IISL.1.-93-801

SPACE LAW RELATED TO EUROPEAN SPACE ACTIVITIES - THE CORPUS IURIS SPATIALIS EUROPEANUS-

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Abstract

This article gives an evaluation of the current state of legal rules applicable to European space activities. The authors conclude that a distinct body of law, the Corpus Iuris Europeanus, has already developed and, due to the ongoing process of European integration, will develop further. This European space law will influence the general development of international space law.

1.Introduction

The purpose of this paper is to give an analysis of the origins, developments and future prospects of the law related to European space activities.

To begin with it is necessary to gain a concise understanding of the notion of "European space law", which is the subject matter of the following analysis.

First of all one can say that European space law can be described as law applicable to European space activities, i.e. to activities taking place at regional European level. Thereby one encounters the problem of precisely defining the meaning of "Europe" within this framework. This is a question of defining all actors in the European space field. When considering this notion of Europe, one means the institutions which use and create legal rules relating to space

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activities at a European level. We assume that the old distinction between Western and Eastern Europe is more or less still valid. The reason for maintaining this distinction is the fact that, whereas Western European space activities are concentrated within the framework of the European Space Agency (ESA), activities of the former Eastern European states have not yet found a new direction after the end of the Cold War. At least in former times those activities were not considered as European activities but did fulfill some support function for the activities and plans of one of the super powers in space, the former Soviet Union; i.e. a specific European focus of such activities did not exist in these times. Although at the moment different attempts of former East bloc states to become integrated into ESA are pending[1] and a strive for closer cooperation between ESA and Russia can be observed[2], a new institutional framework that would allow to an extent a wider notion of European space activities has not yet been developed. This does not mean, however, that the notion of Europe as it is used in the following analysis is a totally static one. In fact the opposite: whereas it is restricted now by activities of the Western European states, mostly institutionalized within ESA, this notion is generally open to change and will certainly also cover regulations of Eastern European countries[3]. One must, however, take into consideration space efforts and their accompanying legal regulation for such European states which possess their own space resources, like, for example, Russia.

In short, the following analysis will cover all such law which regulates European space activities. Currently, mostly Western European activities within the framework of ESA determine such law.

European space law[4] itself is a notion that only reflects a classification of regulations applicable to a certain area of state and private activities and includes public international space law, commercial law and municipal law applicable to space activities carried out under the jurisdiction or control of European states.[5]

The relevance of European space law as will be described hereunder is, that with the maturing of (European) space activities more European regulations facilitating these activities are required.

For Europe, and especially within the framework of ESA and the European Community, an era of operationalisation of concepts of the space treaties has started and will without doubt influence the further development of the general "public and private international space law". Moreover, the further development of European space law will at the same time clarify the well known but mostly very general terms of the United Nations space treaties[6].

Finally, Europe is considered a region of states which have their own specific interests and methods of carrying out space activities, these being facilitated by regulations that reflect these interests.

A short description of the integration of European space activities and the role the various organizations play will be given below. Then we will propose a framework for an analysis and a categorization of sources of European space law. Finally, we will give some thoughts to the further development of European space law and its importance for the general development of space law.

2. Development of European Space Activities

Until now the process of integration of European space activities developed alongside the process of the overall (economic) integration within the framework of the European Community. This had mainly historical reasons.[7] European space integration started in 1961, when the first initiatives were taken to institutionalize European space cooperation and the Commission Préparatoire Européenne de Recherches Spatiales (COPERS) was founded, a preparatory committee for European space research activities. This Committee prepared the foundation of the European Space Research Organization (ESRO).

Already in 1961, the United Kingdom had asked other European States to found a launcher organization in order to become independent from the launcher systems of the USA and the USSR. The British rocket design, the "Blue Streak", an Intermediate Range Ballistic Missile (IRBM) developed for military purposes were to form the basis.[8] This led to the signature of a protocol and the foundation of a preparatory committee for the foundation of a launching organization. In 1962, the ELDO Convention, establishing the ELDO organization, was ratified by seven countries.[9] In 1964 ESRO and ELDO were set up. Due to the relatively unsuccessful launching policy of ELDO, which was manifested in diverse failures to launch the rocket "Europe" as well as in its management problems and profound financial difficulties[10], this organisation ended its work in 1973.

