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**Committee on the Peaceful  
Uses of Outer Space****Report on the United Nations/Economic Commission for  
Africa Conference on Space Law and Policy****(8–10 December 2020)****I. Introduction****A. Background and objectives**

1. The United Nations Conference on Space Law and Policy on the theme “Emerging issues in space law and policy: perspectives of African nations”, was held virtually from 8 to 10 December 2020. It was organized by the Office for Outer Space Affairs of the Secretariat, in cooperation with the Economic Commission for Africa and with the support of the African Union Commission.
2. The Conference was preceded by a long-standing series of capacity-building workshops on space law that have been organized by the Office for Outer Space Affairs since 2002 in cooperation with and hosted by, in chronological order, the Netherlands, the Republic of Korea, Brazil, Nigeria, Ukraine, the Islamic Republic of Iran, Thailand, Argentina and China. The most recent workshop was hosted by the Office and held at the United Nations Office at Vienna.
3. In 2018, the Office, building on the preceding workshops, moved to the next phase of its capacity-building efforts by launching a new series of United Nations conferences dedicated to space law and policy. The first conference was organized jointly with the Government of the Russian Federation and sponsored by the State Space Corporation “Roscosmos”, the Ministry of Foreign Affairs and the Roscosmos Academy, and held in Moscow from 11 to 13 September 2018, and the most recent conference was organized jointly with the Government of Turkey, the Space Technologies Research Institute (TÜBITAK UZAY), the Turkish Space Agency and the Asia-Pacific Space Cooperation Organization and held in Istanbul, Turkey, from 23 to 26 September 2019.
4. International and regional cooperation in the peaceful uses of outer space helps to bring the benefits of space technology applications to a wide range of stakeholders, both governmental and non-governmental, and to intensify and diversify national space programmes. Policy and regulatory frameworks at the national, regional and international levels are of paramount importance in providing the necessary basis for States, in particular developing States, to meet development goals and address challenges to sustainable development. In this connection, it is necessary to continue



to strengthen the linkages between international space law and the conduct of space activities.

5. Each year, in its annual resolution on international cooperation in the peaceful uses of outer space, the General Assembly reaffirms the importance of international cooperation in developing the rule of international law, including the relevant norms of international space law and their important role in international cooperation for the exploration and use of outer space for peaceful purposes, and of the widest possible adherence to international treaties that promote the peaceful uses of outer space in order to meet emerging new challenges, especially for developing countries. The Assembly also recognizes that all States, in particular those with major space capabilities, should contribute actively to the prevention of an arms race in outer space with a view to promoting and strengthening international cooperation in the exploration and use of outer space for peaceful purposes.

6. In today's world, where the number of actors engaging in space activities is constantly increasing, it is of utmost importance to ensure that all actors comply with the requirements of international space law in developing international and regional space cooperation.

7. The successful implementation and application of the international legal framework governing space activities depends on the understanding and acceptance of that framework by policymakers and decision-makers. The availability of professionals who can provide suitable legal advice and disseminate information and knowledge about space law, in particular in developing countries, depends on the availability of adequate education opportunities in space law and policy.

8. In this context, the two regional centres for space science and technology education affiliated to the United Nations in Africa, namely, the African Regional Centre for Space Science and Technology Education – in French Language (CRASTE-LF) and the African Regional Centre for Space Science and Technology Education – in English Language (ARCSSTE-E), play an important role.

9. Against that background, the Conference was held to promote adherence to the five United Nations treaties on outer space and assist States in building their capacity in space law and thus help them to achieve the Sustainable Development Goals.

10. Conference participants were provided with an overview of the legal regime governing the peaceful uses of outer space, examined and compared various aspects of the broader issue of space security within the global governance of outer space activities, including transparency and confidence-building measures in outer space activities, and addressed space law and policy. This was done in pursuit of the following objectives:

(a) Promote understanding, acceptance and implementation of the United Nations treaties and principles on outer space;

(b) Promote the exchange of information on national space legislation and policies for the benefit of professionals involved in national space activities;

(c) Consider the contribution of space law to economic and social development, and the use of space-derived geospatial data for sustainable development;

(d) Consider trends in and challenges to international space law;

(e) Consider mechanisms for increasing regional and international cooperation in the peaceful uses of outer space;

(f) Consider the development of university-level studies and programmes in space law, with a view to promoting national expertise and capacity in this field;

(g) Discuss novel areas in which international space law could provide potential legal models to balance divergent interests of States.

