

Treaty Making For Global Exploration



The Montreal Declaration

The 2nd Manfred Lachs International Conference on Global Space Governance, held at McGill University, in Montreal, Canada, on 29-31 May 2014:

Having brought together over 120 experts from 22 countries (space-faring and non-space faring nations) involved in various aspects of space activity and regulation;

Having served as an objective venue for the conduct of international and interdisciplinary deliberations on different aspects and perspectives of global space governance;

Recognizing that the current global space governance system that was created during the 1960s and 1970s has not been comprehensively examined by the international community since its establishment;

Recognizing that the concept of global governance is comprehensive and includes a wide range of codes of conduct, confidence building measures, safety concepts, international institutions, international treaties and other agreements, regulations, procedures and standards;

Noting that numerous developments have occurred in the world in general, and the space sector in particular, with serious implications for current and future space activities and for the sustainable use of space for peaceful purposes for the benefit of all humankind (i.e. the global public interest in outer space),

Believing that the time has come to assess the efficacy of the current regime of global space governance and to propose an appropriate global space governance system that addresses current and emerging concerns;

HEREBY resolves by consensus to:

- call upon civil society, academics, governments, the private sector and other stakeholders to consider establishing a Working Group to prepare for and convene an international conference to deliberate and agree upon recommendations to governments and relevant international organizations aimed at the establishment of a global governance regime for peaceful and sustainable space exploration, use and exploitation for the benefit of all humankind;
- ensure that the proposed international conference is held as soon as possible with global participation by all key stakeholders (i.e., state and non-state actors) including: international intergovernmental organizations; relevant regional organizations; non-governmental organizations; appropriate state ministries (departments) and space agencies; academic institutions; appropriate commercial enterprises; and concerned individuals;
- call upon the McGill University Institute of Air and Space Law to take the lead in initiating, completing and broadly distributing through all forms of media, an international interdisciplinary study that examines drivers of space regulations and standards prior to, and in support of, the proposed international conference, targeting a global audience;
- ensure that the above-mentioned study examines, *inter alia*:
 - changing global economic, political and social conditions and space infrastructure dependence;
 - identification and assessment of all known space threats;
 - space opportunities and the need for sustainable and peaceful use, exploration and exploitation of space for all humankind;
 - safety, technical and operational gaps to be filled; and
 - appropriate space governance standards, regulations, arrangement, agreements and institutions relevant to current and emerging issues of space activities.

Done in Montreal, this 31st day of May 2014.

A Global Space Faring Community

The year 2017 will mark the 50th Anniversary of the 1967 Treaty on the Peaceful Uses of Outer Space.

This formative period in space history has opened the phases for notable features such as the development of the Global Exploration Road Map, large scale international and inter-agency collaboration and the effective usage of earth observation utilities and communications for immediate environmental and climate change issues.

The establishment of UNISPACE IV in 2017 will provide an international venue for open discussion on the growing dimensions of space development.

UN Conferences on the Exploration and Peaceful Uses of Outer Space (UNISPACE)

Three UN conferences have been held in Vienna

UNISPACE I was held in 1968 and UNISPACE II in 1982.

UNISPACE III took the form of a special session of the Committee on The Peaceful Uses of Outer Space (COUPOS) open to all Member States of the United Nations.

UNISPACE IV will access and describe a wide range of topics including:

- Global Space Exploration
- Collaborative venture
- Information age potentials
- Earth Observation
- International cyberspace
- Space based security
- Rules of the road
- An expanded Treaty basis



The US Library of Congress, engagement for a revisionary role

As US space policy moves towards the future phases of the international program, accommodating resources for US congressional review and authorization must be widely obtained.

The placement of a specialized "space development" unit at the Library of Congress will fulfill the formal requisites for US based recommendation, evaluation, participation and engagement.

A library compilation in support of the leading attributes will include features for participation and engagement within comprehensive US communities, stakeholders and parties of interest. These will include fora for agency and inter-agency recommendation, commercial space development, academic, research and development and educational bodies and so on.

Owing to the complexity of the space development paradigm and in light of the import of the UN based international dialog it must be assumed that an up to date US platform of this type would be in position to fully address and fulfill the evolving issues according to US national policy criteria and administrative objective.

A unique platform for Library of Congress specialized services in support of the US space program, may include virtual and on-line features along with web based public outreach programs.

The provision of a US Library of Congress resource base for space development going forward provides a direct opportunity for engagement at many levels and for consolidation of policy orientations and the forward looking thematic.

Features can be extended via the UN body accordingly and within the mandates of the international community and may include items such as formulation for the UNISPACE IV agenda, the Global Exploration Road Map, and the revisionary basis for the 1967 Treaty on the Peaceful Uses of Outer Space.

