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An International Regulatory Perspective on Earth Observation Data and China's Practice

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UNITED NATIONS/CHINA/APSCO WORKSHOP ON SPACE LAW, 2014, Beijing

Overview

- I. 1986 Remote Sensing principles
  - permissibility, access, dissemination, use
  - national law-making, policy-making and international cooperation, (practical cooperation agreements)
  - "national security", "public interest" and "commercial interests"
  - intellectual property issues, burden of proof on international law and general principles of international law
- II. Practice, Regulatory Framework and its Development as to China's EO Data

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I. 1986 Remote Sensing Principles and analysis of key issues

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research resourses

- Bin Cheng, *Studies in International Law*, Clarendon Press Oxford, 1997.
- Joanne Irene Gabrynowicz, *The UN Principles Relating to Remote Sensing of the Earth from Outer Space and Soft Law*, contained in *SOFT LAW IN OUTER SPACE*, edited by Irmgard Marboe, BOHLAU VERLAG, 2012.

I. 1986 Remote Sensing Principles

- I.I lex lata
  - law as it is
- I.II lex ferenda
  - law as it ought to be

1. 1986 Remote Sensing Principle
1.1 Lex lata

- Principles relating to Remote Sensing of the Earth from Outer Space (Resolution 41/65 of 3 December 1986)
- a preliminary and general arrangement on rights and obligations in remote sensing activities
- forming a preliminary framework for the international management of remote sensing data
- 15 principles ; three categories

1. 1986 Remote Sensing Principle
1.1 Lex lata

- a. the reiteration of existing space law and the principles of international law
  - the principle of "for the benefit and in the interests of all countries" (Article 2)
  - the principle of observing the law (Article 3)
  - sovereignty respect (Article 4)
  - the obligations of registration and notification (Article 9)
  - regulatory obligation and state responsibility (Article 14)
  - the principle of peaceful settlement of disputes (Article 15) solutions.

1. 1986 Remote Sensing Principle
1.1 Lex lata

- b. provisions of principles and forms of international cooperation.
  - cooperation on promotion of remote sensing activities (Article 5)
  - cooperation on facility construction of remote sensing facilities (Article 6)
  - technical assistance (Article 7)
  - promotion obligation of UN (Article 8)
  - global environmental protection and disaster prevention (Article 10 and 11)
  - cooperation and consultation on remote sensing projects (Article 13)

1. 1986 Remote Sensing Principle
1.1 Lex lata

- c. provisions of data access, dissemination and transfer
  - the duty of care of States carrying out remote sensing activities (Article 4)
  - the obligation of providing information of sensing State (Article 9)
  - the right to data access at a reasonable expense without discrimination of the sensed State (Article 12)

I. 1986 Remote Sensing Principle
I.IILex ferenda

- Key legal issues in remote sensing activities
  - permissibility
  - access
  - dissemination
  - use

I. 1986 Remote Sensing Principle
I.IILex ferenda

- i. permissibility
  - it is permitted to gather data of anywhere on Earth from outer space, either from the inspective of international law or practice.
  - penetrative data gathering and peripheral data gathering.

I. 1986 Remote Sensing Principle
I.IILex ferenda

- ii. access
  - Art. 12 As soon as the primary data and the processed data concerning the territory under its jurisdiction are produced, the sensed State shall have access to them on a non-discriminatory basis and on reasonable cost terms. The sensed State shall also have access to the available analysed information concerning the territory under its jurisdiction in the possession of any State participating in remote sensing activities on the same basis and terms, taking particularly into account the needs and interests of the developing countries.

I. 1986 Remote Sensing Principle
I.IILex ferenda

- ii. access
  - right to access V.S. property rights and intellectual property rights
  - "analyzed information"
    - right to access V.S. intellectual property rights (third party)
  - "raw data" and "processed data"
    - right to access V.S. private ownership (private entities)
- **suggestions**
  - by contract
  - national laws and policies

I. 1986 Remote Sensing Principle
I.IILex ferenda

- ii. access
- **suggestions (governmental satellites)**
- a. rationale
  - public service
    - sensed state: right of access
    - cost expenses
  - commercial purposes
    - the owner of intellectual property rights: *right to refuse*
    - market price

