social media platforms, a factor that amplifies the rapid spread of misinformation.



To illustrate the impacts of misinformation, he referenced high-profile incidents such as the hacking of the Democratic National Convention of the United States of America, along with the reported hack of Ghana's Electoral Commission in 2016. He further emphasised the importance of robust legal frameworks to combat misinformation and outlined best practices for cybersecurity, focusing on public awareness and preventive measures. Concluding his presentation, Mr. introduced CSA's Antwi the 24-hour Cybercrime/Cybersecurity Incident Reporting Points of Contact, providing participants with resources for reporting cyber incidents.

Panel Discussion

The panel discussion, moderated by Dr. Lawrencia Agyepong, featured Mr. Yaw Boadu Agyeboafoh, Chairman, National Media Commission; Ms. Jennifer Mensah, Lead, Legal and Compliance, CSA; and Mr. George Sarpong, Executive Secretary, National Media Commission. The discussion centered on regulatory measures in media and cybersecurity for the upcoming elections. Below were recommendations from the panelists;

- CSA should enhance collaboration with stakeholders like the Electoral Commission and IDEG to tackle misinformation and hate speech.
- CSA should continue publishing advisories on social media to counter misinformation, particularly during elections.
- NMC should expand consultations with journalists and enforce ethical measures like issuing apologies and retractions when standards are breached.
- Engage TV stations, especially those serving local communities, to ensure accurate election reporting.
- Increase the use of the NMC's "Media Watch" app for real-time monitoring and reporting of election-related activities.
- Strengthen journalist protection by ensuring compensation for affected journalists and punishment for perpetrators.

Closing Remark

Dr. Angela Dwamena-Aboagye

Chairperson, Civic Forum Initiative (CFI)

Dr. Dwamena-Aboagye urged the National Media Commission to organise workshops to develop a comprehensive two-tiered framework for Ghana. She also urged participants to be wary of disinformation and misinformation that is being spread by the

political parties and thanked all the speakers for their contributions.

F. Dynamic Data Solutions Cybersecurity Awareness Webinar 2024

Background

In line with activities to mark the 2024 edition of the National Cyber Security Awareness Month, the Cyber Security Authority (CSA) collaborated with Dynamic Data Solutions (DDS)to organise a webinar under the theme "Securing Digital Truth - Combating Cyber Threats in an Age of Misinformation and Disinformation", on Friday, November 15, 2024. The objective of the webinar was to create a safer digital environment by raising awareness about cyber threats, promoting cybersecurity practices, fostering digital literacy, encouraging international cooperation, and driving technological innovation to combat cyberattacks and misinformation.

The session was moderated by Dr. Bright Gameli Mawudor, the Regional Training Lead for Crystal Intelligence at DDS.

Presentations

i. Importance of SectorCollaboration and CombatingCyber Threats

Mr. Eric Hazael Mensah

SOC Analyst, ISMS - dds55

Mr. Eric Hazael Mensah, SOC Analyst, ISMS dds55, highlighted the World Economic Forum's warning about the growing threats of misinformation and disinformation. These threats he stated could lead to operational disruptions, financial losses, infrastructure damage, and reputational harm.

He emphasized the importance of countering

these threats and called on organisations to strengthen cybersecurity, using Artificial Intelligence (AI), collaboration, and investing in employee training and conduct regular assessments.

He stated that by adopting a comprehensive approach and staying informed about the latest threats, organisations could build a resilient defence against misinformation and disinformation.

ii. Enhancing Digital Resilience and Protecting Democratic **Institutions Against Cyber Threats: Public and Private Sector Collaborative Assistance** to the Process

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

Dr. Albert Antwi-Boasiako emphasised the importance of digital resilience collaboration between the public and private sectors to combat cyber threats. He mentioned that cyber threats could lead to significant financial losses for both individuals and businesses. Statistics shared by CERT-GH from January to September 2024, indicated that Ghana recorded a total loss of 11.1 million Ghana Cedis resulting from cybercrime activities. The FBI's Internet Crime Complaint Center, also reported that cybercrime in the United States resulted in a loss of 10 billion US dollars in 2023, representing a 25% increase year-over-year. To address this, he mentioned it was critical for government and the private sector to cooperate and implement strong cybersecurity frameworks, educate the public about cyber threats, and invest cybersecurity talent.