11. The Conference was preceded by a half-day project entitled “Introductory technical advisory mission of space law for new space actors” to support the development of national space legislation for new space actors in the African region. The participants in the introductory technical advisory mission also attended the Conference to benefit from that expanded capacity-building opportunity.
12. The observations and conclusions set out in section II of the present report reflect a number of concrete elements covered in the Conference discussions.
13. The report will be submitted to the Legal Subcommittee at its sixtieth session.

## **B. Attendance**

14. Decision-makers and policymakers from national space agencies and governmental bodies, experts from the space community, business experts and researchers, students and specialists from academia involved in space activities from the following countries participated in the Conference: Algeria, Austria, Argentina, Belgium, Bermuda, Botswana, Brazil, Burkina Faso, Burundi, Cameroon, Canada, Chile, China, Colombia, Côte d’Ivoire, Chechia, Denmark, Ecuador, Egypt, Eritrea, Ethiopia, Finland, France, Germany, Ghana, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Ireland, Israel, Italy, Japan, Jordan, Kenya, Lao People’s Democratic Republic, Libya, Luxembourg, Malaysia, Mauritania, Mexico, Morocco, Mongolia, Nepal, Netherlands, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russian Federation, Rwanda, Saudi Arabia, Singapore, Somalia, South Africa, Spain, Tajikistan, Thailand, Turkey, Tunisia, Uganda, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of) and Zimbabwe. Representatives of the Economic Commission for Africa, the African Union Commission, the Asia-Pacific Space Cooperation Organization, the International Telecommunication Union, the European Space Agency, the Secure World Foundation and the Office for Outer Space Affairs also participated in the Conference.

## **C. Programme**

15. The Director of the Office for Outer Space Affairs, the Director of the African Centre for Statistics, Economic Commission for Africa, on behalf of the Executive Secretary of the Economic Commission for Africa, and the Director of Human Resources, Science and Technology of the African Union Commission opened the Conference. A goodwill message was delivered by the Director General of the Ethiopian Space Science and Technology Institute. Speeches were given on topical issues of concern to the space community, in particular capacity-building in space law and policy, the peaceful uses of outer space and the promotion of international cooperation in space activities. It was noted, in particular, that there are many opportunities to utilize space science and technology on the African continent for the benefit of all people and that unlocking these opportunities for end users of services would contribute to economic development. Participants also stressed the importance of building the capacity of African States to utilize space applications and services as a way to inspire students to pursue educational programmes in the fields of science, technology, engineering and mathematics.

16. On the first day, the Conference addressed the international legal regime for outer space including the promotion of the responsible, peaceful and safe use of outer space. Presentations were given on the following topics:

- (a) The legal regime of outer space: an overview of fundamental principles and implementation;
- (b) Legal regimes of aviation, space and telecommunications: a comparison;
- (c) Overview of the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space;

(d) The guidelines and regulatory frameworks for the long-term sustainability of outer space activities: the role of the guidance document under thematic priority 2 of UNISPACE+50 for emerging space nations;

(e) Registration of space objects;

(f) Frequency management.

17. Activities on the second day concerned space activities and perspectives of African nations. A panel discussion was held, and presentations were given on the following topics:

(a) Panel discussion: regional institution-building, education and training – current and future trends for Africa;

(b) Best practices in sharing remote sensing data to achieve the Sustainable Development Goals;

(c) Space-based data and disaster management in Africa;

(d) Data policy, regulatory frameworks and cybersecurity.

18. Activities on the third day concerned emerging issues with respect to the legal regime for outer space and global governance. Presentations were given on the following topics:

(a) Role of African States in the Committee on the Peaceful Uses of Outer Space;

(b) Multilateralism and emerging issues in space laws and policy: the role of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space;

(c) International space law and the environment;

(d) Recent developments in the exploration, exploitation and utilization of space resources;

(e) Perspectives of a future space traffic management regime at the global level;

(f) International frameworks for cooperation in space activities.

The Conference ended with a session on conclusions, observations and recommendations.

19. An introductory note to the Conference, the Conference programme and the presentations given at the Conference are available on the website of the Office ([www.unoosa.org](http://www.unoosa.org)).