On the other hand the work of ESRO was more successful. This organization focussed its work only on space research and launched a series of satellites, ESRO I & II, as well as HIAS in 1968 and ESRA in 1969. This was the proof of Europe's capability to develop satellites but, due to the lack of an industrial policy, Denmark and France cancelled their membership. As a result of a compromise in 1971 ESRO member states could choose in which new application programs they wanted to participate[11]. This led to three new application satellites, AEROSAT[12], METEOSAT[13] and the telecommunications satellite OTS.

In 1973, ESRO decided to develop a European transport system, ARIANE, and to participate in the SPACELAB program as a cooperation project with the United States[14].

In 1972, in a European Space Conference (ESC), an institution created in 1966 for the purpose of coordinating the

activities of the various (space) actors in Europe at ministerial level, the member states of ELDO and ESRO decided to merge into one organization. This led to the foundation of the European Space Agency (ESA), at a conference on 19 May 1975. The original document creating ESA was signed by eleven countries: Belgium, FRG, Denmark, UK, France, Italy, Ireland, The Netherlands, Sweden, Switzerland, and Spain[15]. The basic motive of merging ESRO and ELDO was the need for a concise and uniform European space policy.

One can observe that, starting in 1964, European space activities gradually became institutionalized and centralized in one international organization, ESA.

At a later stage ESA itself gave birth to two other (operational) international organizations in Europe namely EUTELSAT and EUMETSAT[16]. The commercial exploitation of ESA's Ariane launcher was given to the private company Arianespace[17].

3.Sources of European Space Law

According to the classification of Article 38 paragraph 1 of the Statute of the International Court of Justice,[18] the following sources of international law related to European space activities can be identified :

3.1 United Nations Framework

First of all it is evident that general international space law is applicable to European space activities. Notions such as liability, registration, freedom of outer space and non-appropriation are obviously also related to European space activities.

The first well known source of international space law consists of the five space treaties concluded in the framework of the United Nations: the Outer Space Treaty,[19] the Registration Convention,[20] the Liability Convention,[21] the Rescue Agreement[22] and the Moon Agreement.[23]

Besides these five international agreements the United Nations have also adopted, in the form of legally non-binding declarations of the United Nations General Assembly, principles on direct broadcasting by satellites in 1982,[24] on remote sensing by satellites in 1986,[25] and on the use of nuclear power sources in outer space in 1993.[26] These principles give an indication of the current state of the law and partially even reflect customary international space law.

Finally, the international legal framework for outer space activities is based on the Conventions of the International Telecommunication Union, of INTELSAT, INMARSAT, INTERSPUTNIK and ARABSAT. All these organizations, by adopting their own rules and regulations contribute to the international body of space law.

3.2. Regional Treaties applicable to European Space Activities

For Europe the Convention of Transborder Television of the Council of Europe[27] and the Brussels Convention protecting program carrying signals[28] are specific conventions applicable to space activities carried out by European actors.

Other regional European conventions are the Conventions establishing ESA, EUTELSAT (including the Operating Agreement) and EUMETSAT which, according to the general doctrine on international organizations[29], can therefore be designated as primary sources of European space law.

3.3. Additional Legal Instruments

One specific source of law worth mentioning is the Intergovernmental Agreement (IGA) concluded in 1988 between the USA, Japan, Canada and ten ESA member states on the international space station Freedom, which creates a specific legal régime for the operation and use of this station.[30]

Additional legal instruments applicable to European space activities are the Directives of the European Community on the liberalization of the (satellite) telecommunications market.

