INTERNATIONAL INSTITUTE OF SPACE LAW

OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION

INSTITUT INTERNATIONAL DE DROIT SPATIAL

DE LA FEDERATION ASTRONAUTIQUE INTERNATIONALE

3-5, RUE MARIO NIKIS 75015 PARIS - FRANCE e-mail jtmasson@cyberway.com.sg Tél. 33-1-45.67.42.60 Telefax 33-1-42.73.21.20 Website: http://www.IAFASTRO.COM

10th Manfred Lachs Space Law Moot Court Competition 2001*

The Case Concerning Access To ESI-1 Data

Soliscalor v. Cornucopia

STATEMENT OF FACTS

- 1. Cornucopia is a rich Western state with a liberal economic system, and one of the strongest economic powers on the globe. For decades it has run its own space programme, encompassing the full range from scientific and exploratory activities to such commercial activities as satellite launching and satellite communications. For example, its space-borne remote sensing system SatView, consisting of four satellites in polar orbits with optical sensors capable of 4m (monochromatic)/10m (panchromatic) resolution operations, has been operated by the Cornucopian National Space Agency (CNSA) very successfully since 1986. The CNSA is a public entity, under the ultimate control of the President of Cornucopia and his Space Council involving a number of Ministers serving his Government.
- 2. The SatView system provides unenhanced data of the whole globe. These data are provided for free to the Cornucopian Government as well as to scientific users with Cornucopian nationality, as determined by the CNSA. Non-scientific users from Cornucopia, as well as any user not of Cornucopian nationality are entitled to obtain unenhanced data at the "cost of fulfilling user request". This formula resulted in prices ranging from 150 Cornucopian dollars in 1986 to 250 Cornucopian dollars in 1999 per scene of 40 x 120 km. Enhanced data were made available to customers by the CNSA at standard prices ranging from 2,000 (1986) to 3,000 (1999) Cornucopian dollars per 40 x 120 km scene. In addition, various considerable discounts were available for large data sets or frequent customers.
- 3. From the outset, the Cornucopian Government had reserved its right to prohibit the sales of any particular data sets either regarding a specific area or to a specific state and its entities, in case such sales would "be prejudicial to the security interests of Cornucopia". This was done by means of Governmental Decree 97 of 1985. Decree 97 also referred to Article 7 of the Constitution of Cornucopia, stating that "international law binding upon the State of Cornucopia shall be considered as the law of the land, and to the extent applicable supersedes any Cornucopian legislation or other legal action not in conformity with it". Throughout the

_

^{*} Copyright ©2000, International Institute of Space Law. All rights reserved.

years, some 49 foreign Governments or their agencies, in addition to 127 private institutions and commercial entities, purchased SatView data from the CNSA. With one exception, to be dealt with in detail further below (see para. 5), none of them had ever protested against the data distribution policy of the CNSA outlined above, which had been made widely available.

- 4. Soliscalor is a large equatorial state, a major part of which consists of the infamous Nogobi desert. Consequently, it is a rather poor state, depending for its survival upon agricultural products grown in the coastal regions, as well as a few minerals detracted from openair mines in the Nogobi. The state is ruled by a powerful authoritarian regime based on a one-party system, often blaming especially the state of Cornucopia for "neo-imperialist behaviour" when in economic trouble. Such actions however never went beyond such propagandistic talk, and usually led to reactions from Cornucopia in a similar vein.
- 5. For a long time, there had been indications that the Nogobi desert might contain much more valuable deposits of minerals and oil than currently known. Until the latest exchange of unfriendly propaganda in the summer of 1996, the Soliscalori Government had from time to time acquired data on Nogobi in an effort to substantiate such suspicions to no avail. It did so whilst, as the sole exception referred to above (see para. 3), protesting against the applicable data dissemination policy. In particular, the Soliscalori Government took the position that this "discriminatory behaviour of CNSA in requiring higher prices for data regarding Soliscalori territory from non-Cornucopian entities than from Cornucopian entities was especially loathsome since Soliscalor, as a sovereign state, should have exclusive rights of access to any data regarding its national territory".
- 6. The exchange of unfriendly propaganda resulted inter alia in Soliscalor becoming the first and so far only state to be blacklisted under Cornucopia's Governmental Decree 97. This drove the Government of Soliscalor, in close conjunction with its military establishment and without seeking any help from outside, to try to develop its own remote sensing satellite and launch it into an orbit capable of surveying the Nogobi. After the military had claimed to have succeeded in upgrading military rockets to the standard necessary for launching a satellite in the desired orbit, three actual attempts were made with home-made satellites. On the first two occasions, however, the launch vehicle exploded on the launch platform; the third time (in May 1999) the satellite the Solarstar 3 was delivered into outer space, but in a completely useless orbit. The Solarstar 3 was claimed to have a 3m (monochromatic)/8m (panchromatic) resolution. Thereafter, Soliscalor suspended its space programme for lack of funding.
- 7. In June 1999, the CNSA announced at a press conference that a major break-through in its engineering laboratories had resulted in development of Very High Resolution (VHR) satellite sensors with the capacity of providing images of 0.2m monochromatic/1.5m panchromatic resolution. Also, the CNSA announced its decision through Decree 161 of 1999 to offer this technology to three major aerospace companies, for the purpose of commercialising it, in view of the perceived potentiality of a mass-market arising for such VHR-products. All three had been crucially involved in the research program. The companies concerned Ewing Space Industries, Stockbeat Space and Harley Harrietta Satellite Applications, all of them incorporated in Cornucopia and majority-owned by Cornucopian nationals had already prepared plans for building, launching and operating their own satellites with the new technology on a commercial basis. By means of Decree 161 they were now given the formal approval to go ahead with their plans.
- 8. Ewing Space Industries was the first and so far the only one to come up with a substantive product. At a press conference early December 1999, it announced that it had

