1. INTRODUCTION

The 10th edition of the Tana High-Level Forum on Security in Africa will take place on 25-28 November 2021 in Bahir Dar in hybrid format under the theme, “Managing Security Threats: Building Resilience for the Africa We Want”. In line with this, the Institute for Peace and Security Studies/IPSS/, as the Tana Forum Secretariat, with the Mission of Japan to the African Union jointly organised a Joint Virtual Multi-stakeholders’ Pre-Tana forum on the topic: “Emerging Technologies and their Impact on Peace and Security in Africa.” The virtual session was held on 14 September 2021.

2. BACKGROUND

The emergence of new technologies has created new opportunities in the areas of peace and security especially in conflict prevention, peace operations, peace building. New
technologies have made it possible to collect data in crime and conflict enhancing the efficiency of early warning and response. Peace operations can now be implemented in asymmetric threat environment and monitoring and observation can be performed more efficiently as a result of this advancement. Similarly, they foster the peacebuilding efforts down to local level. In addition, changes in technology have always impacted theatres of war and peace. With such advancement comes the engagement of new technologies such as drones and other modern forms of hybrid warfare that introduces their own set of new challenges. They also carry the potential for adverse effects like the danger posed by the militarization of emerging technologies, especially if used in the context of terrorism.

Moreover, cell phones and the Internet in addition to enhancing civic participation and empowerment are increasingly being employed to facilitate conflicts by serving as channel of communication, control public belief, raise awareness on new warfare techniques, documenting intelligence, and taking on cyber-attacks by violent extremists, organized crime and gangs etc.

Just like the rest of the world, emerging technologies are becoming highly influential on the security and stability of African states. Among others, the rapid spread of the internet across the African continent has been heralded as a key driver of prosperity and a sign of the continent’s technological coming of age. Nevertheless, the rapid advancement of technology especially that of the internet across Africa has its own downsides. In addition to the aforementioned benefits and challenges, while 82 percent of the developed countries get access to internet in developed countries the percentage goes to 11 for Africa. Without the necessary infrastructure, gadgets, affordable internet, reliable power and unaffordable costs broadband internet access will remain out of reach for many low-income Africans living in rural areas. Such a digital divide poses its own question on governance. Moreover, the lack of cultural and behavioural changes towards such transformation along with lack of awareness on the impacts of ICT on peace and security and lack of ICT skills and support makes it more challenging.

As the advancement in technologies expand, their benefits and shortcomings foster areas of cooperation at the international level renewing and expanding existing partnerships. Such an opportunity also comes the challenge of African member states and institutions
determining and integrating the role of new technologies in their policies, work and interactions with their partners. It is an exceptional illustration of harmony among all African states on the perception that the continent’s peace and security boldly depend on the new technologies such as Information Communication Technology (ICTs) since the peace and conflict dynamics changed rapidly. This is indeed indebted a great deal to the commitment of many experts and senior officials in the African Union (AU), RECs/RMs, Member States and partners.

One fact remains crucial, the digital revolution’s ultimate legacy will be determined not by technology, but by how it is used. African countries that take advantage of the opportunities and limit the risks inherent in emerging technology may achieve greater peace and stability. Yet many countries could be left behind. As the continent recovers from the COVID-19 pandemic, African leaders face a choice between harnessing emerging technology to improve government effectiveness, increase transparency and foster inclusion, or as a tool of repression, division, and conflict. It is with this background that Tana Forum Secretariat in partnership with the Mission of Japan to the African Union is organizing this multi-stakeholders’ Pre-Forum to debate and discuss the impact of technology on peace and security in Africa.

3. OUTCOMES AND TAKEAWAYS

- The utility of technologies in terms of human security is already known and accepted as a fait accompli. More so, the linkage technologies-human security in Africa demands that we should be cyber-literate to anticipate disasters and any other threats as well as enhancing peacebuilding, peace support etc.

- Although the new technological developments are important for mankind, there is a need for a coordinated regulatory framework to mitigate their negative effects.