Moreover, there are agreements concluded by regional organizations with third states, e.g. agreements concluded by ESA for the reception of European Remote Sensing Satellite (ERS-1) -data by non-member states.[31]

In general we can speak in all of these cases of secondary law, which is derived from the conventions, founding the international organisations as primary law and created by organs of these organizations. In the category of secondary law fits also international regulations, resolutions and declarations of ESA, Eutelsat and Eumetsat, the European Community and the Western European Union.

This makes evident a certain and specific hierarchy of sources as an element of European space law.

Finally one should not overlook that private or semi-private entities like Spotimage and Arianespace by concluding contracts with either state or other (semi-)private actors contribute to the development of European space law. The exact legal qualification of the type of law created depends, however, on the specific cases.[32]

3.4. Municipal Law

On national level one can find other laws related to European space activities which are partly laid down in specific space law acts, the United Kingdom and Sweden Space Law Acts, and partly contained in more general rules.[33]

3.5 Customary law

Besides the fact that general international space law has already developed some rules of customary nature,[34] e.g.

freedom of outer space and non-appropriation of outer space and celestial body, the principle of responsibility and liability for outer space activities and the principle of jurisdiction and control,[35] it is also of specific interest for this study whether or not a regional European customary space law has already developed.[36] In this respect two examples are worth mentioning. First, Europe has developed its own rules for information received by DBS satellites.[37] These rules do not reflect the UNGA principles requesting a prior consent for operating DBS satellites. The second example can be found in the way Europe and especially ESA and Spotimage implement the UNGA remote sensing principles. Whereas in the United States, due to the non-discriminatory access provision in the UNGA resolution, no legal protection of state funded remote sensing data is allowed, Europe applies a policy of (copyright-) protection of data in order to be able to control the proper flow of data.[38]

Therefore and especially because all European states seem to give evidence of a respective opinio iuris by their state practice[39] one can make a good case in favour of the existence of a regional European customary space law.

4. The European Community and Space Activities

With the adoption of the Single European Act (SEA) in 1987[40] the EC formally got involved in space related R&D policy in Europe. The Single European Act changes provisions of the Rome Treaty of 1957 and extends the Rome Treaty by the new Title VI which was added to Part Three of the Rome Treaty and deals with Research and Technological Development (R&TD). Before the adoption of the Single European Act, the Treaty of Rome had no provision specifically dealing with Research and Development and activities in this area were carried out under Art. 235 of the Treaty[41].

Following the SEA the European Commission issued its first Communication on the Community and Space[42] in which the potential areas for the European Community`s role in space are analysed.

After this Communication which formed the basis for possible Commission involvement in space activities, the process of updating the text and the further elaboration of areas for Community action started in 1991 with the creation of an advisory panel of eight independent experts. This panel met in Brussels in three extended sessions in 1991 and published its report in the same year under the title "The European Community - Crossroads in Space"[43]. The panel in which also two ESA officials participated, had the objective to provide a broad view of where European Community action could best contribute, either directly or indirectly, to the successful further development of European space activities.

Then the new Communication of the Commission was issued in September 1992 which updated the old Communication and identified additional (new) tasks for the Commission.

However, according to its Convention, ESA also has the mandate to formulate a European space policy and integrate the national space programs of its member states. It is obvious that the entrance of the European Community in the space domain would change the situation for ESA significantly since the principles upon which ESA was founded (R&D limited to space and contributions to the Agency directly related to industry contracts for developing space hard-ware (juste retour)) were completely different from the Community principles[44] like competition, non-discrimination and especially the formulation of market- and user-oriented policies.
ESA and the EC established five joint working groups to discuss the most important issues for European space development.[45] These discussions are still continuing but some observations can be made with regard to the position of ESA in relation to the cooperation with the European Commission. The relation between ESA and the EEC should be based on a mutual understanding of each others role and functioning. Therefore the duplication of work and conflicts should be avoided which means that competences of both organizations have to be clearly defined. Also both organizations should support each other in strengthening European space efforts and consequently each others goals and activities should supplement. Finally, as the organizations strive to work with each other, both should take into account the legal environment in which the respective organizations are working.

