



National Regulatory Framework for Outer Space Activities in Pakistan

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Outline

- National Space Programme and its Elements
- National Space Agency - SUPARCO
- National Command Authority (NCA)
- National Space Policy
- Pakistan Telecommunication (Re-organization) Act, 1996
- National Regulatory Framework
- Ongoing efforts
- Conclusion

National Space Programme and its Elements



- The National Space Programme of Pakistan began in 1961 for scientific research, socio-economic development and national security
- The elements of the Programme are:
 - Promotion of the peaceful uses and applications of space for socio-economic development and national security
 - Non-militarisation and -weaponisation of space
 - Fulfillment of international legal obligations
 - International cooperation

National Space Agency (SUPARCO)



- Established as a wing of Pakistan Atomic Energy Commission (PAEC) in 1961
- In 1966, Pakistan Space Research & Upper Atmosphere Research Committee was created
- Government of Pakistan established Pakistan Space & Upper Research COMMISSION (SUPARCO) vide Ordinance No. XX of 1981
- SUPARCO *Amendment* Ordinance (No. CXXVII of 2002) brought SUPARCO under the control of National Command Authority (NCA)

National Command Authority (NCA)



- National Command Authority was created under the provisions of the NCA Act (No. 5 of 2010)
 - Establishes administrative control of NCA over strategic organisations, including SUPARCO, through its Development Control Committee (DCC)
 - Headed by the Prime Minister of Pakistan; members include Federal Ministers for Defence, Foreign Affairs, Finance and Interior

National Space Policy



- Draft National Space Policy has been prepared and submitted for approval by Government of Pakistan
- The main elements of the Policy are as follows:
 - Direction and supervision of space activities through statutory framework
 - Implementation and coordination of space activities carried out by natural and juridical persons from and within the territorial jurisdiction of Pakistan

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- Drafting of legal and regulatory regime covering designing, manufacturing, procurement of space technologies, issuance of satellite operator’s license and maintaining national registry of space objects
- International and regional cooperation
- Formulation of comprehensive “Guidelines for Space Sector” covering the entire spectrum of peaceful uses of outer space
- Development of civil use of space technology and applications in collaboration with civil space sector

Pakistan Telecommunication (Re-organization) Act, 1996



- Creation of the Pakistan Telecommunication Authority (PTA) to regulate the telecommunication sector
- Creation of Frequency Allocation Board (FAB) to allocate and assign frequency spectrum to Government of Pakistan, telecommunication service providers, broadcasting operators and private users of wireless systems (*FAB replaced the Pakistan Wireless Board established under The Wireless Telegraphy Act, 1933*)
- Transfer of telecommunication services to the private sector

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- Creation of National Telecommunication Corporation (NTC) to provide telecommunication services to armed forces, defence projects, Federal government, Provincial governments and other government institutions
- The Act also establishes the Pakistan Telecommunication Company Limited (PTCL) under the Companies Ordinance, 1984, to provide basic telephone services

National Regulatory Framework



- The national regulatory framework for outer space activities comprises of the following:
 - a. Ratification of, and accession to, UN Space Treaties
 - b. Other space-related Treaties and Agreements
 - c. UN Principles and Resolutions
 - d. Space Debris Mitigation Guidelines



a. Ratification of, and accession to, UN Space Treaties

- Pakistan is a State Party to the following UN Space Treaties:
 - Outer Space Treaty, 1967
 - Rescue Agreement, 1968
 - Liability Convention, 1972
 - Registration Convention, 1975
 - Moon Agreement, 1979

Cont'd...



- **Registration Convention**

- Furnished registration information of its space objects under Article IV of the Convention on Registration of Objects Launched into Outer Space to the Secretary General of the United Nations

<http://www.oosa.unvienna.org/pdf/reports/regdocs/ser642E.pdf>

b. Other space-related Treaties and Agreements



- Pakistan is also State Party to following space-related treaties and agreements:
 - Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water, 1963
 - Agreement Relating to the International Telecommunications Satellite Organization (ITSO), 1971
 - Convention on the International Mobile Satellite Organization, 1976
 - International Telecommunication Union Constitution and Convention, 1992



c. UN Principles and Resolutions

- Pakistan recognises the value of UN sets of principles and resolutions towards regulating outer space activities, namely:
 - The Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (General Assembly resolution 1962 (XVIII) of 13 December 1963)
 - The Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (resolution 37/92 of 10 December 1982)



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- The Principles Relating to Remote Sensing of the Earth from Outer Space (resolution 41/65 of 3 December 1986)
- The Principles Relevant to the Use of Nuclear Power Sources in Outer Space (resolution 47/68 of 14 December 1992)
- The Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (resolution 51/122 of 13 December 1996)

d. Space Debris Mitigation Guidelines



- Pakistan is incorporating the existing space debris mitigation instruments into its internal processes, to the extent of its technological and financial resources
 - However, it believes that space debris is the result of past operations of space faring nations and that they owe a responsibility and obligation to share the technology and additional cost incurred in design, development and performance of collision-avoidance maneuvers



Ongoing efforts

- Understanding of space law, policy and regulatory issues at the national and international levels
 - Engagement with decision-makers
 - Consultations with stakeholders
 - Harmonisation of activities of terrestrial and satellite operators through new draft National Telecommunication Policy



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- Support from academia/research institutions
 - Interaction with Research Society of International Law (RSIL)
 - Organising panel discussion at ICS-2014; 12-14 Nov 2014; Islamabad, Pakistan
- Understanding and capacity-building in space law, policy and regulatory regime through participation in international forums and events
 - UNCOPUOS
 - Space law seminars and workshops

Draft National Telecommunication Policy



- The National Telecommunication Policy is being drafted by Ministry of Information Technology (MoIT), Government of Pakistan
 - Process of review and integration of telecommunication policies
 - Hiring of international consultants
 - Stakeholders' conference
 - Based on feedback, consultants prepared a draft and circulated to stakeholders
 - Based on comments, first draft of the policy was disseminated to stakeholders for review
 - Stakeholders' Workshop was organised on 14-15 Oct 2014



Conclusion

- Pakistan does not have space legislation and regulatory framework in place AS SUCH
- SUPARCO lacks constitutional and legal mandate to ‘regulate’ and ‘control’ national space activities
- Once approved, National Space Policy will pave the way for space legislation at both federal and provincial levels
- Ongoing engagement with decision-makers and stakeholders

Thank you for your attention!