Dr. Antwi-Boasiako highlighted the importance of cross-sector collaboration in cybersecurity, emphasising a significant gap between the recognition of its necessity and its actual implementation.

The global cybersecurity skills shortage further exacerbates this issue, making institutions more vulnerable to attacks. In conclusion, he stated that the future of Ghana's democracy depended on protecting the critical systems and investing in skills and technology.

iii. Safeguarding Information Integrity through **Cybersecurity - Emphasising** the Role of Cybersecurity across Critical Infrastructure

Mrs. Naa Dzama Olavinka Wilson-Kofi President, Women in Cybersecurity (WiCys)

Wilson-Kofi highlighted that cybersecurity is essential for safeguarding information integrity across critical infrastructure sectors like energy, healthcare, finance, and transportation. These sectors are increasingly vulnerable to cyberattacks that could cause significant disruptions, financial losses, and physical harm.

To mitigate these risks, she mentioned that it was crucial to implement a comprehensive cybersecurity frameworks like the NIST Cybersecurity Framework or ISO/IEC 27001, regularly assess and update security measures, and employ advanced threat detection and response techniques. Additionally, employee training awareness programs she stated are vital, as well as international cooperation to share best practices and combat global cyber threats. By prioritising cybersecurity, organisations could protect sensitive information, ensure business continuity, and build a more resilient digital landscape.

iv. Cybersecurity and Artificial Intelligence

Dr. Bright Gameli Mawudor

Regional Training Lead, Crystal Intelligence

Dr. Bright Gameli Mawudor, stated that Artificial Intelligence (AI) is revolutionising cybersecurity by enhancing threat detection, enabling real-time response, automating security tasks, and improving incident response. He added that AI could significantly enhance our ability to detect, prevent, and respond to cyber threats.

He stated some key benefits of AI in enhanced cybersecurity namely threat detection, real-time threat response, automated security operations and improved incident response. However, he emphasised that AI also introduces new challenges like Al-powered attacks and ethical concerns and for that reason, ethical AI development, continuous monitoring, and collaboration are crucial. In conclusion, he indicated that by harnessing AI responsibly, we could build a more secure digital future.

Conclusion

Dr. Bright Gameli Mawudor, thanked all the speakers for their valuable contributions while highlighting the collective effort in taking a significant step towards securing a digital future. Women in Cybersecurity (WiCys) and Crystal Intelligence were partners for the session.

G. The Building Resilience Against Violent Extremism (BRAVE) Project Workshop

Background

STAR Ghana Foundation implemented the Building Resilience Against Violent Extremism (BRAVE) project, a one-year initiative that targeted 600 youth in host communities and refugee camps across Sapeliga, Garu, and Fielmuo in Northern Ghana. The project aimed to reduce the risk of radicalisation by enhancing awareness of its drivers and fostering digital literacy and critical thinking skills

In collaboration with the Cyber Security Authority (CSA), two workshops were conducted in Kugri and Sapeliga, engaging 169 youth in discussions on cyber safety topics such as cyberbullying, job scams, digital etiquette, and online safety tools. The training sessions, held on 25th and 26th November 2024, addressed vulnerabilities to extremist propaganda and digital exploitation.

The workshops engaged a total of over 160 participants aged 13 to 35, including refugees, teenage parents, and indigenous youth from remote and underserved communities. The workshops were facilitated by representatives of the STAR Ghana Foundation and the Cyber Security Authority (CSA).

Programme Highlights

• Day 1: Kugri Community Workshop:

The first workshop, held in the Kugri community, addressed key topics such as online fraud, cyberbullying, sextortion, digital etiquette, and online safety. With 122 participants, the session combined presentations and discussions to educate attendees on identifying and mitigating online risks. It also introduced the mandate and resources of the CSA.

Participants shared personal experiences of cyberattacks, including sextortion and cyberbullying, underscoring the relevance of the training. Feedback revealed a lack of prior awareness of the CSA's existence and its role in safeguarding Ghana's digital ecosystem. The workshop's impact extended beyond

education by addressing the participants' vulnerabilities and empowering them with practical skills to navigate the digital landscape responsibly. The use of local language translations (English/Twi to Kusaal) ensured inclusivity and understanding.

Day 2: Sapeliga Community Workshop:

The second workshop in the Sapeliga community focused on the unique vulnerabilities of youth in border areas, including refugees and teenage parents. Attended by 47 participants, the session addressed topics such as online fraud, cvberbullving. sextortion. and etiquette. Presentations and discussions were conducted in Kusaal and Moore (Mossi) to ensure inclusivity.