I. 1986 Remote Sensing Principle
I.IILex ferenda

- ii. access
- **suggestions (governmental satellites)**
- b. approach
  - international: by contract
    - the best solution is to clarify rights and obligations in agreements between subjects of remote sensing activities
    - The right to access of the sensed State can only be guaranteed through agreements
  - domestic: national law and policy making

I. 1986 Remote Sensing Principle
I.IILex ferenda

- iii. dissemination and use
- a. Provision in Remote Sensing Principle
  - the right of the sensed State to access of data (Art. 12)
  - the principle of legitimate rights of the sensed Stated not being damaged (Art. 4)
  - the operation of remote sensing space systems, primary data collection and storage stations, and activities in processing, interpreting and disseminating the processed data (Art.1)

I. 1986 Remote Sensing Principle
I.IILex ferenda

- iii. dissemination and use
- b. Reasons for limitation of dissemination and use(national security)
  - military use of satellite remote sensing
    - no limitation?
  - remote sensing for Earth's natural resources and environment
    - limitation: the principle of legitimate rights of the sensed Stated not being damaged (Art. 4)

I. 1986 Remote Sensing Principle
I.IILex ferenda

- iii. dissemination and use
- c. Burden of proof
  - Burden of proof borne by claimant
    - 1872, The Queen Case; 1923 Parker case
  - "proof at efficiency"

I. 1986 Remote Sensing Principle
I.IILex ferenda

- iii. dissemination and use
- d. Regulations in international law concerning limitation of dissemination and use of data
  - good neighborhoods (Article 74 of UN Charter)
  - good faith
- concerns and challenge
  - damage-control and benefit mechanism.

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II. Practice, Regulatory Framework and its Development as to China's EO Data

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I. Practice, Regulatory Framework and Development of China's EO Data

II.1Practice

- i. 2011 Contract between China Center for Resources Satellite Data and Application -APSCO Data Sharing Service Platform
  - Project research data has been provided for Pakistan and Thailand
  - Turkey earthquake in Oct. 2011
  - Thailand floods in Sep. 2013
  - Peru earthquake in Sep. 2013
  - Pakistan earthquake in Sep. 2013
  - Chile earthquake in Apr. 2014

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I. Practice, Regulatory Framework and Development of China's EO Data

II.1Practice

- ii. China-Brazil earth resources satellite cooperation (CBERS-01/02/02B)
  - MOU on 16 July, 2014
    - purpose
    - Areas of Cooperation
    - Principles of Cooperation
    - Contents of Cooperation
    - Implementing Agency
    - Intellectual Property

I. Practice, Regulatory Framework and Development of China's EO Data

II.II Regulatory Framework

- i. Policies relating to assurance and development of remote sensing industry
  - White paper (2000, 2006, 2011)
  - CNSA: Some suggestions concerning promoting the development of satellite application industry

I. Practice, Regulatory Framework and Development of China's EO Data

II.II Regulatory Framework

- ii. Rules governing classification of data and customers, and data distribution and use
  - (1)Regulation of distribution and use of HY-1B and HY-2 satellites data products to overseas customers (State Oceanic Administration)
  - (2)Regulation of the distribution of data products of environment and disaster monitoring and warning satellites (Ministry of Environmental Protection)
  - (3)Regulation of Resource-3 satellite data management (Trial Implementation)

I. Practice, Regulatory Framework and Development of China's EO Data

II.II Regulatory Framework

- ii. Rules governing classification of data and customers, and data distribution and use
  - (4)Interim procedures relating to land and resources data management
  - (5)Regulation of the sharing of meteorological data
  - (6)Ordinance of management of surveying and mapping intellectual results
  - (7) Regulation of public use of remote sensing images (trial implementation)
  - (8)Measures of COSTIND on Administration of National Data concerning CBERS-01/02/02B

I. Practice, Regulatory Framework and Development of China's EO Data

II.III Development

- ii. on policy-making level
  - establish mechanism for data distribution and service, to establish national data center, provincial level data and application center
  - develop policy direction of spatial information service industry
  - promote space information international cooperation and commercial service

I. Practice, Regulatory Framework and Development of China's EO Data

II.III Development

- i. on law-making level
  - departmental documents, statutes, administrative ordinances
  - National Space Law (Space Activity Act)
    - principle of industry promote
    - principle of maximization of commercial interests
    - principle of exception of national security
    - principle of coordination between national security related activities and the civil acitivities
    - principle of classification
    - for the benefit of all countries (data opening)

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any comment or question is welcome

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