Global Development

Space based development provides the formative opportunity in coming to terms with the critical issues of our time. While earth observation techniques offer an accurate description of environmental challenges, related informational aspects will also provide potential for large scale problem solving effect.

Data based features for comprehensive terrestrial mapping and planning will enhance industrial and agricultural outlooks, enabling the fast development of infrastructures and essential services across the world.

As global economic development continues to runs parallel to environmental assurance, the availability of meta-data will become a significant contributing factor.

Data based applications will be undertaken by governmental, inter-governmental and commercial providers using various approaches, in particular the role of the UN development agencies will be significant.

For optimal outlooks in fields such as climate change, natural resources, manufacturing, health care, food production and public education, collaborative engagement through the early revision and recommendation of the 1967 Treaty basis will yield direct results.

Global data can be obtained, verified and distributed through the related UN mandates and working basis. A pervasive global development platform of this type can act for functionality in many areas and provide an extensive availability for the subscription, contribution and participation of communities and Nation States around the world.

The next 50 years will mark our transition into planetary sustainability, for this purpose, the comprehensive application of earth observation techniques and related global communications and Big data perspectives is well supported by the unfolding space development paradigm.

Space based security

The rapid accumulation of space debris poses an ongoing threat to space based assets. While techniques for debris mitigation and removal continue to be developed, additional topics within space based security structures will be directly addressed at home and by the international community. As modernizations within national security profiles are undertaken, various space based security features and aspects will offer clear proposition for collaborative engagement and mutual assurance. These potentials will bring the opportunity for bi-lateral and international engagement with particular attention to international cyber security, collaborative deployment for crisis conditions, and the non-proliferation factors.

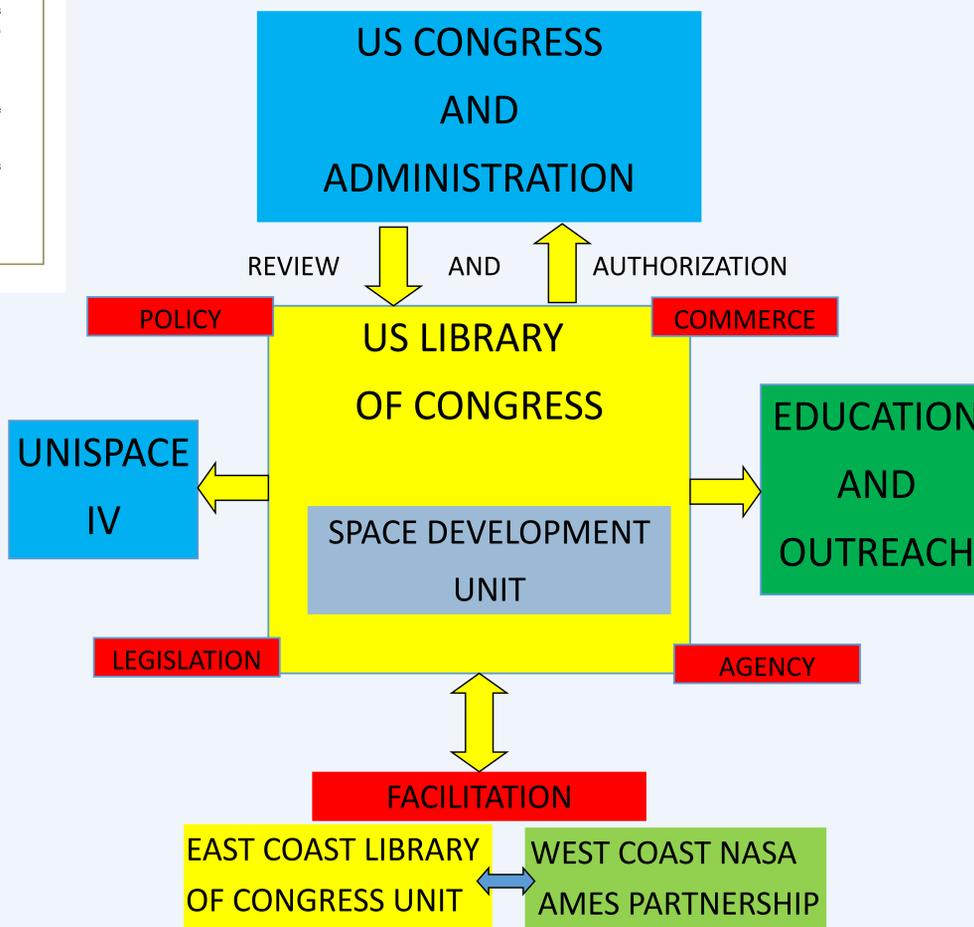
The techniques of space based security are well established and comprise a leading role within national and international portfolios across the world.