Moreover it has to be recognized that the two organizations who potentially are in a position to define the future European space policy are the European Space Agency and the European Commission.

ESA has in its Convention (Art. II-c) a provision which states that it "should coordinate the European Space Program and the National Space Programs and integrate the latter progressively and as completely as possible into the European Space Program".

On the other hand it is now repeatedly stated (also by ESA) that, given the importance of the space activities for the European technological capability in general, the European Community should play a major role as it is in the position to define an overall policy, taking into account the technological, economic, social and political considerations for improving Europe's activities and exploiting the benefits of the space applications at a maximum.

With the entrance of the European Community in the space domain as well, a number of issues are raised due its common market principles.
With regard to ESA, discussions have been held on its geographical return principle and the incompatibility with the Common Market philosophy. The Gibson Report stated that the geographical return policy of the Agency as provided for in the ESA Convention could not be challenged from a legal point of view but suggested that a less rigorous

application of the principle should be implemented by ESA as it was questionable whether the principle worked effectively for the development of a competitive European space industry.

In conclusion, at the moment one can observe a redefinition of competences and tasks for the implementation of European space policy by ESA and the EC.

5. Space Law Related to European Space Activities - The Corpus Iuris Spatialis Europeanus

Having so far described the sources of international and European legal rules related to outer space activities, we now enter the field of European space activities in general, and of European space law in particular. As an underlying hypothesis, as has been made evident in the analysis of the legal sources, we have asserted that already a distinct body of European space law has evolved which deserves particular treatment.

In a first definitional step this body of law was described as such law regulating outer space activities which was developed by European space organizations as ESA, Eumetsat, Eutelsat, Arianespace, and Spotimage. Besides being general international law as described above, it is also applicable to space activities at the regional European level.

The European character of this law shall first be made evident by an analysis of the legal value of the rules created by ESA as the most comprehensive space organization. According to its Convention, ESA´s very aim is the "europeanisation" of space activities of its member states.[46] The differentiation into mandatory and optional activities - aiming at the most comprehensive acceptance of the different programs -, the europeanisation of national programs, and a specific industrial policy are important facets of the overall aim of a single European space policy. With its primary law, laid down in its Convention, and its secondary law like its enabling resolutions and declarations, ESA does not only provide for the legal framework of European space efforts but directly affects the legal situation in its Member States. For example when ESA adopts by resolution an optional program, Member states can only opt out by an explicit statement to that effect within a period of three month (Annex III, Art.I para. 2 of the Convention). Although ESA declarations and resolutions which are binding only upon states, have no direct effect in the Member States which would make them comparable to the law of the European Community, a certain legally measurable effect cannot be denied.

ESA, due to its overall tasks, is the by far most important actor in the field of European space activities but in the future it remains to be seen whether the European Community will leave what is almost a space monopoly to ESA. Statements of recent times give evidence of a growing interest in Brussels in space matters. If the EC gains considerable competence, its space related regulations

would have a much stronger and direct effect in Member States as can already be said of the EC directives e.g. on the liberalization of the telecommunications market.

Besides ESA and the EEC, European governmental satellite organizations like Eutelsat and Eumetsat play an important role in the telecommunications and meteorological sector. Their primary and secondary law therefore logically contributes to the body of European space law. Moreover, semi-private organizations like Arianespace and Spotimage have their own rules and contribute to the body of European space law by the contracts they conclude for carrying out their (commercial) activities.

On the other hand a description of the law regulating European space activities would be incomplete if the national laws relevant to space activities of European states were not included. Contrary to the law just described these regulations, besides implementing provisions of general international space law, specify national preconditions for European space activities.

6.Space Activities and European Identity

Due to the size of the European countries and the European economic integration which started to take shape with the development of the European Economic Community, space activities in Europe have always implied international cooperation. Europe started to develop its space activities as a cooperation between states and industries. This development is rather different from the US and USSR where political goals as leadership, strategic interests and military aspects were the leading motives for stimulating space research and development.