teamed up with other industries to build the ESI-1, launch it into a polar orbit during 2000, and start offering enhanced VHR-data soon thereafter. Under the Cornucopian Space Act of 1995 (see Annex 1 for the relevant Articles of the Cornucopian Space Act), the CNSA had been appointed the licensing authority. Ewing had been given the necessary licenses by the CNSA just five days prior to the press conference (end November 1999). The spokesman of Ewing expressed confidence that the potential for a mass-market was sufficiently large to justify the hundred-million-dollar project. Equally, such a mass-market could be tapped beneficially even while adhering to the conditions provided by the Act. The spokesman declined to explain in any detail what pricing policies Ewing would implement with a view to the 'non-discrimination' principle following from the United Nations Principles Relating to Remote Sensing of the Earth from Space of 3 December 1986. His refusal to be specific extended also to other relevant international obligations relating to data dissemination.

- 9. The launch of ESI-1 took place, as planned, on 21 June 2000, by Ewing's subsidiary Ewing Space Transportation Systems, from Cornucopian territory. As of the next day, the ESI-1 was declared operational, with Ewing's ground-station in Cornucopia receiving the first data. By that time, Ewing had also concluded three commercial agreements with foreign countries that were interested in hosting a ground-station capable of receiving ESI-1 data. The first of these ground-stations, at Lumino in the state of Wizzaly, started its operations two weeks after the satellite became operational. All ground stations would be entitled to receive data directly from the satellite during the overpass of the satellite, in other words: data regarding the region where the ground-station was located. Also, ground-stations would have the option to download data stored onboard the satellite for the period when no direct contact with the satellite was possible (i.e. of areas outside the region). The Lumino ground station was the only one to have chosen to include this second option in its commercial agreement.
- 10. As of July 1, 2000, enhanced data sets could be ordered through Ewing's web-site, which allowed for some summary browsing, in accordance with the price lists published on the web. Also, the pricing policy was outlined. It provided that a typical 15 x 45 km cloud-free scene of enhanced quality (the 'standard scene') could be obtained from Ewing directly at the cost of 4,500 Cornucopian dollars, with substantial discounts for large data sets and frequent customers. In the alternative such a scene could be obtained from any of the ground-stations with which Ewing had commercial agreements in force. Similarly, an unenhanced scene regarding the same area could be obtained from Ewing directly at the cost of 500 Cornucopian dollars.
- The commercial agreements all provided for a non-exclusive right of Ewing's respective 11. contract partners to use, market and sell all ESI-1 data which could be received directly, either unenhanced or after local enhancement, for a fixed annual fee of 500,000 Cornucopian dollars per ground-station. In addition, in the contract with the Lumino ground-station, it was provided that it could buy stored unenhanced data (down-linked at whichever overpass), at the reduced price of 300 Cornucopian dollars per 15 x 45 km scene. With regard to any unenhanced data as such, Lumino had the right under the agreement only to use them for its own purposes or to deliver them to scientists and scientific entities with the nationality of Wizzaly. With regard to enhanced data, Lumino had the non-exclusive authority to sell such data, whether enhanced from directly received or from stored unenhanced data, at its own prices. However, any purchase of enhanced data by entities or persons not having the nationality of Wizzaly, would be bound to a minimum price of 50,000 Wizzalian lira (which equalled 5,000 Cornucopian dollars), whereas such purchases by Wizzalian nationals were not conditioned on any minimum price. The other two commercial agreements concluded by Ewing contained the same clauses, albeit only applicable to data directly received from the satellite.

