

AFRICAN PERSPECTIVES FOR ADVANCING SPACE SECURITY THROUGH NORMS, RULES AND PRINCIPLES OF RESPONSIBLE BEHAVIOURS

WORKSHOP SUMMARY REPORT

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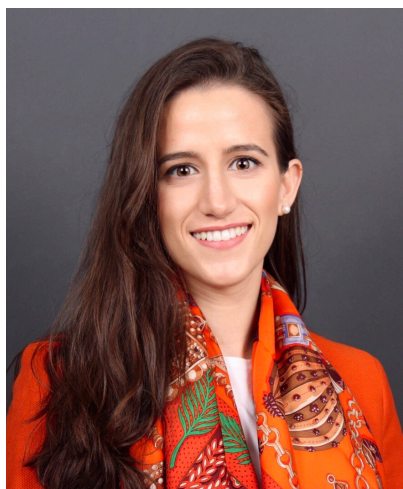
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LIST OF ACRONYMS

ASAT	Anti-Satellite
ECOWAS	Economic Community of West African States
ESA	European Space Agency
GGE	Group of Governmental Experts
GNSS	Global Navigation Satellite System
OEWG	Open-Ended Working Group
OST	Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies
SADC	Southern Africa Development Community
SDG	Sustainable Development Goals
STEM	Science, Technology, Engineering, Mathematics
UN	United Nations
UNIDIR	United Nations Institute for Disarmament Research

INTRODUCTION



Space is increasingly critical to modern life on Earth. However, there is growing concern that, as space becomes more economically and strategically important, tensions between different space actors could lead to conflict. Such a conflict could have catastrophic consequences for humankind. To address this, States established an Open-Ended Working Group (OEWG), convened as a result of the United Nations General Assembly resolution 76/231 on “Reducing space threats through norms, rules and principles of responsible behaviours”.

The OEWG is mandated to make recommendations on possible norms, rules and principles of responsible behaviours relating to threats by States to space systems, including, as appropriate, how they would contribute to the negotiation of legally binding instruments, including on the prevention of an arms race in outer space. With three of the four substantive sessions having already taken place, attention will turn to drafting a report at the fourth session, with a view to submitting this report to the General Assembly during its 78th session.

The workshop “African Perspectives for Advancing Space Security Through Norms, Rules and Principles of Responsible Behaviours” was designed to raise awareness of matters addressed in the OEWG among States of the African region. The event also sought to inspire future engagement by these States in multilateral space security negotiations by bringing the discussion to the region. The event brought together a diverse range of experts and provided the opportunity for an informal discussion around current challenges to space security and stability, and the role that norms, rules, and principles can play in keeping space a peaceful domain.

To encourage a frank exchange of ideas, the workshop was a closed event for representatives of African States, convened under the Chatham House Rule. Under this rule, “participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed”. This report summarizes key discussions and takeaways from the six sessions of the workshop.

01

THE IMPORTANCE OF
OUTER SPACE FOR
THE AFRICA REGION

PANEL 1. THE IMPORTANCE OF OUTER SPACE FOR THE AFRICA REGION

Outer space is critical for humankind. All countries, irrespective of whether they are spacefaring or not, rely on space services on a daily basis. As such, ensuring peace and security in outer space is of the utmost importance. This panel explored the value of space infrastructure and services across the African continent and the corresponding value of space security in the region.

SPACE AND DEVELOPMENT GOALS FOR AFRICA

Speakers on the panel highlighted the essential role that space technology provides for the region. Participants stressed that space technology is a critical tool to help achieve the United Nations Sustainable Development Goals (SDGs) and to help carry out the African Union's Agenda 2063. Participants identified several examples of the value of space technology for the region, for instance, access to space was recognized as a means to increase access to education through accelerated creation of online learning networks and platforms. Furthermore, agriculture forms one of the largest economic sectors of the region. As such, space enabled services, such as precision farming and weather monitoring, play a crucial role in food security and in the agricultural sector of the region. Earth observation capabilities also assist environmental disaster monitoring and response, as well as water resource monitoring, which are both increasingly important in addressing the growing climate crisis. One panellist pointed out the potential for space technologies in alleviating issues with connectivity and the digital divide facing the region, particularly because of the continent's huge geographical size and predominately rural nature. Increasing connectivity across the region expands access to medical specialists through services such as telehealth, therefore strengthening the public health infrastructure. Panellists also explained the potential for space technologies to improve social mobility by creating new economic opportunities.

