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# Access to and Equity in Aerospace Transportation

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# Introduction

- Not beyond reach – access and equity to aerospace transportation
- Aerospace transportation implies seamless flight of a vehicle through airspace and outer space.
- ‘Equity’ has two aspects: economic affordability & freedom to access (use)
- For the economic viability of aerospace transportation, maximum access (use) to this newest means of transportation will be indispensable.
- Maximum access, if achieved, will enhance economic affordability.
- Freedom to access (use), if ensured on a non-discriminatory and global basis, will stimulate world-wide demand for aerospace transportation services,
- Consequently, there will be maximum equity in aerospace transportation

# Introduction

- **How to ensure freedom of access (use) to aerospace transportation?**
- **The first step should be to initiate global understanding of the freedom of access (use) and the importance of global aerospace transportation**
- **This should be done with the adoption of an international declaration of basic, broad and high-level voluntary principles, through an appropriate intergovernmental organization; (e.g. ICAO Assembly or UN General Assembly)**
- **No need to reinvent the wheel for drafting the contents of such a declaration**
- **One may borrow and adapt some principles from universally acknowledged beliefs that are the foundations for international activities relating to outer space, air transportation, telecommunication, trade, etc.**



## Introduction

- **The principles should relate to:**
- **Universal access**
- **Highest degree of safety and security**
- **Uniformity of standards**
- **International cooperation**
- **Opportunity for participation**
- **Single international organization**
- **Etc. etc.**

# Recommendation

- *Declaration of Principles Relating to Global Aerospace Transportation*
- ICAO Assembly/UN General Assembly
- *Inspired* by the prospects for the future development of global aerospace transportation giving rise to unprecedented economic, social and scientific benefits to all humankind,
- *Recalling* the Convention on International Civil Aviation, signed on 7 December 1944, and the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, signed on 27 January 1967,

## Recommendation

- ***Recognizing*** that every State has complete and exclusive sovereignty over the airspace above its territory, and the sovereign right to regulate the aerospace transportation conducted in its airspace and by its nationals,
- ***Recognizing*** that outer space shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law,
- ***Recognizing*** that the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development,

## Recommendation

- ***Convinced*** of the necessity and the significance of strengthening international cooperation in order to facilitate in a timely manner the introduction of global aerospace transportation services and the development of appropriate associated infrastructure for the benefit and in the interests of all countries and people,
- ***Adopts*** the voluntary Principles Relating to Global Aerospace Transportation as set forth below:
- **Principle I:**
- **States should co-operate so as to promote the availability of aerospace transportation services to all countries and people of the world as soon as is feasible and practicable on a global and non-discriminatory basis.**

# Recommendation

- **Principle II:**
- **Global aerospace transportation services should be established on the basis of highest possible degree of safety, efficiency, reliability and security, and take into careful consideration the safety of existing aviation transportation and other uses of air space and outer space.**
- **Principle III:**
- **In order to secure the highest practicable degree of uniformity in standards and procedures, all international standards and recommended practices and procedures relating to global aerospace transportation services should be adopted by the International Civil Aviation Organisation, after active consultation with all stakeholders.**



# Recommendation

- **Principle IV:**
- **Free and fair world-wide competition, in accordance with fundamental principles governing international trade and commerce, should be fostered in relation to all aspects of global aerospace transportation services.**
  
- **Principle V:**
- **All interested intergovernmental and non-governmental organizations, national policy makers, regulatory authorities, aerospace operators, service providers and manufacturers should make every possible effort to follow these voluntary principles with a view to facilitating coordinated solutions and the full implementation of a safe and efficient global aerospace transportation industry as soon as possible.**

## Concluding remarks

- **It is hoped that this suggested first step may go a long way in bringing the required access to and equity in aerospace transportation and in its speedy availability,**
- **The precise wording of the suggested Declaration is not important, as it may be modified to achieve the suggested approach, objective, ideas and the process,**
- **As the need arises, eventually the principles of the Declaration should be further elaborated, into more detailed binding and non-binding governance principles, rules, procedures, etc.**
- **Aerospace transportation will carry passengers, cargo, mail, scientific experiments and will provide services for launching spacecraft, etc. Their specific requirements would need to be accommodated as well.**

## Concluding remarks

Finally, as suggested by Dr. Joseph Pelton, the international community (through consultations among the UN, ICAO, ITU, UNEP, WMO, WHO and all other stakeholders) would need to:

- a. Consider a broader definition of ‘aerospace transportation’ in terms of new applications that are emerging especially in the Protozone or sub space.
- b. Recognize that uses of the Protozone would need to be considered as different from traditional thoughts about the use and control of traditional concepts of ‘national airspace’.
- c. Recognize that the new applications raise interdisciplinary regulatory considerations that involve: (i) the environment; (ii) frequency regulation and coordination; (iii) health standards and perhaps other areas.
- d. Recognise that many of these considerations are of particular concerns and interests of countries that are not necessarily space powers and countries that may have a greater interest in these new applications.



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# THANK YOU

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