- 12. Soliscalor was following these developments quite closely. In a reaction to the press conference by the CNSA of June 1999 and the publication of Decree 161, the Soliscalori Minister of Foreign Affairs expressed his confidence that any activities following from the Decree would remain in conformity with applicable principles and rules of international law. This included most particularly the principle of 'non-discriminatory' access to data resulting from any remote sensing activities, as well as the duty to respect the sovereignty of so-called 'sensed states'.
- 13. When Ewing announced its intention in December 1999 to conclude commercial agreements with foreign ground-stations, the same Minister was quick in initiating discussions on a commercial agreement regarding a ground-station in Soliscalor. After some preliminary exchanges however, the talks broke down at the end of February 2000. The Soliscalori Government insisted that, as part of the commercial agreement, no data on Soliscalor and in particular related to the Nogobi, could be sold by Ewing or any of the other ground-stations without specific consent from the Soliscalori Government. This was totally unacceptable to Ewing, which found itself supported on this issue by the CNSA and the Cornucopian Government.
- Once ESI-1 had become operational, from Ewing's web-site summary browse option it 14. became clear to Soliscalori civil servants that by August 2000 several cloud-free sets of enhanced data on Nogobi and other areas of Soliscalor had been made available. The Soliscalori Government immediately approached the Lumino ground-station, trying first to obtain an exclusive contract to all data on Soliscalori territory. Such data could not be received directly from the ESI-1, but Lumino had the option of buying them at a reduced rate. The Wizzaly Government (which was directly responsible for the ground-station) responded that it did not intend to create such a precedent, even if it would have had the possibility to prevent Ewing from also selling such data. (Such a possibility, however, did not exist in view of the non-exclusivity of the commercial agreement.) Soliscalor, like any other interested state or entity, could only purchase any enhanced data it desired at the standard Lumino price of 60,000 Wizzalian lira per standard scene. In addition, the Soliscalori Government demanded that these scenes be provided unenhanced at a price of at most 3,000 Wizzalian lira per scene. The argument was that this was the price which Lumino itself had to pay for such data and would thus be obliged under the 'non-discrimination' principle to quote to Soliscalor. The Wizzaly Government refused to accept this demand.
- 15. The Government of Soliscalor then approached Ewing directly once more, demanding to be sold the desired unenhanced data at the price of at most 300 Cornucopian dollars per 15 x 45 km scene. Ewing refused. In answering this demand, Ewing's spokesman quoted a Presidential Decree of 2 May 2000 prohibiting the sale of VHR-data, whether unenhanced or enhanced, by any Cornucopian entity to a list of fifty-five states. The reasons given for inclusion on the list were "proven hostility to Cornucopian interests, a political climate hostile to humanitarian interests, and general economic problems making trade relations a hazardous affair". Soliscalor was one of these fifty-five states.
- 16. Then, the Government of Soliscalor approached the Government of Cornucopia directly with its complaints. It referred to the 'non-discrimination' principle of the United Nations Resolution of 1986 and other principles and rules of international law. Further, it demanded that Cornucopia require Ewing to sell its unenhanced data of Soliscalor to the Government of that state at the price of 300 Cornucopian dollars per 15 x 45 km scene, the same price which it had also demanded from the Lumino ground-station. The Government of Cornucopia flatly refused to discuss this for several months, repeatedly stating that the Cornucopian Space Act of 1995, Decree 161, the license given to Ewing and the Presidential Decree of 2 May 2000 were elements

of its national sovereignty to devise its space policies as desired. Consequently, it saw no reason to allow, let alone force, Ewing, which it considered to be a private company without any government control and not in any way violating international law, to sell the desired data to Soliscalor as requested.

17. Finally, Soliscalor on 21 September 2000 took the step of bringing a claim against Cornucopia before the International Court of Justice.