THE ECONOMIC POTENTIAL OF SPACE FOR AFRICA

The panel agreed on the value and opportunity that the space sector brings to the African economy. One panellist provided an overview of the five-billion-dollar annual revenue generating outer space market in Africa, both for local and foreign businesses. Another panellist outlined the fact that the space industry in Africa currently employs approximately 19,000 people working in more than 270 entities, with room for further expansion. Several panellists used the case study of Angola's ANGOSAT-2 to showcase both gains in new market shares and the speed at which space investments could be capitalized and realized. This example was also used to demonstrate how investment in space infrastructure creates future funding opportunities to further space activity and investments.

One participant explained that the successful space activity of one State could result in lowering cost access to services and information to neighbouring States, thus economically benefiting the region as a whole. Panellists also spoke about the potential for economic liberalization and the possibility for space to serve as a catalyst for entrepreneurship, as it supports small- and medium-sized business creation.

THE POLITICAL VALUE OF SPACE FOR AFRICA

Panellists highlighted the positive impact that space technology can have on the political sphere in the region. The space sector creates opportunities for enhanced relations among States in the region through collaborative partnerships and information and technology exchange agreements. Participants identified several potential collaborations for the future, including the possibility of subregional partnerships around the harmonization of satellite metrics and satellite resource acquisition and implementation. More specifically, a panellist spoke to ongoing efforts of the Southern Africa Development Community (SADC) to create a regional shared satellite system, implementing Resolution 170 of the World Radio Communications Conference of 2019.¹ One participant suggested such initiatives could be followed by other subregional partnerships including through the Economic Community of West African States (ECOWAS).

Other panellists spoke to the ability of space technologies to assist political processes at the national level. One panellist used the case study of Cameroon's digitalization of public registries as an example of improved administrative information capacity. With improved information capacities, political bodies can craft and carry out improved policy and more readily adapt to address the needs of their populations. Panellists also pointed to the opportunity presented by the space sector to increase the number of international agreements, partnerships and information and technology exchanges.

EQUITY, AWARENESS, AND UNDERSTANDING WHAT IS AT STAKE

The concrete examples and case studies from the first panel set a tone for understanding the importance of the space sector to Africa. The panel also highlighted the regional risks of escalated outer space conflict and prompted candid discussion on the importance of spreading awareness of the integrated role of space technologies in the daily lives of the public. Panellists indicated that with increased general awareness, governments could gain greater impetus to work on space security issues more vigorously.

One panellist underlined that future contributions from the region needed to emphasize the importance of equity in international discussions on space security. Several participants stressed that equity of access to space technologies and the unimpeded use of space resources was a crucial component to making the outer space domain secure and peaceful and lessening future possibilities of conflict in space.

¹ Resolution 170 (WRC-19), The World Radiocommunication Conference, Sharm el-Sheikh (2019), available online at https://www.itu.int/dms_pub/itu-r/oth/0C/0A/R0C0A00000F0057PDFE.pdf.

A futuristic space station with multiple solar panels is shown in orbit above Earth. An astronaut in a white spacesuit is floating in the dark blue space. The Earth's surface is visible at the bottom, showing city lights and clouds. The overall scene is bathed in a blue light.

02

THREATS TO SPACE
SECURITY: THE AFRICAN
PERSPECTIVE

PANEL 2. THREATS TO SPACE SECURITY: THE AFRICAN PERSPECTIVE

One of the complexities of addressing space security issues is the lack of common understanding on concepts of space security and the wide range of threat considerations across the globe. This session discussed some of the critical challenges faced from an African perspective. It shed light on what African States consider priority threats to be addressed by multilateral processes and why they must be tackled.

A NUANCED DISCUSSION ON SPACE SECURITY

Panellists presented a diverse collection of regional threat perceptions. All panellists spoke to the imminent dangers posed by physical destruction from anti-satellite attacks or space debris collision, as well as the potential harm caused by technical interference, which could result in denial of service or impeded access to regional space systems. This could be particularly harmful given the great dependence of the region on a few indigenously operated satellites compared to the more robust space infrastructure of advanced spacefaring States. Panellists also expressed concern over predatory markets and an overreliance on foreign space services for integral services, such as global navigation satellite systems (GNSS), which are managed by other States or groups of States outside of the region.