- Africa has some specific needs regarding the legal regulatory framework and the incorporation of these technologies in formal and informal contexts. Albeit digital progresses such as social media brought new economic opportunities, they also, unfortunately enabled new economic sources for terrorist groups among other non-state actors.
• The role of Japan in mitigating security threats in Africa is manifested by a timid military support and a strong diplomatic cooperation through TICAD and NAPSA (Japan Version of “African Solution to African Problems”).

• The constraints of the current African context require and allow key actors and African citizens to:
  ✓ Use emerging technologies to reduce marginalisation and poverty; and foster new governance approaches. This should be taken into account while disseminating new technologies in Africa for example.
  ✓ Improve systems of measurement. This would be manifested by the definition of new policies in external and internal contexts.
  ✓ Regulate relationships between internal and external powers to reduce inter-generational divides through emerging technologies.
  ✓ Be proactive in learning new technologies to prevent security threats and improve people’s livelihood.
  ✓ Holistically address conflicts in Africa and reinforce cooperation between African countries around issues linked to emerging technologies.

• The African Union should play its role of “Big Sister/Brother”. The AU should step up to monitor the use of emerging technologies throughout the continent, collaboratively with Regional Economic Communities (RECs) and Mechanisms (RMGs).

• African governments, particularly should redefine their perceptions of peace and security from the lens of their people.

• Numerous conflicts are happening in Africa and emerging technologies can help mitigate them; and equally support peacebuilding. However, their negative effects could seriously threaten peace efforts on the continent. It is therefore imperative to use a hybrid governance approach that allies traditional methods and emerging technologies.
• The benefits of emerging technologies are not materialised yet in Africa. Their materialisation would be the challenge of the next coming years.

• Finally, policy responses to emerging technologies should be tailored as there are unique and specific to each country.

4. PROCEEDINGS OF THE WELCOMING AND OPENING REMARKS, SESSION 1, SESSION 2 AND CLOSING REMARKS.

• Welcoming and Opening Remarks

Dr Yonas A. Adeto, Director of Institute for Peace and Security Studies, Addis Ababa University gave the opening remarks. Dr. Yonas, underlined “Peace”, “Security” and “Technologies” the three key words contained in the day’s topic. He stated that the utility of technologies in terms of human security is already known and accepted as a fait accompli. It additionally made clear that the link technologies-human security in Africa demands that we should be literate to anticipate disasters and any other threats as well as enhancing peacebuilding, peace support etc. Dr. Yonas stressed on the timeliness of the topic and wished that the discussions to be held would contribute to fostering global peace and security and establishing a clear comprehension of the nexus between peace, security and technologies. He warmly acknowledged the Mission of Japan to the African Union, the IPSS staff and the entire audience before officially opening the joint workshop.

Dr. Yonas was followed by H.E. HORIUCHI Toshihiko, Ambassador of Japan to the African Union.

H.E. HORIUCHI Toshihiko situated the topic in the Tana Forum and the current continental contexts. He affirmed that although the new technological developments are important for mankind, there is a need for a coordinated regulatory framework to mitigate their negative effects. In that frame, Japan nurtures several partnerships in Africa, especially with the African Union. In addition, he announced that Japan will organise a summit next year in Tunisia as part of their efforts towards sustaining human security in Africa.

Session 1: State of Play of Emerging Technologies in Peace and Security in Africa
Dr Khabele Matlosa, Former Director of Political Affairs, AUC and Programme Advisor at the UNDP moderated the first session. He warmly greeted and acknowledged the organisers as well as the audience. The timeliness and relevance of the day’s workshop discussing issues of emerging technologies regarding peace and security in Africa was underlined. Dr. Matlosa presented the three sub-topics on the first session’s agenda, introduced the three panellists and drew the line up.

Ms. Olufunmilayo B. Arewa Shusterman, Professor of Business & Transactional Law from Temple University Beasley School of Law, Philadelphia, was the first speaker of the session. Ms. Arewa based her remarks on one of her books to be published in the field of emerging technologies in the next coming weeks. Her research is focused on business, new technologies and on the imperative to consider local communities’ needs. She stated that her book also discusses the new innovations in terms of technology such as the blockchain, social media etc. To the question “How do we regulate emerging technologies?” She argues that Africa has some specific needs regarding the legal regulatory framework and incorporation of these technologies in formal and informal contexts. She also stated that social media brought new economic opportunities but also enabled new economic sources for terrorist groups among other non-state actors.