In particular, it asks the Court to adjudge and declare:

- 1) that the principle of 'non-discriminatory' access to remote sensing data constitutes a rule of international law binding upon Cornucopia; and consequently
- 2) that Cornucopia has violated its international obligations towards Soliscalor by not allowing Ewing Space Industries to sell any unenhanced ESI-1 data relating to Soliscalori territory to Soliscalor at the price of 300 Cornucopian dollars per 15 x 45 km scene; and
- 3) that Cornucopia discharge its obligations under international law by requiring Ewing Space Industries to sell immediately all unenhanced ESI-1 data relating to Soliscalori territory which were requested by Soliscalor at a maximum price of 300 Cornucopian dollars per 15 x 45 km scene.
- 18. Cornucopia filed its counterclaim with the International Court of Justice on 7 October 2000. In particular, it asks the Court to adjudge and declare:
- 1) that in the absence of binding force of the United Nations Principles Relating to Remote Sensing of the Earth from Space of 3 December 1986 or any other relevant rule of international law, and in the absence of any consistent state practice, Cornucopia was under no obligation towards Soliscalor to adhere to any principle of 'non-discrimination' regarding the access to remote sensing data;
- 2) even if the Court were to declare the existence of a principle of 'non-discrimination' regarding the access to remote sensing data binding upon Cornucopia under international law,
 - a) that Cornucopia would still have the right to prohibit Ewing Space Industries to sell the requested data to Soliscalor under such principle, or
 - b) that Cornucopia could not be obliged to force Ewing Space Industries to change its data policy in such a way as to offer the requested data to Soliscalor at any specific price; and
- 3) that all claims of Soliscalor to the contrary be rejected.
- 19. Both states have accepted the jurisdiction of the International Court of Justice without any relevant condition; no issues of exhaustion of local remedies or of the jurisdiction of the Court are therefore subject to debate. Both states are members of the United Nations and parties to the Outer Space Treaty. Both states are also members of the International Telecommunication Union; however, no issues of orbit or frequency assignment or co-ordination are at stake. Representatives of Cornucopia and Soliscalor were took part in the discussions within the United Nations General Assembly on the Principles Relating to Remote Sensing of the Earth from Outer Space of 1986, which were adopted by consensus. Furthermore, neither state took any outspoken or extreme positions with regard to the Principles during these discussions.

ANNEX 1 Excerpts Cornucopian Space Act, 1995

Introduction

This Act is enunciated subject to the following paramount considerations:

- (1) The continuous collection and utilisation of land remote sensing data from space are of major benefit in studying and understanding human impacts on the global environment, in managing the Earth's natural resources, in carrying out national security functions, and in planning and conducting many other activities of scientific, economic, and social importance.

 (...)
- (3) The national interest of Cornucopia lies in maintaining international leadership in satellite land remote sensing and in broadly promoting the beneficial use of remote sensing data.

(...)

(10) Regardless of management responsibilities for the SatView programme or other programmes in which the Cornucopian National Space Agency has a major role to play, Cornucopia's broad civilian, national security, commercial, and foreign policy interests in remote sensing will best be served by ensuring that SatView and other Cornucopian systems remain unclassified programmes that operate according to the principles of open skies and non-discriminatory access.

(...)

- (13) To maximise the value of Cornucopian remote sensing programmes to the Cornucopian public, unenhanced satellite data should be made available, at a minimum, to the Cornucopian Government, to global environmental change researchers, and to other researchers who are financially supported by the Corncuopian Government, at the cost of fulfilling user requests, and unenhanced SatView data should in addition be made available to all users at the cost of fulfilling user requests.
- (14) To stimulate development of the commercial market for unenhanced data and value-added services, the Cornucopian Government should adopt a data policy for Cornucopian remote sensing activities which allows competition within the private sector for distribution of unenhanced data and value-added services.

(...)

Chapter VI, on Remote Sensing and Related Activities

(...)

<u>Art. 69 – Definitions regrading Chapter VI</u>

In this chapter, the following definitions apply:

- (1) The term "Agency" means the Cornucopian National Space Agency.
- (2) The term "cost of fulfilling user requests" means the incremental costs associated with providing product generation, reproduction, and distribution of unenhanced data in response to user requests and shall not include any acquisition, amortization, or depreciation of capital assets originally paid for by the Cornucopian Government or other costs not specifically attributable to fulfilling user requests.

(...)