“SOFT THREATS” AND THE IMPORTANCE OF POLICY

While each panellist highlighted the concern over technically enabled threats, the panel dedicated much of the discussion to what one panellist termed ‘soft threats’, or the threats arising from political, governance, and regulatory issues. Panellists expressed concern that the majority of the States from the region lack domestic space policies and governance mechanisms, despite being consumers and users of space technology. Several panellists indicated that efforts to develop regional or national measure to address space security should be done holistically, taking into account possible competing interests of States in the region and without infringing upon the sovereign right to access space.

Panellists also spoke of the need to enhance participation in international negotiating bodies on space security issues. It was suggested that having a clear regional position on issues of space security could strengthen international engagement and impact in negotiating processes. Panellists indicated that such a regional position could be crafted by establishing a permanent indigenous forum that met regularly to deliberate space governance issues. Panellists pointed to the recent development of the African Space Agency as a possible avenue to help facilitate a shared regional position. However, it was suggested that actions by States individually, such as the establishment of comprehensive domestic regulations or the adoption of unilateral commitments to enhance space activities, was still paramount for supporting dialogue at the level of the African Space Agency and African Union Commission.

ASYMMETRY OF INFORMATION, ACCESS AND AWARENESS

Panellists also pointed to regional disparity in levels of knowledge on space issues. One panellist argued that ignorance of the issues was dangerous and counterproductive to the goal of securing outer space. In order to address the knowledge asymmetry across the region, one panellist suggested that States use technical, legal and strategic frameworks to pursue collaborative projects. It was emphasized that such collaborative projects could be achieved without impacting or infringing on the sovereignty of States. The European Space Agency (ESA) was highlighted as an example of how an interlinked, collaborative network of space institutions can improve the response time to incidents and emergencies. One panellist spoke to the importance of having advanced information and technical understanding to ensure that future production of space assets in the region is made more resilient against both security threats and naturally occurring risks.

It was acknowledged that a State's space capacity is increasingly an enabler of military power, and thus it contains significant strategic value. In light of this fact, panellists underscored that assured access to space was an essential component of space security for the region. It was stressed that all African States have the right to peaceful uses of outer space and that nothing should impede access to space by any State in the region.

A night sky with the Milky Way galaxy and a silhouette of a landscape. The Milky Way is visible as a bright, pinkish-purple band of stars and dust, arching across the sky. The foreground shows a dark silhouette of a landscape, possibly a mountain range or a city skyline, with a small amount of light visible on the horizon.

03

THE ROLE OF AFRICAN
STAKEHOLDERS IN
ACHIEVING SPACE SECURITY

PANEL 3. THE ROLE OF AFRICAN STAKEHOLDERS IN ACHIEVING SPACE SECURITY

Outer space is very different today than it was when space exploration first started. Space is more diverse and has more stakeholders than ever before. Over 80 per cent of actors in space are non-governmental entities, and Africa, with its booming space industry, is a big contributor to this change. These new stakeholders have a key role to play in ensuring space security by providing States with valuable insight that could aid in the optimization of policymaking. This panel explored the role of African non-governmental entities in achieving such goals.

THE ROLE OF THE COMMERCIAL INDUSTRY AND CIVIL SOCIETY

Panellists agreed that government entities were not the only stakeholders to take into consideration within a country or the African region. They underscored the relevance of non-governmental entities, including academia, industry, and the citizens or users of space services. It was highlighted that non-governmental entities can be especially helpful in advancing space security issues by providing neutral platforms for stakeholders to convene and progress dialogue. Panellists also pointed out that the participation of industry in space security negotiations would lead to more sustainable and easier to implement measures, as the majority of interest and activity in outer space in the region is commercial in nature.

CONSIDERING CAPACITY-SHARING AND A BOTTOM-UP APPROACH

One panellist discussed issues of orbital crowding and proposed that States should cooperate with the commercial industry, as well as with each other, in projects. The panellist further suggested that States should share infrastructure in order to avoid exacerbating orbital crowding. Moreover, capitalizing on existing projects could lower the barrier to entry for new stakeholders, therefore promoting knowledge-sharing and capacity-building.