Ms. Arewa ended up defining 3 priorities as follow:

1. Use of emerging technologies to reduce marginalisation and poverty. She noted that the emerging technologies should bring about new governance approaches. This should be taken into account while disseminating new technologies in Africa for example.

2. Improving systems of measurement. This, according to her, would be manifested by the definition of new policies in external and external contexts.

3. Regulate relationships between internal and external powers to reduce inter-generational divides through emerging technologies.
Mr. KATAOKA Sadaharu, Professor from the School of International Liberal Studies, Waseda University, Japan, was the second guest speaker. He focused his presentation on the state of Peace and Security in Africa and the role played by Japan in mitigating African security issues. After presenting his line-up (see presentation), Mr. Kataoka began his speech by highlighting the recent coup d’états in Africa, particularly in west Africa and the Sahel with a particular focus on the regionalisation of the Malian crisis which has affected the whole West Africa Sahel region since 2012. He also underlined the current local conflicts in the Liptako-Gourma region (spanning Mali, Burkina Faso and Niger) and the recent coup d’état that ousted President Ibrahim Boubacar Keita (IBK) in Mali and the role of Russia in the Central Africa conflict. He stated that the use of technologies such as artificial intelligence revealed key to counter security threats in certain areas worldwide, including African countries. According to him, the role of Japan is manifested by a timid military support and a strong diplomatic cooperation through TICAD and NAPSA (Japan Version of “African Solution to African Problems”). He said that NAPSA particularly aims to address root causes of conflicts and terrorism in Africa. To him, numerous conflicts are happening in Africa and emerging technologies can help mitigate them and support peacebuilding. It is therefore imperative to use a hybrid governance approach that allies traditional methods and emerging technologies. Mr. KATAOKA ended up reiterating underlined the link between terrorist groups and emerging technologies, before stating the strong diplomatic and technical support of Japan to African countries.

Ms. Chioma Agwuegbo, Executive Director of TechHerNG Abuja, Nigeria was the third speaker. After greeting the organisers and the audience, she approached the day’s topic from a social point of view. How emerging technologies can be used to improve people’s daily lives? To that foundational question, Ms. Agwuegbo responded that the use of drones in Rwanda and the use of MPESA in Uganda for example have been game changers in these countries’ social lives. However, she mentioned that emerging technologies have deepened banditry and terrorism throughout the world and especially in Africa. She affirmed that the digital revolution legacy would be judged based of its effects on people’s lives. In Africa there has been an abusive use of Artificial Intelligence (AI) to manipulate the society through digital means such as social media. Ms. Agwuegbo said that the UN (university), for instance, have highlighted the negative implication of the misuse of
technologies. Additionally, she argued that the technological warfare can be translated in so many ways and countries with advanced technologies automatically acquire a sort of power to dominate those who are less equipped.

She finally recommended that:

1. African citizens, the African Union and countries should be proactive in learning technologies to prevent security threats and improve people’s livelihood.

2. Conflicts in Africa, should be addressed holistically by key actors including the African Union and the Regional Economic Communities (RECs).

3. Cooperation between African countries should be enhanced around issues linked to emerging technologies.

4. The African Union should play its role of “big Sister/Brother”. The AU should step up to monitor the use of emerging technologies.

5. Governments should redefine peace and security from the lens of their people.

Presentations were followed by a Questions and Answers (Q & A) session moderated by Dr. Matlosa. The following questions and answers came up from the exchanges between the panellists, the moderator and the audience.

**Q1:** My question is, there are over 15 top new emerging technologies… example Artificial Intelligence, 5G and Internet of things, Serverless Computing, Cloud computing, Biometrics, Augmented and Virtual realities, Robotics, Natural Language Processing, Blockchains, Quantum Computing, Data Analytics, Cyber Security etc, which of these are we targeting for peace and security operations and where do we start from?

**A1:** It is first important to define internal strategic goals and internal and external contexts, no matter what the technology is.
Q2: What plans and strategies do we have in place to integrate or infuse these high-tech digital solutions into Peace and Security operations especially during deployment, combat, gathering of intelligence and making peace keeping efficient?

