

THE MOMBASA DECLARATION ON SPACE AND AFRICA'S DEVELOPMENT

The participants in the Fourth African Leadership Conference on Space Science and Technology for Sustainable Development (ALC IV), held in Mombasa from 26 to 28 September 2011,

Recalling that humans have always gazed at the sky with wonder and that from this was born the curiosity that led to scientific discoveries that laid the foundations of modern space science and technology;

Recognizing the major contribution that space science and technology makes to the well-being of humanity and specifically to the economic, social and cultural development of Africa in terms of Earth observation, satellite navigation and communications services that support, *inter alia*, education, health, environmental monitoring, management of natural resources, disaster management, meteorological forecasting and climate modelling;

Recognizing that space science responds to the universal human urge to explore the unknown, thereby enhancing our knowledge of the natural world and providing a powerful source of inspiration for the youth to embrace science and technology;

Considering that space transcends national boundaries and local interests, permitting the development of solutions to address common challenges faced by all African countries;

Reaffirming that the exploration and use of outer space is the province of all humankind, and that outer space should be utilized for peaceful purposes and in the interests of maintaining international peace and security, in accordance with international law, including the Charter of the United Nations, and as proclaimed in the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (Outer Space Treaty);

Recognizing that the orderly conduct of space activities is beneficial to all countries, whether or not they have national space programmes, and that the observance by States and by international organizations of the provisions of the outer space treaties should be encouraged;

Recognizing that the space environment is becoming increasingly crowded and that actions of one actor in outer space hold potential consequences for many other actors, and that emerging space nations do not have the luxury of entering into a pristine environment, but have to take cognisance of the effects of their actions on all other users of outer space;

Recognizing the role played by the United Nations Committee on the Peaceful Uses of Outer Space in fostering international cooperation in outer space activities;

Convinced that international cooperation is the best manner to promote the peaceful uses of outer space;

Recalling that the United Nations General Assembly, in its resolution 65/97, emphasizes that regional and inter-regional cooperation in the field of space activities is essential to strengthen the peaceful uses of outer space, to assist States in the development of their space capabilities and to contribute to the achievement of the goals of the United Nations Millennium Declaration, and in that regard recognizes the important role played by conferences and other mechanisms in strengthening regional and international cooperation among States;

Recalling that the African Leadership Conference on Space Science and Technology for Sustainable Development was born out of a need for a regional platform to improve cooperation among African space professionals and to raise awareness among African governments of the important benefits of space science and technology for Africa's sustainable development;

Noting with satisfaction that the African Leadership Conferences on Space Science and Technology for Sustainable Development, held in Abuja in 2005, South Africa in 2007, Algeria in 2009 and Kenya in 2011, have contributed to a better understanding of space technology and to capacity-building in the utilization of space technology for social and economic development in Africa and that these conferences have also led to the creation of the African Resource Management Constellation project;

Further noting the valuable contributions of participants of the various technical fora of ALC IV;

And convinced that efforts should be undertaken to facilitate substantive joint projects between “space-capable” and “non-space-capable” countries in Africa;

Declare their commitment to harness space science and technology for the betterment of the human condition in Africa through the following actions:

- (a) For protection of Africa’s natural environment and the collective management of the continent’s resources for sustainable socioeconomic development, action should be taken:
 - a. To develop and implement the African Resource Management Constellation;
 - b. To make maximum use of existing capabilities in worldwide satellite coverage;
 - c. To assess the infrastructure related to data availability, archiving and dissemination in Africa, particularly in regard to freely available fundamental data;
 - d. To promote data exchange among African countries and to develop data exchange policies and models;

- (b) For the enhancement of human security, development and welfare, action should be taken:
 - a. To improve public health services by expanding and coordinating space-based services for tele-health and telemedicine;
 - b. To implement an integrated regional disaster management system, in coordination with existing international efforts, such as UN-SPIDER and its Regional Support Offices in Africa;
 - c. To improve literacy and enhance education by implementing and coordinating satellite-based tele-education programmes and the related ground-based infrastructure;