Panellists agreed that future legal and regulatory frameworks should not restrain the rights of stakeholders to access and use space for peaceful purposes. It was further suggested that by adopting a bottom-up approach to governance development, non-governmental entities could provide their tangible experience and expertise to ensure that future governance mechanisms are feasible, sustainable and do not impede the accessibility and right of all to the use of space services.

DIVERSITY, CROSS-SECTOR TRAINING AND FURTHER RECOMMENDATIONS

Panellists repeatedly underscored the need to increase diversity and improve education. Recommendations included government-sponsored fellowships targeting youth to participate in and carry forward conversations around space issues. In the same vein, panellists explained that scholarships to give opportunity to youth, especially girls, to study STEM (science, technology, engineering, mathematics) and space sciences could increase general salience of the issues and future engagement. Additionally, participants discussed how providing cross-sector training and

education initiatives across science and policy could help to foster more dynamic and nuanced governance initiatives.

Panellists also pointed out the potential for the region as a whole to develop unified positions on issues of responsible space behaviour. One panellist spoke to the appetite of the space industry in the region to support the development of regionally initiated responsible space activity guidelines. One participant recommended that the newly developed African Space Agency should release a Statement for a Responsible Space Sector, similar to that of the European Space Agency. The panel also highlighted the importance of spreading awareness of existing norms and guidelines (such as the Long-term Sustainability Guidelines) and pursuing collaborations with existing partnerships (such as the Space Data Association). Participants contended that such measures could serve as plausible immediate steps to be taken at the national and regional levels.



04

PAST AND PRESENT
INITIATIVES FOR SPACE
SECURITY: HOW DO THEY
RELATE TO THE WORK OF
THE OEWG?

PANEL 4. PAST AND PRESENT INITIATIVES FOR SPACE SECURITY: HOW DO THEY RELATE TO THE WORK OF THE OEWG?

Discussions around space security have been ongoing since the early days of the space age. In the past, States undertook some initiatives to address space security concerns at the multilateral level. During this panel, discussions addressed the elements constituting States' past proposals and how they could inform current initiatives designed to enhance space security.

PAST AND ONGOING DISCUSSIONS PERTAINING TO SPACE SECURITY

Panellists identified several past and ongoing initiatives related to space security. These initiatives include proposals for a treaty to prevent the placement of weapons in outer space, debates about norms, principles, and rules of responsible behaviour, as well as discussions focused on enhancing transparency and avoiding the destruction of space objects. Participants discussed which aspects of those proposals can inform present-day initiatives to improve space security and how different initiatives can complement each other.

Over time, the space ecosystem has evolved, and the pace of transformation continues to accelerate, leading to the emergence of new multilateral initiatives. Panellists highlighted how the current space security environment is much more complex than at the time of the negotiation of the 1967 Outer Space Treaty (OST). This is largely due to the growing number of State actors and non-governmental stakeholders in space, the development of military technologies, and the proliferation of satellites for military-related uses. Panellists described how voluntary, non-legally binding measures can help to clarify the application of international treaties in new contexts and provide a better understanding of how to interpret certain activities in space.

Panellists emphasized the importance of African States' active engagement in shaping legal and normative frameworks related to space, as active international policymakers, by taking a proactive stance in multilateral discussions.

IMPROVING REGIONAL COORDINATION TO PROTECT SATELLITE SYSTEMS

Panellists highlighted the importance of satellite applications for daily life in the African region and the potential impact on the SDGs if space systems are not protected. Some panellists indicated that there is a lack of recognition of space systems as critical infrastructure in many African States despite their importance in supporting various services.

Panellists also talked about the challenges Africa is facing in dealing with disease, natural hazards, and disasters. Space technology could actively mitigate these challenges. However, it is not always clear for States in the region how space systems could do so in practice.

Panellists highlighted the crucial role of regional coordination for fostering space security. They noted that, while Africa is represented in multilateral communities, active participation of diverse African States has been lacking at the multilateral level, and there is a need for better coordination to ensure effective representation and participation in space-related discussions. Some panellists spoke about the need for African States to take action to protect their space assets and to advocate for changes to international law to address issues related to the increasing amount of debris in outer space, including a ban on destructive testing of counterspace capabilities.