Even now when we look at reports from the US[47], military strategic arguments are still being put at the foreground which results in a stimulus for Europe to continue to strive for its own space capacity. Whereas the US has its national reconaissance system Europe will have to built up its own capacity, necessarily in another way because these projects will be international from the outset. One could mention in this respect e.g. the HELIOS and EUCOSPACE initiatives.

Another development stimulating a European position is the conflict of interests between the US and Europe with regard to the way competition in space related services should be regulated. Due to the US decision in the eighties to develop the Space Shuttle as the single launcher which would receive government funding a large part of the world launcher market came into the hands of Ariane. Since the Challenger accident and due to the high costs of the operation of the Space Shuttle the US tried to regain a part of the world launcher market by stimulating its conventional launching capacities. Criticism was raised with regard to government involvement in the Ariane development program and

negotiations were started with ESA for the purpose of reaching an agreement to a set of "rules of the road" for the launching services competition.

These developments have an impact on European space policy and ultimately on the European regulations reflecting this policy. In Europe the trend for international cooperation (within and beyond Europe) became much more popular due to the budgetary crisis within the European Space Agency. At the two Ministerial Conferences, in Munich in 1991[48] and in Granada in 1992, the idea of developing an independent European manned space capacity was practically abandoned, with the postponement of the development phase of the Hermes project. However, at the same time the ESA Ministers at both Ministerial Conferences emphasized the need for international cooperation as a way of saving costs, improving coordination and preventing duplications. This new policy of ESA has led ESA to giving more attention to cooperation with the US and Russia, is at the same time confronted with a US policy of considering sometimes even international cooperation projects like the space station a largely domestic affair. Consequently, the reactions of ESA, Japan and Canada on the debate in Congress in 1992 where the space station budget came under heavy pressure were fairly negative.

All these facts demonstrate that in an evolving way the distinct European interests will lead to a specific European identity which will have its reflection in the legal sphere. It remains to be seen what Europe`s contribution will be in the case of a realization of US/Russian cooperation for the building of a common space station.

7.The Influence of European Space Law on the further Development of General International Space Law

Before we conclude this paper a few thoughts have to be given to the influence of European space law on general international space law and to the consequences of the further integration of European space activities. That general space law will be influenced by these developments seems to be without doubt and it is therefore necessary to indicate the issues that can arise as a consequence of the further emergence of European space law.

7.1. The Issue of Regionalisation

In general, public international space law is influenced by the growing maturity of space activities. The more generally defined concepts as laid down in the UN Space Treaties have to be adapted to the practical needs of the space community. Moreover, there is an increasing number of states, private companies and a combination of both using outer space. This development will bring a number of activities (especially telecommunications, remote sensing and at a somewhat later stage microgravity research) under regulations not exclusively

conceived for outer space activities but for terrestrial activities like media law, public telecommunications law, copyright law and, more generally, principals of domestic laws applicable to commercial activities.

In the European context European Community Law will have more influence in regulating commercial space activities. As the European Court in Luxembourg has created its own doctrine and jurisprudence for the interpretation of concepts such as non-discrimination, markets, commercial activities, dominance etc., space law will also be influenced by these concepts of law. Of course this can mean that Europe will have its own interpretation of public international space law concepts and will develop them further. This trend can lead to a regionalisation of (commercial) space law principles at least for European actors.

A danger of such development could be that it is not in the interest of the non-Community states to accept these principles and moreover they will not be involved in the further development of this body of law as has happened with liability and cross waiver clauses in launching contracts in the United States. That this development can lead to an erosion of the general principles of international space law, due to different interpretations of the UN principles and the further development of doctrines is obvious and not necessarily in the interest of states now gaining access to space derived services and data for example in telecommunications and the remote sensing field.

