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English only

**Committee on the Peaceful
Uses of Outer Space**
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**Report of the Scientific and Technical Subcommittee
on its fifty-first session**

**Commentary on and proposed amendments to the proposal
for the consolidation of the set of draft guidelines on the
long-term sustainability of outer space activities**

Submission by the Netherlands

I. Introduction

Space policy in the Netherlands is primarily focused on international cooperation in European contexts within the European Union, European Space Agency (ESA) and in the meetings of the Committee on the Peaceful Uses of Outer Space (COPUOS).

European Union (EU)

The growing number of satellites and amounts of debris in the space surrounding our planet makes the risk of collision a serious threat to the sustainable operation of EU space infrastructure. In April 2014 the European Commission welcomed the European Parliament vote in favour of a proposal to create a European Space Surveillance and Tracking (SST) Framework. The purpose of the service is to provide alerts to help reduce the risk of collisions between spacecraft, between spacecraft and space debris, and collisions due to the uncontrolled re-entry of non-operational spacecraft or large debris. The Commission's proposal aims to encourage Member States with relevant space surveillance abilities to work together and pool their means in order to provide the EU with space surveillance and tracking services. The proposal will now be submitted to the European Council for its final approval.



European Space Agency (ESA)

ESA's Space Situational Awareness (SSA) Programme is being implemented as an optional ESA programme with financial participation by 14 Member States. It began in 2009, and the programme's mandate was extended to 2019 at the 2012 ESA Ministerial Council. The second phase, Phase II, of the programme is currently funded at €46.5 million for 2013-2016.

Under the programme, Europe is acquiring the independent capability to watch for objects and natural phenomena that could harm satellites in orbit or infrastructure such as power grids on the ground. To achieve this, ESA's SSA Programme is focusing on three main areas:

(a) Space Weather (SWE): monitoring conditions at the Sun and in the solar wind, and in Earth's magnetosphere, ionosphere and thermosphere, that can affect space borne and ground-based infrastructure or endanger human life or health;

(b) Near-Earth Objects (NEO): detecting natural objects that can potentially impact Earth and cause damage;

(c) Space Surveillance and Tracking (SST): watching for active and inactive satellites, discarded launch stages and fragmentation debris orbiting Earth.

Committee on the Peaceful Uses of Outer Space (COPUOS)

As a member State of COPUOS, the Netherlands fully adheres to the COPUOS Space Debris Mitigation Guidelines, IADC Space Debris Mitigation Guidelines, ITU Recommendation ITU-R S.1003, the European Code of Conduct for Space Debris Mitigation and the ISO Standards. The Netherlands supports also ESA and EU initiatives.

National level

The Dutch Space Activities Act serves to regulate space activities that fall under Dutch jurisdiction and the establishment and management of a registry for space objects. Three of the five space related treaties that have been ratified by the Netherlands — namely the Outer Space Treaty, the Liability Treaty and the Registration Convention — were relevant for legislating the Space Activities Act. Activities in outer space may only be performed with the requisite licence. Section 3, subsection 3, paragraph b, deals with regulations to protect the environment in outer space including the disposal of space objects at the end of their operational life.

Conclusion

Looking at the efforts of the Netherlands at various levels (European, COPUOS and national) one can conclude that sustainable outer space activities and space debris is important for the Netherlands. Guidelines developed, for example by COPUOS, will be executed by bringing it to attention in the European Space Surveillance and tracking (SST) Framework, in ESA's Space Situational Awareness (SSA)

Programme. At national level the Guidelines are already partly implemented in the Space Activities Act, such as Guidelines 4, 6, 9, 12 and 20.

II. Proposed amendments to the proposal for the consolidation of the set of draft guidelines on the long-term sustainability of outer space activities

The following amendments to the draft guideline relating to “International cooperation in support of the long-term sustainability of outer space activities” (guideline 16+18), as contained in document A/AC.105/2014/CRP.5, are proposed:

International cooperation in support of the long-term sustainability of outer space activities (Guideline 16+18)

States and international intergovernmental organizations should promote and facilitate international cooperation in the peaceful uses of outer space, conducted on a mutually acceptable basis without infringing intellectual property rights and in accordance with non-proliferation norms and principles, as a means of enhancing the long-term sustainability of outer space activities.

All States, particularly those with relevant space capabilities and with programmes for the exploration and use of outer space, should contribute to promoting and fostering international cooperation on the long-term sustainability of space activities on a mutually acceptable basis. In this context, particular attention should be given to the benefits for and interests of developing countries and countries with incipient space programmes. States are free to determine all aspects of participation in the exploration and use of outer space on a mutually acceptable basis. The terms of such cooperative activities, for example through contracts and other legally binding mechanisms, should be fair and reasonable.