TRANSPARENCY AND COMMUNICATION BETWEEN STAKEHOLDERS

Panellists stressed the importance of effective communication between States to avoid escalation of tensions and potential conflict. Panellists suggested that one solution would be increased transparency about doctrines, policies, and operations, as well as avoiding activities that result in permanent damage to space services and capabilities. Panellists underscored the importance of better regulatory coordination among African States to address multinational issues and the need for governments to reach out to private entities and academics to improve their plans for the future. Some panellists argued that there is a need to focus on responsible behaviour approaches rather than limiting specific capabilities, and that discussions should encourage responsible actions and promote clarity on what is safe and sustainable versus dangerous and irresponsible. They emphasized the power of States voluntarily choosing not to engage in dangerous activities in outer space. Moreover, they also underscored the importance of legally binding agreements.

STRENGTHENING STAKEHOLDER ENGAGEMENT AND INCLUSIVITY

Panellists affirmed the value of stakeholder engagement as a valuable tool, especially through the creation of 'tech hubs' to foster young people's creativity and nurture the next generation of innovators and entrepreneurs developing new space technologies and solutions. This way, community engagement can promote public support and involve the wider community to develop a national ecosystem.

Panellists shared several key takeaways about African institutions' engagement in multilateral processes and measures to enhance their participation in space activities, to prevent Africa from being portrayed as hesitant or unwilling to participate in certain discussions –they highlighted the need for sharing expertise and resources regionally in order to contribute to building a regional security strategy that addresses and analyses potential threats to space assets. The panellists touched on the potential impact of increased participation of non-governmental stakeholders in space, especially commercial actors. Moreover, panellists also discussed enhancing attendance at events related to space technology and legal training, and building a unified and multilateral engagement among African States to promote skills and expertise.

Additionally, panellists considered the opportunity to operationalize transparency and confidence-building measures, creating a mechanism for communication among States with significant

interests in space. They discussed the need to strengthen collective security in space, with one panellist suggesting that African States be more involved in decision-making processes, establishing transparency and confidence-building measures, and engaging in discussions about space security. Overall, the panellists agreed that enhancing African institutions' participation in the space activities requires a holistic approach that involves inclusion, collaboration, community engagement, and practical applications.

05

THE OEWG ON REDUCING
SPACE THREATS
THROUGH NORMS, RULES
AND PRINCIPLES OF
RESPONSIBLE BEHAVIOUR:
WHAT HAS HAPPENED SO
FAR AND WHAT IS TO COME



PANEL 5. THE OEWG ON REDUCING SPACE THREATS THROUGH NORMS, RULES AND PRINCIPLES OF RESPONSIBLE BEHAVIOUR: WHAT HAS HAPPENED SO FAR AND WHAT IS TO COME

With three sessions of the OEWG over and only one more to go, this panel looked at the work done by the OEWG so far, and what could be done in the final session in order to ensure that the process effectively contributes to space security.

CONTRIBUTIONS TO THE OEWG: CONCERNS AND SOLUTIONS

One panellist expressed concern over the lack of presence of African States during past sessions of the OEWG. They highlighted the need for political will to prevent the underrepresentation of African States by providing representatives to support the development of policies and regulations at the multilateral level. However, it was also underscored that despite the small number of interventions on behalf of African States, the quality of African statements was high, and brought particularly valuable and constructive arguments to the OEWG discussions.

Panellists indicated that the focus of the OEWG during the intersessional period before the final session should be on finding language that reflects the concerns expressed by all the delegations, including those of the African region. On this point, panellists highlighted the following concerns: the development and testing of anti-satellite systems, the placement of weapons in outer space, interference with navigation and communication satellites, and the need to strengthen the existing international framework to address concerns about rapid technological advances. Furthermore, they discussed the need to build upon initiatives and mechanisms that have been put forward so far to address space security concerns. Panellists expressed optimism about the constructive discussions in the third substantive session of the OEWG and the emerging convergence among members of the group, particularly regarding the mutually reinforcing nature of different measures.