- (6) The term "data preprocessing" may include -
- (A) rectification of system and sensor distortions in land remote sensing data as it is received directly from the satellite in preparation for delivery to a user;
 - (B) registration of such data with respect to features of the Earth; and

- (C) calibration of spectral response with respect to such data, but does not include conclusions, manipulations, or calculations derived from such data, or a combination of such data with other data.
- (8) The term "land remote sensing" means the collection of data which can be processed into imagery of surface features of the Earth from an unclassified satellite or satellites, other than an operational Cornucopian Government weather satellite.

(...)

- (10) The term "non-commercial purposes" refers to those activities undertaken by individuals or entities on the condition, upon receipt of unenhanced data, that -
- (A) such data shall not be used in connection with any bid for a commercial contract, development of a commercial product, or any other non-Cornucopian Government activity that is expected, or has the potential, to be profit-making;
- (B) the results of such activities are disclosed in a timely and complete fashion in the open technical literature or other method of public release, except when such disclosure by the Cornucopian Government or its contractors would adversely affect the national security or foreign policy of Cornucopia or violate a provision of law or regulation;(...)

(...)

(13) The term "unenhanced data" means land remote sensing signals or imagery products that are unprocessed or subject only to data preprocessing.

(...)

Art. 74 – Responsibilities of the Agency

The Agency shall be responsible for -

- (1) SatView procurement, launch, and operations;
- (2) ensuring that the operation of the SatView system is responsive to the broad interests of the civilian, national security, commercial, and foreign users of the SatView system; and
- (3) ensuring that all unenhanced SatView data remain unclassified and that, except if in conflict with the national interests or international obligations of Cornucopia, no restrictions are placed on the availability of unenhanced data;

(...)

Art. 76 - Authority to contract

The Agency may enter into contracts with the private sector for services such as, but not limited to, satellite operations and data preprocessing, as long as in conformity with this Act and the international obligations binding upon Cornucopia.

(...)

Art. 79 – Data policy for SatView

With respect to data derived from SatView operations, the Agency shall ensure that -

- (1) unenhanced data shall be provided, at a minimum, to the Cornucopian Government and its affiliated users at the cost of fulfilling user requests, on the condition that such unenhanced data are used solely for non-commercial purposes;
- (2) instructional data sets, selected from the SatView data archives, will be made available to educational institutions exclusively for non-commercial, educational purposes at the cost of fulfilling user requests;
- (3) SatView data users are able to acquire adequate data necessary to meet the needs of global environmental change researchers and national security users;

(4) the Cornucopian Government and its affiliated users shall not be prohibited from reproduction or dissemination of unenhanced data to other agencies of the Cornucopian Government and other affiliated users, on the condition that such unenhanced data are used solely for non-commercial purposes;

(...)

<u>Art. 79-bis – Data policy for VHR-data under Decree 161</u>

With respect to data derived from VHR operations resulting from Decree 161, the Agency shall license private entities, in conformity with Art. 121, to provide such data under the conditions that -

- (1) unenhanced data are available to all users at the cost of fulfilling user requests;
- (2) any data dissemination conforms to international obligations binding upon Cornucopia.

(...)

Chapter VIII - Regulating the involvement of private entities in Cornucopian space activities

(...)

Art. 121 -. General licensing authority

The Agency has the authority to license any private entities, if incorporated under Cornucopian law and majority-owned by Cornucopian nationals, to undertake the following space and space-related activities in conformity with the respective Chapters of this Act:

(...)

Art. 127 – Licensing VHR-data satellite operators

- (1) In consultation with other appropriate Cornucopian Government agencies, the Agency is authorised to license private entities to operate private remote sensing space systems in accordance with the following provisions.
- (2) No license shall be granted by the Agency unless the Agency determines in writing that the applicant will comply with the requirements of this chapter, any regulations issued pursuant to this chapter, and any applicable international obligations and national security concerns of Cornucopia.

(...)

Art. 129 -. Conditions for operation

No person who is subject to the jurisdiction or control of Cornucopia may, directly or through any subsidiary or affiliate, operate any private remote sensing space system without a license pursuant to this Act and relevant Decrees.

Any license issued pursuant to this subchapter shall specify that the licensee shall comply with all of the requirements of this chapter and shall -

- (1) operate the system in such manner as to preserve the national security of Cornucopia and to observe the international obligations of Cornucopia;
- (2) make available to the government of any country (including Cornucopia) unenhanced data collected by the system concerning the territory under the jurisdiction of such government as soon as such data are available and on reasonable terms and conditions;

(...)