7.2. The Role of the European Community

As stated above the role of the European Community will become more important for the further regulations of commercial space activities. But also at a political level the Community will gain more importance in space activities and space policy. The Community represents the twelve member states in a number of international fora; for example, at the last UNCOPUOS meeting, the UK Chairman of the European Community Council gave a statement on behalf of the twelve.

The question then arises what the role of the other European organisations will be in the future if the regulatory preeminence of the Community will cover even more commercial, trade, and political issues relating to space. For the operational organisations like Eumetsat and Eutelsat of which the latter is engaged in commercial activities, the regulatory framework will be more and more defined by Community decisions. Satellite telecommunications and especially the question of direct access to the space segment is a good example of this development. For research and development activities which, due to the Single European Act, came under the competence of the Community the situation is less clear.

Most space activities in Europe originated from ESA which functions under an unique system, by developing through the contributions of the member states a space capacity in all member states. However, the need will arise to make a clearer distinction between R&D activities (which should stay in the competence of ESA) and the more applied activities which can partly be considered as activities structuring markets (a mandate of the Community). This will mean that regulatory activities and larger policy questions (like the launching competition) will be dealt with by the Community after having received the input of ESA as an expert organisation.

7.3 The Question of the Necessity of a European Space Law Act

A logical question which has to be answered as a consequence of the developments we have described above is whether Europe should have its own European space law act. This act would harmonize the different regulations which exist for space activities and at the same time facilitate access to space on the same conditions in all European states. When looking at European integration as a process that will continue[49] the creation of such an act should seriously be considered. Partly because a number of countries do not have specific regulations making access to space transparent (France, remarkably, is one of them)[50] and partly because this act would enable for the better monitoring of space activities by European entities and would consequently lead to a harmonious development of European space activities.

8. Conclusion

In this paper a distinct set of regulations applicable to European space activities have been identified which gives evidence of the existence of a specific Corpus Iuris Europeanus. The importance of identifying this distinct body of law arises from the fact that Europe is developing its own interests and policy in space and consequently has developed and will develop its own interpretations of space law principles as well as create additional complementary regulations reflecting its own interests. A more structural analysis of the sources and origins of European space law will enable a better analysis of issues arising from these developments to be made and will at the same time make Europe more aware of possible approaches, applicable to the regulation of commercial uses of outer space, the enlargement of Europe and the relations with non-European states. The entrance of the European Community in the domain of space policy and space law is in this respect the most important event which will influence future regulations of European space activities.

NOTES

1. -See ESA/LEG/123, 1990, Agreement between the European Space Agency and the Government of the Union of Soviet Socialist Republics concerning Cooperation in the field of the exploration and use of outer space for peaceful purposes. This agreement was confirmed by Russia as the sucessor of the USSR by a diplomatic note sent to the Director General of ESA, dated 28 April 1992. Source: ESA Annual Report 1992.
-ESA/LEG/129, of 26.6.1990, Agreement between the European Space Agency and the Government of the Republic of Hungary concerning Cooperation in the field of exploration and use of outer space for peaceful purposes, signed 10.4.1991.
-Poland and ESA are still in the process of discussing the conclusion of a cooperation agreement, Source: Chronique des Activités spatiales, Centre d´études et de recherches sur le droit de l´espace, janvier 1991-Mai 1992, p.140.
-Rumania and ESA signed a cooperation agreement on 11 December 1992. Source: ESA Annual Report 1992, p.92.

2. See the resolution on space cooperation with the Russian Federation, adopted on 10 November 1992 at the Council Meeting at Ministerial Level in Granada. Source: ESA Annual Report 1992.

3. Many of the Eastern European states are in the process of adhering to one of the European space organizations whereby especially EUTELSAT has received several applications.

4. See for a discussion on the basic questions, F. Lyall, Space Law - What Law or Which Law?, in: Proceedings of the 34th Colloquium on the Law of Outer Space, 1992, pp. 240-243.