REFLECTING DIVERSITY AMONG THE INTERNATIONAL COMMUNITY: KNOWLEDGE-SHARING AND EDUCATION ABOUT SPACE SECURITY ISSUES

Panellists noted that the international community looks very different now than it did in the early days of space exploration. The increasingly diverse composition of the community should be reflected in the diversity of participants in the negotiation process at the multilateral level. Participants also indicated support for having independent experts and civil society involved in discussions, and how they can bring novel perspectives. The discussion focused on the importance of knowledge-sharing and collaboration among States, non-governmental entities, and international organizations such as the United Nations to promote space security. The panellists considered what actions the United Nations and governments could take to encourage such collaboration and ensure that knowledge is effectively shared. Suggestions included forging connections between different organizations and

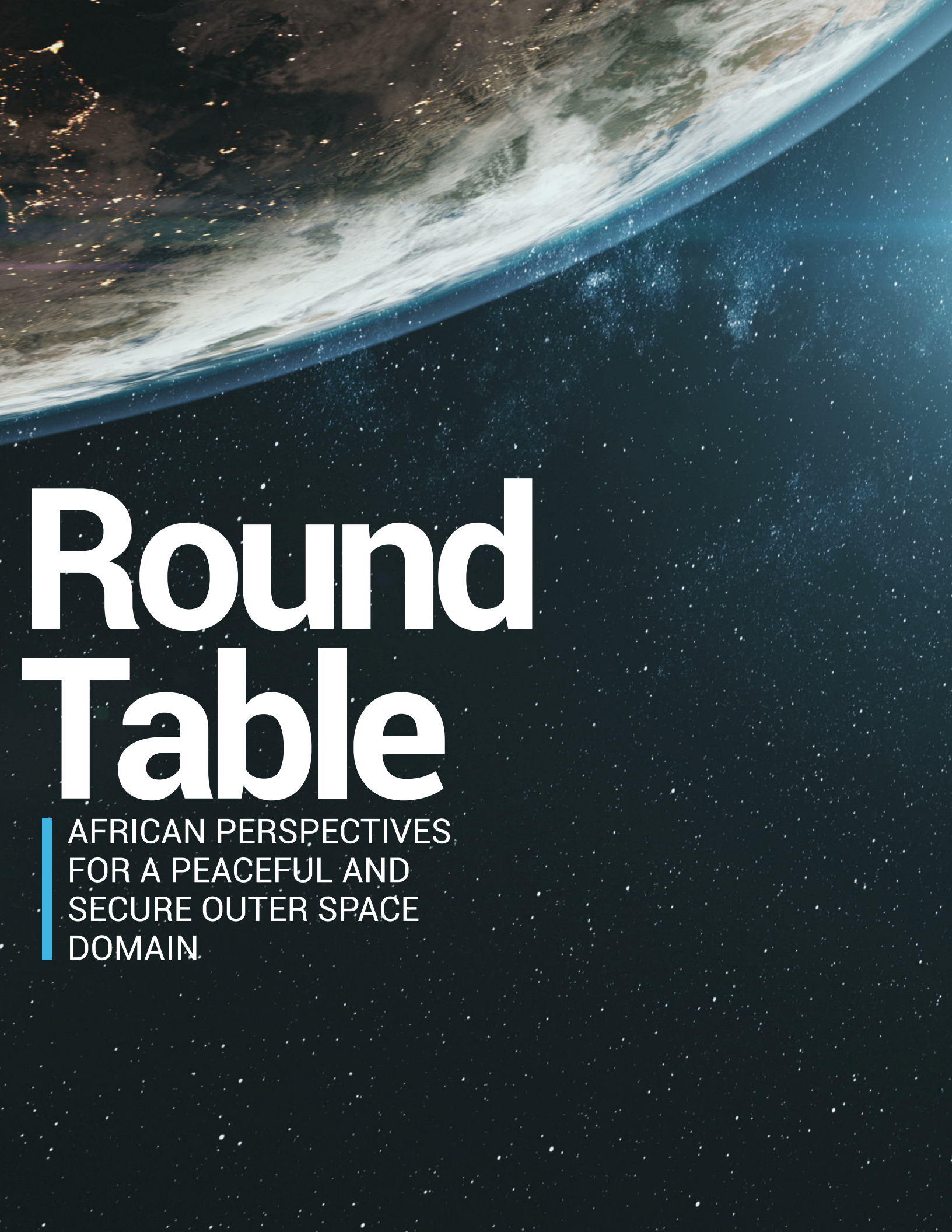
regions of the world by sharing best practices and know-how to save time and resources, promote collaborations on space-related initiatives and address gaps in expertise. Panellists added that this can enhance the visibility and credibility of individual organizations. Panellists also discussed the involvement of the commercial sector in these discussions. The commercial sector was seen as critical to developing standards and protocols for space activities, such as the concept of right-of-way agreements to avoid satellite collisions. Some commercial actors have already developed useful solutions for building trust and transparency, which States could learn from.