Participants shared real-life experiences of digital threats, such as WhatsApp account takeovers and courier scams, highlighting the prevalence of cybercrime in remote areas. The workshop empowered participants leverage CSA's 24/7 Cybercrime/Cybersecurity Incident Reporting Points of Contact (PoCs) and introduced them to practical tools for online safety. By bridging communication gaps with local language translations, the workshop fostered trust and community engagement.

Recommendations/Action Points

The workshops revealed critical gaps and opportunities for improvement. Key recommendations included:

Expand Awareness Campaigns: The CSA encouraged capacity-building programmes to other vulnerable border and underserved communities, targeting youth, refugees, and marginalised groups.

- Enhance Local Partnerships: Collaboration with organisations like STAR Ghana Foundation, community leaders, and local institutions was recommended to ensure culturally sensitive and tailored training sessions.
- Develop Educational Materials: The CSA was advised to produce accessible resources (e.g., pamphlets, infographics, short videos) in local languages to reinforce training concepts.
- Empower Peer Educators: Participants were encouraged to serve as "digital champions" within communities, equipped with additional resources and training.
- Increase Publicity for PoCs: The CSA was urged to use community radio, social media, and local events to raise awareness about its 24/7 Points of Contact.
- Focus Context-Specific on Scenario-based training and hands-on demonstrations were recommended to address specific cyber threats identified during workshops.

H. Shai-Osudoku District **Hospital Cybersecurity Sensitisation**

The Shai-Osudoku District Hospital collaborated with the Cyber Security Authority (CSA) for a staff workshop aimed at promoting cyber hygiene within the hospital and equipping staff with critical cybersecurity knowledge.

The workshop was attended by several including dignitaries. the Medical Superintendent of Shai-Osudoku District Hospital, Dr. Kennedy T. C. Brightson; the Queen Mother of Dodowa, Nana Ayerkie Yotsu III; and the Head of Hospital Administration, Mr. Atindaana N. Nsorbilla. Other attendees included Mrs. Esther Abubakar. Head of Finance, Mr. Benedict Lamptey, Head of IT, Ghana Health Service, and Mr. Ephraim Akwetey Mensah from Global Secure Solutions. Other notable guests were Mr. Mawufemor Ashong, USAID-Health Informatics Specialist; Mr. Joseph Antwi Attoh, (CERT-GH); and Mr. Theophilus Botchway, Law Enforcement Liaison Unit (LELU) of the CSA.

Below were key recommendations from the workshop:

- Hospitals' IT departments should proactively engage with community members to provide education on safe online practices, safeguarding their financial and personal information.
- The CSA should foster greater collaboration among health institutions, government bodies, and cybersecurity professionals to enhance information sharing and strengthen incident response capabilities.
- Healthcare providers should leverage the cyber hygiene curriculum developed in partnership with the Ghana Health Service (GHS) to improve cyber awareness across the sector.

- Health facilities should establish and maintain comprehensive data backup and recovery plans, alongside effective incident response procedures, to mitigate cyber risks.
- Health workers should refrain from visiting suspicious websites when using hospital Wi-Fi and devices to prevent the introduction of malware and the compromise of patient data through phishing.
- Hospital management should prioritise the procurement of proprietary software and ensure regular updates of devices to minimise vulnerabilities to cyberattacks.
- Healthcare professionals should actively counter misinformation by engaging with patients, educating communities, and partnering with technology platforms to report and address harmful content.

I. Additional list of institutions that collaborated with the CSA during National Cyber Security Awareness Month NCSAM 2024

S/N	Institution	Торіс
01	Star-Ghana Foundation	Combating Misinformation and Disinformation for Civil Society Organisations (CSOs)
02	Star- Ghana Foundation	Promoting Civic Education: The Role of the Youth in Development
03	Accra Technical University	Empowering the next Generation of Cyber defenders: Building a Resilient Digital Future
04	West African Network for Peacebuilding (WANEP)	Combating Misinformation/ Disinformation in A Digitally Resilient Democracy- Our Collective Responsibility
05	World Food Programme (WFP)	Misinformation and Disinformation
06	GIZ Ghana	Misinformation and Disinformation
07	Ghana Chamber of Telecommunications and Electronic Money Issuers Chamber	Misinformation and Disinformation
08	United Nations Educational Scientific and Cultural Organisation (UNESCO) Ghana, DW Akademie and Youthkommunity.Org	Youth Against Disinformation
09	African Centre for Parliamentary Affairs	Combating Misinformation/ Disinformation in A Digitally Resilient Democracy- Our Collective Responsibility