5. Id., note 4, F.Lyall correctly points out that a comparison can be drawn to environmental law.

6. See for an analysis of the problems raised by the maturing of space activities and a proposal to revitalize the UN space treaties, O.M. Ribbelink & P.H. Tuinder, The increasing access to Outer Space and its Implications for the Development of Space Law, in: Proceedings of the 32nd Colloquium on the Law of Outer Space, 1990, pp. 394-402.

7. See for more details, K.J.Madders & W.Thiebaut, Two Europes in one Space: The Evolution of Relations between the European Space Agency and the European Community in Space Affairs, in: Journal of Space Law, Vol.20, No 2, 1992, pp.117 et seq.

8. The Blue Streak was to replace the US Thor missiles which were deployed in the UK in order to counter the threat from the Soviet Union, see Politics - The Rise and Fall of ELDO, in: Space, April 1993.

9. The ELDO Convention was ratified by the UK, France, Germany, Belgium, Italy, the Netherlands and Australia.

10. In 1968, the UK left ELDO and ELDO which formally ceased to exist on 28.2.1974 and were merged into ESA in 1975.

11. This model was used for the later ESA organization where also a distinction is made between the mandatory and optional programs.

12. AEROSAT was a joint ESRO, US, Canadian program for Aeronautical Satellite Communications which was never realized in practice.

13. Meteorological Satellite Program.

14. These application programs were the result of a package deal made in July 1973 at a session of the European Space Conference. At that Conference ESRO accepted responsibility for the development of the new ARIANE launcher program of which the management was entrusted to CNES. Also two other new application programs were adopted namely Spacelab under the main sponsorship of Germany and MAROTS under the main sponsorship of the UK. Until 1971, the entire program of ESRO was mandatory and funded by all member states on a GNP basis.

15. Followed later by Austria and Norway. Finland is an associate member expected to become full member in 1995 and Canada has a cooperation agreement with ESA and participates in some of the programs.

16. EUMETSAT's Convention was signed in May 1983 and entered into force on June 19, 1986 and was ratified by fourteen countries. German Source: BGBl 1987 II, p.257; reprinted in: K.H.Böckstiegel/M.Benkö (eds.), Space Law. Selected Legal Documents, losefeaf, vol.2, C III 1.

17. Arianespace is a company established in 1980 under French Law, a Societé anonyme, and was created by those Governments which participated in the Ariane Launcher Development Program.

18. a) international conventions, whether general or particular...
    b) international custom, as evidence of a general practice accepted as law
    c) the general principles of law recognized by civilized nations
    d) judicial decisions and the teaching of the most highly qualified publicists of the various nations, as subsidiary means for determining of rules of law.

19. Source: 610 U.N.T.S. 205

20. Source: 1023 U.N.T.S. 15

21. Source: 961 U.N.T.S. 187.

22. Source: 672 U.N.T.S. 119

23. Reprinted in: 18 I.L.M. 1434.

24. Source: UNGA 37/92 of 10.12.1982.

25. Source: UNGA res. 41/65 of 3.12.1986.

26. Source: UNGA res. 47/68 of 23.2.1993.

27. Source: Council of Europe, Doc. D.H.-M.M. (89) 1; reprinted in 28 I.L.M., 859-869.

28. Brussels Convention relating to the Distribution of Programme Carrying Signals Transmitted by Satellite. Source: 1144 U.N.T.S. 3.

29. See e.g. I.Seidl-Hohenveldern/G.Loibl, Das Recht der Internationalen Organisationen einschließlich der Supranationalen Gemeinschaften, 5th ed. Köln et al. 1992, p.203.

30. Source: Doc. ESA/C (88)R/25, add.1; see for a description of the legal régime G.Lafferranderie, Les accords relatif à la station spatiale internationale, in: RGDIP 1989, p.318; S.Hobe, Die rechtlichen Rahmenbedingungen der wirtschaftlichen Nutzung des Weltraums, Berlin 1992, pp. 220 et seq.