The panellists also discussed how having a holistic view of the space sector within the African region is necessary to develop a comprehensive understanding of the space market and the main needs for space sustainability and security. The panel concluded with final thoughts and recommendations, including the importance of ensuring that knowledge reaches all African States. There was also a suggestion to use the multilingual nature of the United Nations to encourage communication in languages other than English.

CROSS-REGIONAL COOPERATION SEEN IN THE MULTILATERAL DISARMAMENT CONTEXT

Panellists discussed ways to engage more African States in regional workshops, intersessional discussions and other similar events designed to share knowledge and raise awareness of space security. Panellists exchanged views on how the work done during this African Perspectives workshop can be preserved and implemented in future conversations on space security, as it has the potential to feed into other initiatives and processes, including the ongoing OEWG and the upcoming Group of Governmental Experts (GGE) on further practical measures for the prevention of an arms race in outer space.

The panel also touched on next steps at the international, national, and regional levels, including the adoption of potential UN General Assembly resolutions that could highlight important principles related to space security. Despite the possibility of not achieving a desired consensus outcome at the OEWG, the panellists agreed that important progress has already been made in the discussions, and that the legitimacy and value of the process lies in its broad multilateral participation and constructive, interactive discussions, which feed into ongoing discussions on space security. Panellists indicated that after the OEWG comes to a close, the work to ensure space security must continue, and expressed that this could take the shape of actions at the international, national, and regional levels, such as negotiating UN General Assembly resolutions that take into account concerns and priorities for the African region, such as the ones highlighted in this report, and encouraging further participation in regional discussions on space security.



Round Table

AFRICAN PERSPECTIVES
FOR A PEACEFUL AND
SECURE OUTER SPACE
DOMAIN

ROUND TABLE. AFRICAN PERSPECTIVES FOR A PEACEFUL AND SECURE OUTER SPACE DOMAIN

This session brought all participants together to reflect on the topics raised during each of the panels, and to explore the role of States in the African region in building a robust space security regime that attends the interests for all States in the OEWS, and in encouraging common understanding among stakeholders to set the foundations upon which to build effective and long-lasting frameworks for space security –non-legally binding and legally binding alike.

RAISING AWARENESS AT ALL LEVELS ON SPACE SECURITY MATTERS

Some participants addressed the need to encourage further awareness-raising around space security threats and the mechanisms that already exist to mitigate them. In this sense, participants highlighted the importance of broader adherence to legal frameworks, United Nations treaties, conventions, and various guidelines and voluntary instruments. Participants also suggested enhancing the capacities of governments and private industries of African countries to develop a strong space market, as well as to develop technical capacities within these countries through cooperation between academia and the government. They advocated for South–South cooperation in this field to bring more attention to the importance of space security in African States.

Participants emphasized the importance of fostering education and capacity-building in the field of security, targeting specific communities and institutions, such as universities and training centres, in order to ensure a broad and shared understanding of the importance of this topic.

They also stressed the need for specificity when talking about security, as different countries and cultures have different perspectives and practices. Some participants suggested that non-governmental organizations (NGOs) and neutral organizations like the African Union Commission and the United Nations would be best positioned to lead the effort. However, participants underscored the need to continuously discuss to prevent any duplication of efforts in initiatives.

FROM LOCAL DISCUSSIONS TO MULTILATERAL FORA: ENGAGING A VARIETY OF VOICES

Participants discussed the importance of awareness, equity, diversity, and inclusivity in the context of space security. Some participants underscored how an unstable and non-transparent space environment would negatively impact the African region, and highlighted the need for communication, clarity and fairness in decision-making in order to effectively avoid such an outcome.