A2: They should be a combination of all the technologies.

Q3: New technologies give the floor to everyone, with good or bad intention. Everybody can voice out what they see, hear and think. Is that the real problem? Or, leaders and decision makers who are used to take decision with closed door, should now admit that they are not alone anymore, that they have to take into account not only their ideas but also the ideas of other players?

A3: Security should go beyond geographical boundaries. Continental and regional bodies should play their regulatory and leading roles in coping with technological abuses. The African Union should see that as a new opportunity to renegotiate its digital approach with its members.

Q4: Technology seems to have contributed much better in citizen engagement (governance) and much less in security and peace-keeping in Africa. It would be very helpful to learn from Japan on their experiences with Peace, Security and governance and what lessons/recommendations they can make for leap-frogging the use of technology in the broader theme of peace and security in Africa

A4: Japan has very limited military support in Africa, However, Japan has a strong diplomatic relationship with African countries and bodies through NAPSA.

Q5: Question: I am interested in finding out how these emerging technologies can facilitate grassroots communities in peacebuilding processes and interventions. What strategies do we have to make these technologies accessible and usable at the local level?

A5: Technologies can be used to mobilise people without necessarily having a leader. Technology is the path, not the product. There is a need to build people’s conviction in using emerging technologies.

Q6: Will African Security hubs be willing to share intelligence through technological and digital advancement to prevent future occurrences in coups, instability etc? example if there is a hacking attack in Nigeria or Ghana, will Togo be willing to help de-hark?
A6: We need to confront the reality the power detained by certain companies (the Pegasus scandal for example). The technologies are detained by companies mostly based in the Silicon Valley having a huge decision-making power.

Q7: Rather than the technology or along with the technology how could link the African traditional knowledge with the technology for the sustainable peace and security in Africa? Any strategy from AU or from the presenters?

A7: No Answer

Q8: What is the leaders’ role in support of technology to enhance the livelihood of our society and digital literacy rate? Especially mobile phone has a positive impact in our day-to-day life.

A8: Government should enhance capacities of their citizens/communities, from a policy perspective, as the technology universe is constantly shifting to ensure stability internally. African States should regulate the use of technologies to counter terrorist propaganda while using emerging technologies to build strong institutions. They should build capacities and define strategies to embrace the emerging digital era as well. This would allow them to undermine security threats and reduce social and economic gaps.

Session II: Managing Threats Caused by Emerging Technologies

Dr. Baylie Damtie, Vice Chancellor of Kepler in Rwanda was the moderator of the second session. For Dr. Damtie, emerging technologies have brought new perspectives in the African peace and security landscape by facilitating development interventions and peace support operations among others. He opened the second session after introducing the experts participating in the panel.

Dr. Juliane Brach, specialist for economic development, change management, technology, entrepreneurship, and emerging countries, especially in the Middle East and North Africa introduced the second session as first speaker. She affirmed from the outset that technological capacities are key factors to human future development, especially in Africa, North Africa and the middle East. However, according to her analysis, there are little studies about those areas. She added that these areas present two sets of issues that are
either political or economic. Northern African countries, for instance, are generally technology followers. Over the past 15 years, she said, the technological landscape has not changed in these countries. The benefits of emerging technologies are not materialised yet and would be the challenge of next coming years. She affirmed that internet and most of the emerging technologies are highly controlled by governments internally. More so, Dr. Brach argued that albeit North Africa is a small part of Africa, the region remains strategic as it represents a bridge between Africa and Europe and any misuse of emerging technologies in northern African countries might affect both continents. Emerging technologies are vast, as per the statements of Dr. Brach. Yet, she mentioned that there is a huge technological gap in emerging countries that need to be undermined by decision-makers and all the relevant actors concerned. To her, countering the emerging technological threats necessitates a various range of capacities, education (technological readiness) and a strong political will. She pointed out key social actors like Civil Society Organisations (CSOs) that should be prepared to support efforts towards countering technological threats. Dr. Brach concluded saying that the most serious threat, beyond cyber-attacks, is the ambiguous use of emerging technologies against people.