J. The following are key recommendations derived from the sensitisation efforts to effectively mitigate and detect misinformation and disinformation:

- Strategic responses to disinformation should include legislation to criminalise and deter disinformation and collaborations with social media platforms to regulate and swiftly address harmful content.
- Digital tools such as data-driven reporting and the use of engaging visual aids should be adopted to simplify complex truths for public consumption, making reliable information more accessible.
- ► The need for increased awareness campaigns to help people understand the impact of spreading false information and the urgency of tackling fake news.
- ▶ Increased Collaborations between technology companies, authorities, and parliamentarians to ensure that legislation is implemented effectively to protect citizens from cybercrimes.
- The education sector should design curricula to enable universities offer professional and short cybersecurity courses, addressing existing skills gaps.

K. Key Tips Shared with the public to Mitigate Misinformation and Disinformation

- Fact-check news articles and social media content before sharing.
- Contact the CSA's Cybercrime/Cybersecurity Incident Reporting Points of Contact for assistance with cyber-related issues or to verify information, especially during the lead-up to national elections. Call or text 292 for reliable support and guidance.
- Develop critical thinking skills in media consumption and question suspicious information.
- Adopt proactive online safety practices, such as enabling two-factor authentication on all devices to prevent unauthorised access.
- Review app permissions carefully, as excessive or unnecessary access may expose personal and sensitive information.

NATIONAL CYBER SECURITY AWARENESS MONTH (NCSAM) 2024 REGIONAL MEDIA ENGAGEMENTS

PART III

Ashanti Regional Media Forum on Misinformation and Disinformation with Ghana Journalists' Association (GJA)

Background

In recognition of the critical role the media plays in addressing the rising threat of online misinformation and disinformation, particularly in an election year, the Cyber Security Authority (CSA) in collaboration with the Ghana Journalists' Association (GJA) organised a forum for media professionals in the Ashanti Region on October 07, 2024. The event which was held at the Eye Conference Centre at the Komfo Anokye Teaching Hospital welcomed a total of 33 participants from various media houses.

Dignitaries present included some executives of the GJA including the Vice President, Ms. Linda Asante Agyei and the General Secretary Mr. Kofi Yeboah. Mr. Alexander Oppong, Director, CBAC and Mr. Stephen Cudjoe-Seshie Lead, CERT-GH at the CSA were also present. The forum was aimed at providing journalists with the opportunity to deepen their understanding of cybersecurity issues related to the spread of false information and explore strategies for safeguarding public discourse to help foster digital resilience in Ghana's democracy.

Welcome Address

Mr. Kofi Yeboah

General Secretary, GJA

Mr. Yeboah noted the importance of the event given the criticality of the theme of the 2024 edition of the NCSAM. He highlighted the indispensable role the media plays in sustaining Ghana's democracy, noting that journalists have a duty to uphold the integrity of their profession. To achieve this, he stressed the need for accurate and factual reporting, while urging media practitioners to actively promote the NCSAM to help combat the spread of misinformation and fake news.

Opening Remarks

Dr. Albert Antwi-Boasiako

Director-General, Cyber Security Authority

Mr. Alexander Oppong, Director, CBAC, speaking on behalf of Dr. Antwi-Boasiako provided insights into Ghana's digital landscape, disclosing that disinformation and misinformation could undermine trust in institutions, disrupt communities, and pose substantial risks to democratic processes and societal stability, stressing the importance of collaboration among journalists, cybersecurity professionals, and Civil Society Organisations (CSOs) to safeguard democratic processes and ensure a secure digital environment.

He concluded by commending the GJA's partnership, stating that it is a testament that the fight against misinformation and disinformation is a collective responsibility. He urged the journalists to commit to ethical journalism as they play a vital role.

Presentation

Mr. Isaac Socrates Mensah

Senior Manager, CERT-GH, Cyber Security Authority

Mr. Mensah briefed the audience on Ghana's internet usage, providing insights on some techniques of misinformation and disinformation such as fake news, deepfakes, imposter content and bots or automated systems. Participants were taken through ways of combating misinformation, including using fact-checking tools and visual tools for the debunking of such information.