The collaborative devolution of space based security infrastructures into global security network capacities through the UN basis may offer additional stability during unique transitional phases.

Although national autonomies may not be compromised, appreciation of supplemental security facets through collaborative international alignments, in particular for data based interchange, can help ensure stability and enable mitigation of threat through untoward military escalations or incident

The momentum towards a secure and peaceful global environment requires close attention to the collaborative features of space based security assets, in this sense the 1967 Treaty revisionary basis offers clear opportunity for the way forward.

The Global Exploration paradigm will obtain many original space based infrastructures and capacities over the next 50 years. Such a working platform will include provisions for the research and development of sensitive technologies such as space based solar power, laser based transmissions and nuclear and fusion vehicles. These types of specialized contingencies will also be considered within space security profiles at both originating and international levels.



The east/west coast corridor

Owing to the highly distributed nature of the space development community and because of the need to consolidate US engagement within centralized focus, the propositions for Library of Congress resource should be mutually supported by the creation of a direct east/west coast alliance.

As future phases will comprise for both exploration and informational networks along with advanced global communications structures, appropriate partnerships through NASA Ames and the Silicon Valley technological communities can be suitably defined. The policy basis lends itself to referendum in several ways, as technological export and economic development also providing worthwhile substantiation.

The east/west coast corridor will link many aspects into developmental alignment, engaging legislative values to accommodate further productivity through assessment of objectives and ongoing enterprise conditions.

The future manifests of the inter-agency space program will represent a democratic outlook and a creative potential. These universal values will provide for affective adaptations across the world. National dialog in the US can be readily achieved through an innovative model which describes and designates the many attributes of space development practice and the projected results.

The time scales are several, 50 years have passed since the space age was inaugurated, the 50 years ahead will define our eventuality for the long duration. Working together for this world and the worlds beyond, America and the international community stands poised to usher in the future phases.

US engagement and leadership is essential, rapid process towards UNISPACE IV and the 1967 revisionary basis can be readily achieved through accurate utilization of a Library of Congress resource, and the establishment of east/west coast corridor thereby creating accommodation for multiple interests and notable collations.

The Global Exploration Road Map

The dramatic outlines of the global space exploration platform accurately detail the arena of research and development within key objectives such the preparation of next generation space based infrastructures and an eventual lunar and Martian manned settlement.

Global space exploration offers and provides many significant benefits, acting as catalyst, creating pooled resources and generating expedient pathways. Perhaps even more significantly, such remarkable venture will bring the peoples of the world together for mutual enterprise and the world of the future.

It may be considered that global space exploration represents a unique and evolutionary engagement. While inclusive and underlying aspects of global space development have capacity to address both terrestrial conditions and background international relations, the forums for global space development may be considered as wide scale resources with effect in many pertinent arenas.

The 1967 treaty basis provides genuine prospects for extensive and long term international engagements. Forthcoming space exploration profiles are ambitious but realistic, given an exponential rate of technological development; it is probable that a manned lunar settlement could be achieved in 50 years along with an initial Martian landing.

Such historic global venture represents a clear leap towards the future, this impetus will accommodate many responsive and collaborative ventures, with leading issue for science, education and economic growth. Global space exploration is an important aspect of international development in general, the comprehensive features of the ensuing global prospectus will include leading essentials towards climate change mitigation and the related problem solving contingencies, demonstrating an outlook towards global security aspects, and proposing for global development attributes through mass communications and the informational basis.

Sensitive technologies

Designs for new generation space based infrastructure will focus upon incremental deployment, interoperability and the provisioning of in-situ resources. The availability of cis-lunar capacities will support a capable lunar and Martian program, including for advanced transportation manifests.

These profiles will include the research and development of space based solar and laser energy sources, conferring a number of usages including for beamed microwave utilities and communications networks, with additional prospects for terrestrial supply.

New types of vehicles for lunar and Martian transportation may include nuclear and fusion based engines, and various integrated styles will be undertaken. The development of innovative space based models will comprise a leading contribution for research and development in key areas of nuclear, fusion and laser development, together with the associated functions, including for near earth asteroid deflection shield

Sensitive technologies are effective elements which propose and require the genuine consideration and appreciation of the international community. While the policy basis will determine the areas of engagement for technological attributes, it must also be affirmed that space development policy is effective for not only a motivated exploration program but also for fast track global venture. The functionality and features of a future world will largely depend upon space based information flows, data based structures and analytical applications. Both governmental and commercial interests across the world will see a greatly expanded communications basis, enabling all the fields of human endeavor.

It is the responsibility of the space faring community to ensure that sensitive technologies of all types are not misused or appropriated against the universal goal of human betterment. We can certainly say that the past 50 years have ushered in a historic watershed, as the space age become the information age and planetary sustainability becomes the task in hand.