## II. Observations and conclusions

20. The Conference participants heard with interest the presentations and the panel discussion and actively engaged in discussions and thereafter arrived at the following observations and conclusions regarding space law and policy taking into consideration African perspectives:

(a) The African continent has a high potential for growth in the field of space activities, including small satellites, and can significantly benefit from an increase in the local development of satellites and the use of satellite applications for social and economic development;

(b) Space science and technology are an important tool for ensuring the sustainable use of natural resources, fostering entrepreneurship and the creation of high-technology industrial sectors. Furthermore, they make a considerable contribution to the creation of enabling environments for addressing a wide range of pressing challenges, including the need to create jobs, reduce poverty, manage resources sustainably and develop rural areas;

(c) The implementation of the African Space Policy and Strategy will lead to growth of the space economy and further institution-building, which will assist African nations in realizing the vision of Agenda 2063 of the African Union;

(d) The establishment of the African Space Agency of the African Union, hosted by Egypt, constitutes an important step towards African space infrastructure;

(e) Stronger cooperation between Governments, intergovernmental and non-governmental organizations, the private sector, academia and research institutions is important in this overall context;

(f) To strengthen the African contribution to global governance of outer space activities, more African countries should become active members of the Committee on the Peaceful Uses of Outer Space. There should also be increased active participation of the African Group in the work of the Committee;

(g) The African Union Commission may wish to consider becoming a permanent observer to the Committee on the Peaceful Uses of Outer Space to foster an African common interest in international cooperation in the peaceful uses of outer space;

(h) African countries are encouraged to develop their own space policies and strategies and regulatory frameworks for national space activities, which could guide and inform the ratification of United Nations treaties on outer space, promoting the universality of the Outer Space Treaty;

(i) The Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space, adopted by the Committee in 2019, would provide helpful guidance for governmental and non-governmental entities. The implementation of these voluntary guidelines would strengthen governance and enhance the safety, security and sustainability of outer space activities. Capacity-building and increasing awareness are important in this regard;

(j) Fundamental principles of space law remain relevant and topical even after more than 50 years have passed since they were enshrined in the Outer Space Treaty. Approaches to implement those principles have ranged from formal treaty-making in the early days to the adoption of a set of principles, and now to modern voluntary instruments such as the Guidelines for the Long-term Sustainability of Outer Space Activities, which mark a new chapter in applying a multilateral approach to the progressive development of space law;

(k) A common feature that runs throughout this rich history is the recognition and willingness of States to work together in multilateral forums, such as the Committee on the Peaceful Uses of outer Space and its Legal Subcommittee, to address space matters that affect all countries worldwide;

(l) The multilateral approach to global space issues will be key to addressing emerging issues such as the utilization of space resources and developing a comprehensive and reliable space traffic management system;

(m) As space becomes more accessible to a wider range of new actors, the fundamental principle of the Outer Space Treaty (article VI) that States have the obligation to authorize and continually supervise the activities in outer space by non-governmental entities within their jurisdiction is now more important than ever before;

(n) The implementation of fundamental principles of space law in national space legislation enables States to consider the most appropriate manner to develop their national and commercial space programmes, which allows them to support and grow their economies so that they may gain the benefits from space science and technology;

(o) Space-based data may be used by policy and decision-makers to promote economic development, address and achieve the Sustainable Development Goals and

facilitate emergency response and the management of natural and humanitarian disasters;

(p) Efforts should be taken to promote better access to space, bridging the space divide, by enhancing the access to space-based data and information, future opportunities for ground, launch and in-orbit experiments and research, as well as through the design, manufacturing and operation of small satellites;

(q) The joint effort by the Office for Outer Space Affairs and the International Telecommunication Union of providing guidance on the registration of space objects launched into outer space and frequency management, in particular for small- and very-small-satellite activities, serves as a useful guideline for Governments and small-satellite operators;

(r) Greater capacity-building is key for States to make the most out of what space has to offer. In that context, space law and policy can be a catalyst for growth and economic development. Capacity-building, education and training are paramount in that regard;

(s) Robust space laws and policies at the national level can facilitate many aspects of capacity-building, from inspiring students to pursue careers in science, technology, engineering and mathematics to building the national and commercial capacity to operate space assets and to encouraging the developers of applications that utilize space-derived data such as Earth observation, mapping, navigation and timing;

(t) The Pan African University network for space science and technology could consider including education and training in space law and space policy;

(u) The educational programmes of the African regional centres for space science and technology education affiliated to the United Nations should be strengthened and fully utilized to meet the African needs;

(v) The African Union Commission, the Economic Commission for Africa and the Office for Outer Space Affairs should consider joint collaborative efforts to further enhance long-term space capabilities at the national and regional levels;

(w) The United Nations introductory technical advisory mission entitled “Fostering responsible national space activities in the African region”, which was organized by the Office for Outer Space Affairs and held on 7 December 2020, back-to-back with the present Conference, was welcomed by the participants in the Conference, and it was noted that it was important to continue to hold such events in order to enhance capacity in national space law and policy development.

### **III. Concluding remarks**

21. The Conference expressed its deep appreciation to the Office for Outer Space Affairs, the Economic Commission for Africa and the African Union Commission for organizing the Conference as it had shed light on several emerging issues in space law and policy from the perspective of African States.

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