

Side Event Application at U.N. Summit of the Future Action Days

The signers of this letter respectfully apply to hold a side event during the Summit for the Future, in which the proposal of an 18th SDG focused on Civilian Space Development will be illustrated and discussed, to achieve general consensus and the endorsement of U.N. member states.

The future of terrestrial civilization appears increasingly precarious. There are several concerning trends. The global military expenditure has reached \$2.5 trillion, while the global Space Agencies expenditure is only \$100 billion—a staggering 4% ratio of public money spending on life vs. death. This imbalance reflects a “syndrome of the closed world” where 8 billion humans struggle to survive on a single planet.^{[1][2][3][4]} The environmental and resource crises are clear signs of this unsustainable situation. Some leaders have responded by escalating conflicts—the number of global conflicts has risen from 30 in 2000 to 120 in 2024.

There is a strong interconnection between the social and economic development of all peoples on planet Earth, and wars and conflicts. When people see no escape from a hopeless future, they may turn to violence to compete for scarce resources, in a fratricidal struggle. The alternative to such a gloomy future exists: to kick off civilization expansion into the solar ecosystem and to start using resources outside the boundaries of our mother planet. The incoming cislunar economy is a concrete step on such a roadmap.

The path to sustainable space settlement is paved with daunting challenges, but also exciting opportunities. First, we need to ensure sound support for the incoming cislunar economy, developing industrial products and services in geo-lunar space. This will require consolidated reusable launch vehicles, in-space fuel production, and recovering/reusing orbital debris.

We also need to figure out the best way to establish a permanent human presence—a combination of O'Neill orbital habitats, and working/exploration/research surface outposts—on the Moon and Mars. Protecting human life and health from radiation and providing simulated gravity are crucial. We will also need to create green, ergonomic, psychologically healthy habitats, in which environmental beauty and comfort will be primary requirements.

Artificial intelligence, robotics, and other advanced tools will be essential aids in this endeavor. If we start now, by 2050 we could see a thriving cislunar economy, a growing space infrastructure based on lunar and asteroid mining, space-based energy, and closed-loop life support systems. This could help make resource wars obsolete and bring a new sense of unity and purpose to humanity.

Considering the “Overview Effect”^[5], experienced by astronauts when viewing planet Earth from a distance, we may think of an Overview Effect 2.0, when lunar pioneers will watch planet Earth in the sky from the Moon. A new romanticism might arise, from shared sentiments of brotherhood, sisterhood, and solidarity in a difficult environment. To survive, they will need to help one another, whatever their various Earthly nationalities might be, thus making terrestrial origin a secondary, non-essential aspect of human history.

The International Space Station (ISS) is a clear example of how living together in outer space can foster collaboration among space pioneers from different countries, even when their countries are militarily opposed on Earth.^{[6][7]} The ISS has proven to be an outstanding model for international cooperation, with each partner contributing critical components and capabilities. This mutual collaboration has not only advanced scientific knowledge but also built valuable global partnerships and personal relationships among the astronauts and cosmonauts. The Apollo-Soyuz rendez-vous in orbit was the first international manned space mission, in July 1975. American astronauts and Russian cosmonauts shook hands, achieving a historic milestone, a symbol of détente between the two superpowers during the Cold War^[8]. Twenty years later the joint Space Shuttle - MIR program, also called “Phase One”, allowed the United States to learn from the Russian experiences with long-duration spaceflight, preparing the way for “Phase Two” of the joint project, the construction of the International Space Station (ISS)^[9].

As civilization is on the edge of expanding into the solar ecosystem, vigorous space diplomacy will be increasingly important: the geo-lunar space might be a very much larger field for such a spirit of collaboration.

Both the Artemis Accords and the International Lunar Research Station (ILRS) might be opportunities for fair competition and collaboration, sources of best practices, all essential for the development of a modern space legal system, evolving beyond, and adding to, the 1967 Outer Space Treaty.

Sustainability must be at the core of space development and settlement. We need to learn from past mistakes and design systems fully oriented to circular economy and a zero-waste mentality. The skills and experience gained by the space communities would certainly improve sustainability back on Earth.

We are living in an age of permanent space revolution, in which new countries enter the space arena each month, and they do not need to go through the long way traveled by the forerunners: they can benefit from the previous experience. This space renaissance process must be 100% inclusive—benefiting all on Earth, not just traditional space powers. We need to build capacity and open opportunities for all countries and peoples. Space technologies like communications and Earth Observation already benefit many. The goal is a future where space development uplifts all of humanity, on Earth and beyond.

Space Renaissance International, the National Space Society, and 85 organizations grouped in the Space 18th SDG Coalition^[8] propose adding an 18th SDG, focused on civilian space development, to the U.N. 2030 Agenda. The Space 18th SDG will give space development its deserved status as the key factor of sustainability for future human social and economic development. That will be essential to widen the popular awareness, consensus, and support for civilian space development.

The Space 18th SDG Coalition includes both large and small NGOs, several educational entities, and a number of commercial entities. We believe our coalition represents, in itself, a model of global cooperation, fostered by the vision of Large-Scale Expansion into Space, with different stakeholders from all the countries of planet Earth. SRI recently was granted the status of NGO observer for 3 years at COPUOS, pending approval as a permanent observer at the end of such period. SRI also recently applied to achieve consultative status at ECOSOC. NSS is a permanent NGO observer at COPUOS. Both SRI and NSS are members of the International Astronautical Federation.

Looking forward to your pleasant acceptance of our application,

Sincerely

Adriano V. Autino, SRI, CEO and Founder; Space 18th SDG Coalition, Coordinator

Citations:

[1] <https://www.weforum.org/publications/global-risks-report-2024/in-full/global-risks-2024-at-a-turning-point/>

[2] <https://www.theguardian.com/commentisfree/2023/may/26/future-ai-chilling-humans-threat-civilisation>

[3] https://ec.europa.eu/assets/epsc/pages/espas/ESPAS_Report2019.pdf

[4] <https://www.bbvaopenmind.com/en/articles/technological-wild-cards-existential-risk-and-a-changing-humanity/>

[5] <https://www.space.com/frank-white-overview-effect>

[6] <https://hir.harvard.edu/a-shared-frontier-collaboration-and-competition-in-the-space-domain/>

[7] <https://www.bakerinstitute.org/research/international-cooperation-and-continuing-exploration-space>

[8] <https://spacerenaissance.space/the-space18sdg-proposer-organizations/>