Additionally, he shared some best practices that journalists can utilise to protect their devices and social media accounts, such as usage of strong passwords and two-factor

authentication. He ended his presentation by urging the audience to seek verification through the Cybercrime/Cybersecurity Incident Reporting Points of Contact (POC) before sharing information, to help combat misinformation the spread of disinformation.

Recommendation

The participants recommended that the training be extended to journalists in the other 15 regions of Ghana to build their capacities in detecting and combating misinformation and disinformation.

Other Regional Media Engagement

As part of efforts to reach a wider audience, this year's National Cyber Security Awareness Month (NCSAM) had a number of regional media engagements. This broader approach reflected the national strategy to enhance public awareness about cybersecurity risks and to bring critical digital safety education to communities nationwide. As part of this initiative, the Cyber Security Authority (CSA) was hosted by several media outlets with sessions designed to inform the public about the growing dangers of misinformation and disinformation, particularly relevant during the sensitive period of an election year.

Speakers

- Mr. Eric Kafui Bansah, Principal Manager, Capacity Building and **Awareness** Creation (CBAC)
- Mr. Isaac Socrates Mensah, Senior Manager, Computer Emergency Response Team (CERT-GH)
- Ingrid Serwah Asare, Esq., Manager, Legal and Compliance (LECO)
- Andrew Owusu-Agyemang, Esq.

- Deputy-Manager, Legal and Compliance (LECO)
- Mr. Raphael Kwampah, Officer, Administration Support Services (ASS)

Radio Interviews

The broadcasts emphasised the importance of verifying information sources, recognising disinformation tactics, and understanding how these tactics can threaten both individual and societal security. By directly engaging local audiences through familiar media channels, the NCSAM initiative is aimed to equip listeners with practical knowledge to navigate the digital landscape more safely and responsibly. This decentralised approach not only amplified the campaign's impact but also tailored the message to resonate more effectively within the selected regions, fostering a stronger, nationwide culture of cvbersecurity awareness.

The interviews offered a valuable opportunity to highlight how false information can jeopardise the integrity of the election process.

Listeners were urged to take an active role in preventing the spread of misinformation by verifying sources and sharing credible information.

Questions raised during the interviews largely focused on the efforts of the Cyber Security Authority (CSA) to address misinformation and disinformation. The Officers of the CSA emphasised that since 2020, there has been a significant increase in misinformation and disinformation. with many individuals consuming and sharing content without verifying its accuracy. The team pointed out that old stories and videos are often circulated to stir political sentiments, hence the focus of the 2024 edition of the NCSAM on educating the public on effectively identifying and differentiating between misinformation and disinformation.

Officers of the CSA clarified that, while the

Cybersecurity Act, 2020 (Act 1038), does not directly cover these issues, there are other legal provisions such as Section 76 of the Electronic Communications Act, 2008 (Act 775) which criminalises the intentional transmission of false information. The team cautioned listeners that violating this law could lead to severe penalties, including fines of up to three thousand penalty units, imprisonment of up to five years, or both upon summary conviction. Listeners were informed to be mindful of the information they share to avoid potential legal consequences.

The CSA educated the public on effective strategies for verifying news, especially during election periods when false information spreads rapidly. Further emphasising the importance of assessing credible news sources before sharing or acting on information. The public was advised to verify facts from reputable, well-established neutral, non-partisan radio stations and media outlets to mitigate the spread of misinformation and disinformation, fostering rational public discourse.

Many callers expressed gratitude for the timely and relevant insights shared by the CSA. The CSA team underscored the associated responsibility with sharing information publicly, urging listeners to be cautious and thoughtful about what they post or share on social media and other platforms. further The CSA team stressed misinformation risks undermining national stability and called on listeners to prioritise peace and truth in their communications. The team further stressed that responsible sharing of information is essential for maintaining societal harmony and protecting the country from unnecessary tensions. Listeners were encouraged to contact the CSA for assistance regarding cybercrime/cybersecurity issues through the various Cybercrime/Cybersecurity Incident Reporting Points of Contact particularly through call or text - 292.

