### Legal Aspects of Cooperation for Space Monitoring of Climate Change and Sustainable Development

# "Climate change is the biggest science issue in the world"

(NewScientist, 01/03/2008)

### New issue in Space Law

Cooperation for Space Monitoring of Climate Change and Sustainable Development is a new specific issue in International Space Law.

And a very pressing one.

### **Space monitoring**

Space monitoring, in that case, is based in a space infrastructure, integrated by Earth observation, telecommunications and navigations systems.

### Space monitoring: complex

Space monitoring of climate change and sustainable development is a complex of equipments and capacities intended to study regularly these two major contemporary problems.

### Space monitoring: legal view

Space monitoring or satellite monitoring are not legal concepts yet.

They do not appear in the 1986 UN Principles Relating to Remote Sensing of the Earth from Outer Space.

(GA Resolution 41/65)

# Space monitoring = RS activity

Space monitoring is indeed
a remote sensing activity.
Therefore, space monitoring of
climate change and sustainable development
should be conducted according
to the Remote Sensing Principles.

## Space monitoring: access to data

And, concerning RS Principle XII, we can accept that all sensed States should have open access to all data on their territories and relating to climate change and sustainable development as soon as the data is produced.

### Fundamental public interest (I)

### Why should access be open? Four reasons at least:

1) It is fundamental for public interest, as the Convention on Climate Change affirms that "the change in the Earth climate and its adverse effects are a common concern of humankind."

#### All countries need access

2) Furthermore, according to the Convention on Climate Change, "all countries, especially developing countries, need access required to achieve sustainable social and economic development."

# For present and future generations

3) All the Convention on Climate Change was created "for the benefit of present and future generations of humankind."

# Implications for peace and security

4) In April 2007, the UN Security Council recognised the threat that the aggregate impacts of climate change might cause, with not only serious environmental, social and economic consequences, but also implications for peace and security.

### Conditio sino qua non

In brief, space monitoring of climate change is essential.

### Space monitoring in another words

The Convention on Climate Change considers satellites as a major tool for global climate observations, but – like RS Principles – it also does not use the term "space monitoring." It just refers to "systematic observation and development of data archives."

### **Space monitoring: synonyms**

The Convention on Climate Change also refers to "data collection and systematic observations."

### Kyoto Protocol, in force since 2005

The 1997 Kyoto Protocol to the Convention on Climate Change – on emission limitation and reduction commitments – similarly uses the expression "systematic observation and development of data archives."

### Towards a low-carbon society

Space monitoring is one of the major tools in all systems to be developed and deployed for carbon capture, storage and sequestration (CCS), which are fundamental for the Earth's global sustainability objectives.

# Cooperation on space monitoring

The Convention on Climate Change considers that international cooperation is indispensable for the achievement of its purposes.

It includes cooperation for space monitoring.

### Commitments to cooperate

Article 4 of the Convention on Climate Change establishes "Commitments" to cooperate # in systematic and development of data archives;

# in full, open and prompt exchange of scientific, technological, technical and other information; # in education and training people.

# Cooperation in Kyoto Protocol (I)

**Article 10 of the Kyoto Protocol** says that Parties shall cooperate # in taking practical steps "to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, knowhow, practices and processes pertinent to climate change, in particular to developing countries."

# Cooperation in Kyoto Protocol (II)

Article 10 of the Kyoto Protocol
also provides that Parties shall
# "Cooperate in scientific and technical
research and promote the maintenance and
the development of systematic observations
systems and development of data archives."

# Cooperation in Kyoto Protocol (III)

In addition, persuant to Article 10 of the Kyoto Protocol, Parties shall # "Cooperate in and promote at international level (...) the development and implementation of education and training programs, including the strengthening of national capacity building..."

# Comparing to 1996 Declaration (I)

The concept of cooperation in the Convention on Climate Change and the Kyoto Protocol can be considered as a step ahead of the 1996 Declaration on International Cooperation in the Exploration and Use of Outer Space.

# Comparing to 1996 Declaration (II)

The Convention on Climate Change and the Kyoto Protocol define the fields and the actions for which cooperation should take place.

And they consider cooperation as a stronger and indispensable commitment.

• We need a definition of "space monitoring of climate change and sustainable development," in order to give to this term the legal certainty and consistency required for an effective application, and to differenciate it from the other kinds of space monitoring activities;

 We need to define the different terms which are currently used in the wide field of Earth Observation activities.

In view of the complexity underlying, the "Legal Aspects of Cooperation for Space Monitoring of Climate Change and Sustainable Development," the topic should be discussed in the COPUOS Legal Subcommittee as a three-year work plan.

To meet the challenges of climate change and sustainable development in the present world we need mega efforts and creativity in the international and national space legal fields as well.

## The high importance of Space Law

Space Law, governing all space activities, can, must, and should defend and preserve the Planet Earth in the first place.

But it necessarily requires cooperation, cooperation, and even more cooperation, than ever before.

Thank you very much for your kind attention.