States undertaking, authorizing or intending to undertake or authorize international space activities involving the use of controlled items (objects, materials, manufactured items, equipment, software or technology ~~and other products~~) ~~that are based on technologies~~ whose unauthorized disclosure and onward transfer are prohibited and thus warrant appropriate levels of control should ensure that such activities are conducted in accordance with multilateral commitments, non-proliferation norms and principles and international law, and respect intellectual property rights, irrespective of whether such activities are carried out by governmental or non-governmental entities or through international intergovernmental organizations to which such States belong. Space activities should be in accordance with responsible standards and practices, such as subscription to and implementation of the Hague Code of Conduct against Ballistic Missile Proliferation.

States concerned should establish appropriate legal and administrative regulations relating to cooperation in cases where such controlled items are exported or imported, and seek to forge collaborative relationships based on mutual benefits and equal advantages with regard to safeguarding controlled items. States are encouraged to ensure, by means of agreements or other arrangements which are

properly institutionalized under national legislation, the safety and security of imported controlled items while they are in the territory of the importing State. In particular, States should enter into consultations to reach agreement in relation to:

(a) Post-sale monitoring and verification to ascertain that controlled items are not at risk of unauthorized use or onwards transfer;

(b) Strengthening end-use certification and authentication procedures at the State level;

(c) Providing legal supervision of contracts and contract-based activities in order to effectively facilitate the proper application of agreed measures on end use and to prevent any circumstances in which exported controlled items, when located in the territory of the importing State, could become the subject of disputed jurisdiction or be used for illicit purposes; and

(d) Ensuring that the relevant State bodies have the power and capacity to monitor the end use of controlled items and to take appropriate measures where there is a presumption of non-compliance with non-proliferation norms and principles regarding end use.

Guideline 16

Promote and facilitate international cooperation in the peaceful uses of outer space as a means of enhancing the long-term sustainability of outer space activities (D.1)

Guideline 16 applies to all modes of cooperation, including governmental and non-governmental; commercial and scientific; global, multilateral, regional or bilateral; and among countries at all levels of development. All States, particularly those with relevant space capabilities and with programmes for the exploration and use of outer space, should contribute to promoting and fostering international cooperation in the long-term sustainability of space activities on a mutually acceptable basis. In this context, particular attention should be given to the benefit for and interest of developing countries and countries with incipient space programmes stemming from such international cooperation conducted with countries with more advanced space capabilities. States are free to determine all aspects of participation in the exploration and use of outer space on a mutually acceptable basis. The terms in such cooperative ventures, for example through contracts and other legally binding mechanisms, should be fair and reasonable.

Guideline 18

Promote international cooperation on a mutually acceptable basis, to support the growing interest of many countries in establishing national capacities for outer space activities through capacity-building and transfer of technology, without infringing intellectual property rights, and in accordance with non-proliferation norms and principles, taking into account the requirement of long-term sustainability of those activities (A.4)

States and international organizations should consider promoting international technical cooperation to enhance the long-term sustainability of outer space activities and support sustainable development on Earth.

States and international organizations should support current initiatives and consider new forms of regional and international collaboration to promote space capacity-building, taking into account the needs and interests of developing countries and in accordance with national legislation, multilateral commitments, non-proliferation norms and international law.

States and international organizations should promote technology safeguard arrangements that may facilitate space capacity-building, while respecting intellectual property rights, and in accordance with non-proliferation norms and principles, as well as the requirements for long-term sustainability.

States undertaking, authorizing or intending to undertake or authorize international space activities involving the use of goods (objects, materials, manufactured items, equipment and other products) that are based on technologies whose unauthorized disclosure and onward transfer are prohibited and thus warrant appropriate levels of protection should ensure that such activities are conducted in accordance with non-proliferation principles and the norms of international law, irrespective of whether such activities are carried out by governmental or non-governmental entities or through international organizations to which such States belong. Space activities should be in accordance with responsible standards and practices, such as subscription to and implementation of the Hague Code of Conduct against Ballistic Missile Proliferation.

States concerned should provide opportunities to establish stronger legal and administrative regulation relating to such cooperation in cases where it would be particularly appropriate or even essential in view of the nature of the controlled goods that are exported or imported. States should seek to forge collaborative relationships based on mutual benefits and equal advantages with regard to the consideration and resolution of issues relating to the coordination of procedures for safeguarding controlled products. To maximize the potential benefits of this practice, States are also encouraged to provide, by means of agreements or other arrangements, for the implementation of measures, institutionalized appropriately under their national legislation, to ensure the safety and security of imported controlled goods while they are in the territory of the importing State. In particular, States, acting in accordance with the relevant legislation and on a mutually accepted basis, should enter into consultations to reach agreement in relation to:

(a) Post-sale monitoring and verification to ascertain that controlled items are not at risk of unauthorized use or onward transfer;

(b) Strengthening end-use certification and authentication procedures at the State level;

(c) Providing legal supervision of contracts and contract-based activities in order to effectively facilitate the proper application of agreed measures on end use and to prevent any circumstances in which exported protected goods, when located in the territory of the importing State, could become the subject of disputed jurisdiction or be used for illegal purposes;

(d) Ensuring that the relevant State bodies have the power and capacity to monitor the end use of controlled items and to take immediate measures (including the issuance of the relevant orders) where there is a presumption of non-compliance with the arrangements on end use.