## I. Peaceful Uses of Outer Space for Sustainable Development

Six decades after mankind boldly leapt into the outer space, it is clear that the subsequent exploration and research increased our knowledge of the universe substantially. Today, modern space technology has become an essential element in addressing global challenges mankind is confronted with, both in space and on the ground. Space-driven technologies such as global-positioning, telecommunications, and advanced weather forecasting have all stemmed from early satellites. Having more than 1,000 operational satellites in Earth's orbit, these platforms have become invaluable for human development and information they gather is used by all nations of global world in some capacity. As the number of countries interested and capable of going to outer space, currently numbered at more than 60, increases, space is becoming more crowded with manmade objects and more dangerous as a consequence.

The United Kingdom of Great Britain and Northern Ireland (UK) believes that ensuring sustainable space development is an absolute imperative. The UK's position about sustainable space development is very well captured by Richard Blayber, Head of Regulation at the UK Space Agency, when he states, "[t]he United Kingdom's focus remains promoting a safe and more secure space environment through a range of measures including increasing our situational awareness, building our resilience to a range of threats and ensuring our regulatory environment is proportionate and effective".

The United Kingdom fully supports UN Resolution A/68/189 on "Transparency and Confidence-Building Measures in Outer Space Activities" and believes that cooperation and further strengthening of the trust among all public and private sector actors in space is a key ingredient in ensuring sustainable and prosperous space activities. In May 2010, the United Kingdom created a Space Leadership Council, which drew together Government, Industry and Academia, with goal of providing strategic advice to the UK Space Agency. The nation's commitment to outer space activities is very well reflected in Space Innovation and Growth Strategy 2014 – 2030 Plan. The plan lays out a framework for domestic and international strategies needed to generate sustainable growth in space based on cooperation between the government and industry.

The United Kingdom urges consideration and adoption of a plan put forth by the late John Rhinelander to move the international community towards a deweaponized space. The first step, to be accomplished immediately, includes "multilateral agreement to not interfere with peaceful objects in space". The second step, targeting 2018, would "ban orbiting killer weapons, however armed, and…require mitigation of debris in space". The final step would be to, by 2020, produce a "comprehensive" agreement forbidding any sort of attack-capable weapons in space and creating an agency similar to the International Atomic Energy Agency, to verify compliance. Making sure that all activities which take place in space are exclusively peace-oriented has been a norm from the beginning of space exploration. Development and ongoing perfection of ballistic missile defense systems has put this norm in serious jeopardy, hence, it is of utmost importance to directly associate missile defense systems and weaponization of outer space.

The UK remains a world leader in communications, broadband and television services from satellites. But the nation's interest in space goes beyond commercial ventures. As UK space trade industry president Andy Green states, "space...stretches the innovative skills of our best scientists and engineers and it inspires young people to develop the skills to push forward the frontiers of scientific knowledge. Most importantly it offers the promise of helping the human race to solve some of the biggest challenges it will face over the next few decades".

## **II.** The Threat of Nuclear Stockpiles in Turbulent Regions

Since the creation of the United Nations, the global community has had nuclear disarmament as a goal. There are currently an estimated 15,000 nuclear weapons in the world, held by at least nine different countries. Even one-third that amount of weapons has the capacity to release enough radiation to render life impossible on earth. The two largest nuclear powers, the United States and the Russian Federation, currently have over 90 percent of these weapons, with an estimated 1,800 ready to launch at a moment's notice if deemed necessary. The United Kingdom currently operates four submarines each armed with sixteen nuclear missiles, with one submarine always on duty at any given time.

Nuclear weapons held in turbulent regions of the world represent a particularly significant threat. India and Pakistan are both nuclear powers that have a history of conflict with each other. North Korea is attempting to obtain missile technology capable of launching nuclear weapons as far as the United States, and remains in a state of high tensions with its neighbor, South Korea. Each of these regions presents the risk of nuclear war. As such, the UK believes that it is extremely important the international community takes measures to ensure the prevention of nuclear disasters.

The UK supports the international community's efforts to reduce the threat created by nuclear weapons. The UK is one of six nations that recently negotiated an agreement to lift sanctions from Iran if the country would scale down its nuclear material production in an attempt to prevent Iran's obtaining of dangerous nuclear weapons. The UK fully supports Resolution A/69/436/L.1, which establishes the Middle East as an area free of nuclear weapons. The UK also supports Security Council Resolution 1540, which forbids UN member states from giving weapons to non-state actors, and stands by the Security Council in its stance against North Korea's nuclear weapons activities, notably its satellite launch in February 2016 that is believed to have been used to test long range missile technology.

The UK was also among the first countries to sign and ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and has invested over \$5 million in the Preparatory Commission for the CTBT Organization (CTBTO). The UK is a member of the CTBTO and currently operated 14 stations in the International Monitoring System, with 2 more planned. The UK is currently actively considering decommissioning its own nuclear arsenal as a way of moving the world closer to disarmament.

The United Kingdom sees the issue as being two-fold. First, existing nuclear stockpiles must be accounted for and secured. Second, protocols need to be put in place to discourage the spread of nuclear weapons above and beyond what exists in the Nuclear Non-Proliferation Treaty (NPT). One concern, though often downplayed in international discussions, is of an accident occurring at a nuclear weapon storage facility which might lead to chain detonations. The United Kingdom urges Member States to consider a limit to the number of nuclear weapons that can be housed within a certain geographic area, the specifics of which should be left to an agency such as the International Atomic Energy Agency to decide. Limits could also be placed on where nuclear weapons can be stored to keep them away from major population centers that would be damaged by an accidental nuclear detonation.

Sanctions have been used many times in the past as a punishment for member states who do not cooperate with the international community, but their effectiveness is open to debate. The UK would urge the usage of both carrots (trade incentives and foreign aid) along with sticks (sanctions) to encourage countries to abide by international nuclear norms. Finally, the United Kingdom encourages Member States to empower the IAEA to better track existing nuclear weapons in a secure manner This would support transparency of nuclear states as well as supporting the implementation of both above proposals. Only by taking such steps can we continue to progress towards a nuclear-weapon-free world and secure the safety of existing nuclear weapons in turbulent regions.