Conclusion

The regional media engagements proved to be highly successful. Many callers engaged actively, indicating a strong level of interest and concern around the topics discussed. The discussions sparked meaningful conversations and prompted listeners to ask questions and share their perspectives. The enthusiastic responses and thoughtful feedback from callers suggested that the public appreciated the importance of being vigilant against misleading information. Overall, this outreach effort effectively raised awareness and empowered listeners to approach news and information critically, a vital step toward fostering a more informed and resilient community. Below are the various regional media engagements held:

S/N	Radio Station	Frequency
01	Eastern Radio	105.1
02	Afeema FM	103.3

Table 1 - Eastern Region

S/N	Radio Station	Frequency
01	Volta Star	91.3
02	Swiss FM	93.7
03	Но FM	92.5
04	Global FM	105.1

Table 2 - Volta Region

CYBERSECURITY AWARENESS FOR RELIGIOUS ORGANISATIONS

PART IV

National Cyber Security Awareness Month (NCSAM) 2024 Sensitisation Efforts with Religious Organisations

Background

The Cyber Security Authority (CSA) organises the National Cyber Security Awareness Month (NCSAM) annually to raise awareness about cybersecurity-related matters. This year's edition also focused on collaborating with faith-based institutions to combat the spread of misinformation and disinformation in Ghana. As part of the initiative, sensitisation exercises were held from September 23 to November 3, 2024, across 11 religious organisations.

The sessions aimed to educate congregants and stakeholders on key topics such as the οf misinformation disinformation, strategies for verifying online information, and essential cyber hygiene practices like creating strong passwords and avoiding suspicious links. Participants were also informed about the punitive sanctions outlined in Ghana's laws for offences like spreading false information online. Additionally, the sessions provided valuable insights into available resources and fact-checking tools to promote informed and responsible online behaviour.

Impact

The sensitisation efforts engaged diverse audiences, fostering awareness of the critical role individuals play in ensuring a digitally resilient society. By focusing on churches and mosques, the CSA successfully reached grassroots communities with knowledge needed to navigate the digital landscape responsibly.

Conclusion

The CSA remains committed to empowering citizens via education and collaboration to build a safer and more informed digital environment in Ghana.

The table below reflects the number of participants engaged at each venue visited.

List of NCSAM 2024 Religious Group Sensitisation Engagements

S/N	Date	Name of Religious Body	Number of Participants	Facilitator(s)
01	Monday, September 23, 2024	Digital Champions Summit	1,000	Mary Ama Bawa
02	Saturday, September 26, 2024	Tesano Youth Baptist, Pentecost Convention Centre, Kasoa	130	Patricia AdafienuCynthia MakuDassinor
03	Sunday, October 13, 2024	Revival Outreach Church, La	160	Kwaku Sarpong Manu
04	Sunday, October 20, 2024	Fire Mountain Prayer Ministry, Abeka	120	Leslie AcquayeCapt. Nugent Abeiku
05	Thursday, October 24, 2024	Church of Pentecost – Pemem Ministry, Darkuman	30	Joseph Antwi Attoh
06	Friday, October 25, 2024	The National Mosque, Kanda	1,500	 Najeeb Mustapha Ali Bawa Zeinab Mohammed Denderi Alexander Awere-Kyere
07	Sunday, October 27, 2024	Elim Pentecostal Gospel Church International, Darkuman	50	Theophilus Botchwey
08	Sunday, October 27, 2024	Central Assemblies of God, Ashaiman	250	Joseph Antwi Attoh
09	Sunday, October 27, 2024	The True Church of Christ, Abeka	50	Capt. Nugent Abeiku
10	Sunday, October 27, 2024	Victory Presbyterian Church, Frafraha	250	Isaac Socrates Mensah
11	Sunday, November 3, 2024	Presbyterian Church of Ghana Ashaiman Central	670	 Joseph Antwi Attoh Cynthia Maku Dassinor



Photo Gallery

Media Launch of the National Cyber Security Awareness Month (NCSAM) 2024 at the Ministry of Information











Official Launch of the National Cyber Security Awareness Month (NCSAM) 2024



































National Cyber Drill



National Cybersecurity Challenge and the Launch of the **National Child Online Protection Framework**





Launch Of the Industry Forum and Inauguration of the **Independent Assessors**



Forum of Incident Response and Security Teams (FIRST) Workshop on "Securing Ghana's Digital Landscape: Safeguarding Critical Information Infrastructure (CII)



Cybersecurity Awards and Recognition Night





Collaborations & Partnerships

















Partners









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