Participants acknowledged the challenges of spreading awareness about space security to the right target audience and the need to take into account the nuances of micro-cultures in different regions, particularly in Africa. Additionally, they emphasized the use of African institutions to coordinate a response for a more unified regional space strategy, which could favour the region at the multilateral level. They also noted the challenge of finding space actors to engage in regulatory discussions

about space security issues within space agencies and emerging spacefaring States, and the need to recognize that space security is not only a military issue but also essential for the sustainability of space activities.

Participants emphasized the importance of diversity when working on space security matters, such as when engaging in multilateral processes, organizing events, and drafting reports to ensure a broader reach and recognition in spreading awareness about the topic, especially given the challenges of reaching different users of space resources and technologies. They also encouraged NGOs and industry stakeholders to follow suit and recognize the importance of diversity in this endeavour.

LONG-TERM EFFORTS AND SUSTAINED ACTION FOR SPACE SECURITY

Participants suggested that low-hanging fruits should be identified, referring to easily achievable goals or solutions that require minimal effort or resources to implement, in order to support African States willing to engage in space security discussions. Participants proposed the possibility of holding a regional dialogue among African space leaders on norms, principles, and rules of responsible behaviour in order to reach a regional shared understanding to influence the drafting of the OEWG report during the fourth and final session. This dialogue could be coordinated by space agencies or civil society organizations of the region, the African Union, or other relevant actors.

Various participants commented on the need for a partnership between non-governmental organizations, such as commercial industry, civil society and academia, and Member States to ensure effective governance mechanisms for space activities. Some participants also raised the issue of how to allocate resources effectively and suggested thinking about mechanisms and entities that could help to ensure that activities were set up and carried out effectively.

Conclusion



I CONCLUSION

Over the course of the event, participants collectively generated a rich and insightful discussion on what space security means for Africa and how the region can pursue next steps at the domestic, regional, and global levels. It was acknowledged that such informal discussions were important in advancing the security environment of outer space and could feed into important political initiatives such as the African Union's Agenda 2063, especially as the domain is undergoing significant and rapid change.

Participants painted a holistic picture of the critical role that space technologies play in the region. From increasing access to education, catalysing social mobility and entrepreneurship, to assisting domestic policymaking, the impact that space infrastructure has and will continue to have on developmental, economic, and political activity for Africa is immense. Understanding the impact of space technology contextualizes what is at stake for the region and could be used in both public awareness campaigns and national incentives to push for unilateral and regional engagement on space security issues.

Participants shared a diverse collection of threat considerations for the region, ranging from capability-related threats to more nuanced discussions surrounding 'soft threats' and the importance of supporting the creation of space governance at the domestic and regional level. While participants recognized the importance of crafting and strengthening a unified regional position on space security issues, they advised that such a position would need to account for the diversity of the region. It was emphasized that collective policy should not disregard subregional and national considerations and sovereignty, nor should it overlook the various microcultures of the region. With these aspects in mind, it was suggested that a permanent forum for the region be created, perhaps under the auspices of the African Space Agency, to facilitate regular exchange of ideas on issues of space policy, including specifically issues of space security.

Participants importantly considered the role of other stakeholders, notably the commercial space industry, civil society, and academia. It was highlighted that because the majority of interest and activity in outer space is commercial in nature, any negotiations without the participation of industry would be less sustainable and more difficult to implement. Therefore, the importance of considering a bottom-up approach to space governance initiatives that considers the perspectives of non-governmental entities was discussed. In a similar vein, the need to sponsor educational and research opportunities, especially among youth, to inspire future dynamic and nuanced governance initiatives was also discussed.

Across the different panels and the roundtable, participants proposed valuable ideas to move forward space security-related discussions at the multilateral level so that States can work together on innovative solutions to find a common understanding on the most fitting governance mechanisms for their respective and shared interests.

AFRICAN PERSPECTIVES FOR ADVANCING SPACE SECURITY THROUGH NORMS, RULES AND PRINCIPLES OF RESPONSIBLE BEHAVIOURS

WORKSHOP SUMMARY REPORT



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