First International Space Forum at Ministerial level Trento, Italy; 24 October 2016

Statement by the Portuguese Head of Delegation

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The sustainable future of our society requires more knowledge and more scientific culture, ensuring the access to science and education as an inalienable right of all. More science and the systematic democratization of access to knowledge means more equal opportunities, more social mobility and a new stimulus for entrepreneurial activities and well-being.

We are entering critical times that require creating conditions able to strengthen and sustain knowledge-based international cooperation. Lessons learned over the past decades with international partnerships in science, technology and higher education, among many intergovernmental scientific ventures, have clearly shown that the future can only be built with more knowledge, a greater scientific culture, and enhanced exchanges of ideas.

A new paradigm of structured international research relationships is emerging shaped by a new era of government and industry intervention in association with knowledge. Crossdisciplinary new frontier research should be the result of ambitious initiatives yet to be developed or stimulated from the huge potential of interacting research-based institutions, including intergovernmental research laboratories and joint ventures.

It is under this context that the Government of Portugal would like to challenge all participating nations in this First International Space Forum to open a new debate about multilateral cooperation in complex engineering and science systems with respect to an integrative approach to space, climate change and energy, and earth and ocean science in the Atlantic Ocean, together with emerging methods of data science. The ultimate goal of the white paper we have prepared and distributed to all national delegations is to build a bridge to the future through an enlightened commitment to science and knowledge, to decision-making and engineering solutions, and to north-south cooperation. Specifically, the commitment is to foster *networks of opportunity* to help future generations create a better future.

The white paper proposes the installation of the *Azores International Research Center (AIR Centre)* in the form of a international research network centered under two main priorities: i) new data collection for innovative research; and ii) synergies Sea/Space towards new knowledge production and diffusion. Its ambition is driven by increasing evidence of the

potential benefits resulting from the human, social and economic appropriation of the results and methods of science and technology by society. Thus, the aim is to stimulate the necessary knowledge-driven conditions to build an intergovernmental research center in the Azores with robust international cooperation that will better use the strategic Atlantic positioning of the Azores and Portugal to foster north-south cooperation in science and technology.

By promoting new knowledge about climate change and its impact on society, and related issues in the Atlantic, conditions are being fostered that will provide society with the means to plan a better world. By facilitating the access to space from the unique position of the Azores, new frontiers of knowledge, together with the development of new space industries are likely to emerge. Also, by promoting new research in the deep sea surrounding the Azores, a deeper and broader understanding of extreme conditions for living organisms and new energy sources will result.

The sustainable future of humankind requires ensuring access to science and education as an inalienable right. A greater culture of science and the systematic democratization of access to knowledge means informed decision making, more equal opportunities, more social mobility, and new stimuli for entrepreneurial activities and societal wellbeing.

Our goal is that the AIR Center agenda is implemented together with another new international initiative on "*Knowledge for Space – Space for Knowledge*", extending traditional education and science awareness programs to consider new horizons of space technologies to foster the access to "knowledge for all". This will be achieved by involving telecom operators, broadcast services and space providers in a "space for knowledge" network.

This is important in today's societies because space science involves a series of disciplines that provide new insights on the Universe (physics; astronomy), allows perceiving earth dynamics which helps in the prediction and preparation for emerging threats; foster new advancements in satellites and robotic engineering, as well as in related technology allowing the exploration of outer space and find new materials and new knowledge of the Universe.

It is under this context that several major initiatives have been launched worldwide in the last decades to foster education for space in an effort to bridging the knowledge gap between people and space science. For example, in 2002 UNESCO launched a Space Education programme following recommendations from the 1999 World Conference on Science and the Third United Nations Conference on the Peaceful Uses of Outer Space.

To carry out these objectives UNESCO develops space education workshops and other initiatives that show the importance of the peaceful uses of outer space and the part played by space uses and technology in protecting, monitoring, documenting, and sharing our common heritage, both cultural and natural.

In a related action, ESA launched the ESERO initiative (European Space Education Resource Office) with several nations, including several activities to help teachers to introduce space in the classroom and raise awareness in schools of the importance of space science and technology. Among other initiatives, it has provided teacher-training courses, with special emphasis to primary level education and the reinforcement of the communication between the scientific community, enterprises and schools.

By using space as an engaging multidisciplinary challenge, these initiatives are contributing to promote the interest and mobilization of younger generations for science and technology.

Through the initiative "*Knowledge for Space – Space for Knowledge*", the future AIR Center will facilitate expanding and complementing existing activities at UNESCO, ESA, NASA and other major players worldwide to raise awareness for the sciences among all children, but also **to deliver new educational and cultural contents in developing countries through space technologies**. Specific activities will be aimed to promote the diffusion of endogenous knowledge of local cultural and natural heritages and contributing for educating more children everywhere, anytime.

We all should share the responsibility of promoting "Knowledge as our common future", including ways to allow population at large, from every country, to benefit from access to space. Portugal and the Portuguese Government are engaged in this endeavor and clearly share such responsibility.

<u>Proposal</u>: The Government of Portugal proposes the **organizing of a Second International Space Forum at Ministerial level to be held in 2017 in Azores, Portugal**. It is advanced the second week of May 2017 for the event, subject to an overall agreement among national delegations. The proposed focus is on the installation of the Azores International Research Center (AIR Centre) and the initiative "Knowledge for Space – Space for Knowledge".

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3