Dr. Nathaniel Allen, Assistant Professor for Security Studies, Africa Centre for Strategic Studies as the second speaker enumerated three major challenges faced by African countries that he expanded in his presentation:

1. The lack of awareness among African leaders which should be thoroughly addressed through cooperation and education from his point of view.

2. The failure to consider technology dependence or technology as a development and stabilisation factor. For example, he said, the use of biometric technology, among others remains very low to record populations’ data and within security forces.

3. The failure to incorporate emerging technologies in governance approaches. He clarified this particular point saying that African countries need a coordinated approach and should define new strategies to manage emerging technologies to cope with technical threats.
Dr. Lemma Lessa, Assistant Professor, School of Information Science, Addis Ababa University, Ethiopia was the third speaker contributing to the second session. Dr. Lemma introduced his presentation affirming that technologies facilitate social daily life and bring many other advantages. However, he indicated that most of the African countries are not cyber-ready. According to his observation, the majority of African governments highly control the cyber space to secure their power rather than to the advantage of the citizens. According to him, governmental actors often initiate state-sponsored attacks using emerging technologies. He added that African countries largely lack ICT infrastructures to sustain digital capacities’ development. He concluded saying that the security paradigms in Africa should be redefined and adapted to the shifting nature of the cyber universe among African countries through cooperation.

Ms Zamanzima Mazibuko-Makena, Senior Researcher, Knowledge Economy and Scientific Advancement Faculty Mapungubwe Institute for Strategic Reflection (MISTRA), Johannesburg, South Africa closed the series of intervention as fourth speaker. She started her exposé by underlying that a systemic approach is required to understand the impacts emerging technologies in our societies. To her, policy responses to emerging technologies should be tailored as there are unique and specific to each country. However, she did not omit to mention that most of African countries are facing challenges to perform in key technological areas in order to ensure a sustainable digital future. In due course, she affirmed, African countries should make further efforts to enhance infrastructures and human capacities to facilitate the deployment of emerging technologies. Additionally, Ms. Zamanzima said that the local environment should also be taken into account while decision-makers are developing legal frameworks. As demonstrated during the Covid-19 outbreak, she said, technology allowed a certain continuity of employments. Yet, she noted that emerging technologies give opportunity for fake news and manipulated messages. She concluded noting that among the major challenges in African countries are also related to the insufficiency of reliable data sets.

The presentations, like the first session, was followed by a Q & A session moderated by Dr. Damtie. The substance of the exchanges is as follow:

Q1: What are the major threats posed by emerging technologies?
A1: Threats depend on who’s perspective one takes. Social media are seen as advantageous generally, but when it comes to manifestations for example, a government might see them as a threat rather than a benefit.

Q2: Is there any difference between African countries in terms of human capacities’ developments?

A2: There is a significant gap between countries in terms of technical capacities, interstate coordination, enabling environments. Only 6 African countries are considered as countries that have done good.

Q3: What are the favourable conditions for emerging technologies in Africa, conflict or peace contexts?

A3: Conflict would generate money. Definitely, if the interest is just to make money, then conflict would be the favourable context. However, the peace side of it should be internal and instigated by countries.

Q4: To what extent should Africa need to be worried when some of the new technologies such as armed drones are being found in the hand of non-state actors or militant groups?

A4: African states should prepare themselves to cope with future shifts in technologies as they become more sophisticated and might be intensively used by non-state actors such as rebel or terrorist groups.

Q4: What is the key take away in term of job creation?

A4: The potential for African countries is that they perform under potential, so there is a huge margin to develop further capacities.

Closing remarks

Mrs. Lettie T. Longwe, Interim Director of the African Peace and Security Programme (APSP) at IPSS gave the closing remarks. She congratulated all the panellists, moderators, participants as well as the audience. Mrs. Lettie pursued her speech, noting that emerging technologies may help reduce the gap between warning and response while mitigating security threats in Africa and worldwide. New technologies, to her, are cross-cutting instruments and have a lot of advantages in the areas of peace support, at the community
level, and peacebuilding/ support operations. However, she noticed, emerging technologies bring negative effects as shown by manipulated messages spread on social media during the covid-19 outbreak. She concluded mentioning that continental and regional bodies should put human beings at the centre of their policies aiming at deploying and managing emerging technologies.