- (c) For the development of Africa’s human capital resources in space science and technology, action should be taken to:
 - a. To improve access to high-level education and training in space science and technology on the continent;
 - b. To acknowledge and harness the expertise already present on the African continent through the development of a comprehensive database of African space science and technology experts;
 - c. To align with existing human capital development initiatives of the African Union;
 - d. To utilize existing training centres in Africa and to promote greater cooperation among education and training institutions to develop appropriate training programmes in space science and technology that respond to Africa’s needs;
 - e. To encourage African countries to increase their utilisation of and support for the Regional Centres for Space Science and Technology Education, affiliated to the United Nations, located in Morocco and Nigeria;
 - f. To promote knowledge sharing through regional space conferences and through scholarly interaction among African institutions;
 - g. To support the existing networks and associations of space professionals in Africa;
 - h. To encourage the development and implementation of university curricula in space science and technology in Africa;

- (d) For the advancement of scientific knowledge of outer space and to protect the space environment for future generations, action should be taken:
 - a. To promote and strengthen intra-African cooperative activities in areas such as astronomy, space physics and the study of near-Earth objects and to encourage participation of African institutions in global lunar and planetary exploration efforts;
 - b. To protect the near-Earth space environment through responsible actions in outer space, including the implementation of the Space Debris Mitigation Guidelines of the United Nations Committee on the Peaceful Uses of Outer Space, and other established international best practices in this regard;
 - c. To ensure that the activities of African States do not introduce electromagnetic interference that may disrupt space applications or interfere with Earth observation in certain bands or with ground-based astronomical activities;

- (e) For the advancement of the widest possible adherence to international treaties governing the use of outer space for peaceful purposes, action should be taken:
 - a. To encourage African States to accede to the existing United Nations treaties governing the peaceful uses of outer space in order to protect their legitimate rights and interests in space activities;
 - b. To encourage African States to develop national policies and regulatory frameworks to govern the activities of States and their space agencies at the level of domestic legal order and to regulate such activities under their legal jurisdictions;
 - c. To encourage closer cooperation and dialogue between universities and institutions with established space law programmes and those wishing to develop such programmes, for the benefit of students and professionals in the public and private sector;
 - d. To promote overall capacity-building in space law in Africa, for which regional coordination and cooperation could play an important role;
- (f) For the enhancement of public awareness of the importance of space activities, action should be taken:
 - a. To promote the celebration, in all African countries, of World Space Week, proclaimed by the United Nations General Assembly to be celebrated annually from 4-10 October.
 - b. To increase awareness among decision makers and the general public in Africa of the importance of utilising space infrastructure to improve the common economic and social welfare of humanity;
 - c. To encourage all African countries to provide their children and youth, of both genders, with opportunities to learn more about space science and technology and its importance to human development, as an investment in the future;
 - d. To develop a mechanism for the sharing of experiences, knowledge and resources to improve space awareness in Africa;
- (g) For the strengthening of space activities in the African Union, action should be taken:
 - a. To establish, within the African Union, the African Leadership Conference on Space Science and Technology for Sustainable Development as a consultative mechanism on space science and technology;
 - b. To encourage participation of a greater number of African States in the ALC through engagement with the African Union;
 - c. To establish a special African Union fund for the purpose of implementing the recommendations of the ALC conferences;
- (h) For the strengthening of African participation in the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), and other global space fora, action should be taken:
 - a. To reaffirm the importance for African member States of COPUOS to participate actively in the sessions of COPUOS and its Scientific and Technical Subcommittee and Legal Subcommittee;
 - b. To promote better coordinated African participation in COPUOS and other global space fora, to ensure that the agendas in those fora address Africa's needs and to engage in those fora with well developed African positions on key issues;
 - c. To affirm, through statements in COPUOS, the value of the United Nations Programme on Space Applications for Africa and the importance of ensuring the provision of adequate resources for the continuation of this Programme;
 - d. To take note of the outcomes and recommendations of other regional conferences for Asia and the Pacific and Latin America and the Caribbean, that are relevant to efforts to promote cooperation in the peaceful uses of outer space at the regional, inter-regional and global levels.