31. See: M.Ferrazzani, The Legal Framework for the Use of ERS-1 Data, in: ESA Bulletin 1991, No 68, p.104-110.

32. See to the problem of the state as partner of private entities with respect to the applicable law, K.-H.Böckstiegel, Der Staat als Vertragspartner ausländischer Privatunternehmen, Frankfurt a.M. 1971, pp.105 et seq.

33. See generally for an assessment of domestic space legislation J.Reifarth, Nationale Weltraumgesetze in Europa, in: ZLW 1987, p.3 et seq.

34. See for the preconditions of the creation of customary international law the judgement of the ICJ in the North Sea Continental Shelf Case, ICJ Reports 1969, p.43; see also to the problems of the creation of customary international space law, S.Hobe, note 30, pp.67 et seq.

35. See V.Vereshchetin/G.Danilenko, Custom as a Source of International Law of Outer Space, in: Journal of Space Law 1985, p.22.

36. See for a description of the conditions for the development of regional customary international law A.Verdroß/B.Simma, Universelles Völkerrecht, 3rd ed. Berlin 1984, p.359.

37. EC Council Directive on the Coordination of Certain Provisions laid down by Law, Regulation or Administrative Acts in Member States Concerning the Pursuit of Television Broadcasting Activities of 3 October 1989; Source: Official Journal of the European Communities, N° L 298/23 of 17 October 1989; reprinted in: 28 I.L.M. (1989), pp.1493-1500.

38. See M.Ferrazzani, supra note 31; see also Ph.Gaudrat, Conditions of Access to Remote Sensing Data, European Commission Study, 1992 (not published).

39. This is the requirement as laid down by the ICJ in the Asylum Case, ICJ Reports 1950, p.276; see also D´Amato, The Concept of Special Custom in International Law, in: AJIL 1969, p.211.

40. Official Journal of the European Communities, L 169, 29 June 1987.

41. Art 235 of the Rome Treaty provides: " If action by the Community should prove necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and this Treaty has not provided the necessary powers, the Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, take the appropriate measures".

42. The Community and Space: A Coherent Approach, July 1988. The Communication was the Commission response to a Resolution adopted by the European Parliament on 17 June 1987, on European Space Policy in which the Parliament required the European Commission to elaborate a coherent policy concerning space activities. The Communication was directed to Council and Parliament. Already in 1985, the Parliament discussed a Report from its Committee on Energy, Research and Technology (The Toksvig Report) which among others advised that Parliament should monitor space activities more actively.

43. This report is better known as "The Gibson Report" after its Chairman Roy Gibson, a former Director General of ESA.

44. See on the difference on approach between the two organisations among others the article of Madders and Thiebaut, note 7, in which was emphasized correctly the necessarily "top down" approach of ESA as compared with the "bottom up" approach of the Community which raises important policy differences between the two

organisations especially with regard to ESA's industrial policy.

45. These working groups were established in 1989 and cover: commercial policy and external relations; industrial competitiveness and internal market; earth observation and environment; telecommunications; research and development (including micro-gravity); Source: Gibson Report, note 43, p.28.

46. See Annex III of the ESA Convention entitled "Internationalization of National Programs".

47. See the Space Advisory Boards report under direction of at that time Vice President Quayle, published in November 1992, where it was stated that: "Today, there is increasing concern that declines in defense-related spending and increasing international competition are harming or will harm the ability of the US to maintain an industrial base that is capable of meeting US governments requirements and the demands of commercial competition." (p.2) in: Vice President's Space Policy Advisory Board: The Future of the U.S. Space Industrial Base - A Task Group Report-

48. See for an evaluation of this conference S.Hobe, Legal Implications of the ESA Conference on Ministerial Level in Munich, in: AASL 1992, pp.237-254.

49. The Treaty of Maastricht is an example for such further step of integration.

50. See for the consequences of the lack of French space legislation P.M.Martin, Legal Consequences of the lack of French Space Legislation, in: Proceedings of the 34th Colloquium on the Law of Outer Space, 1992, pp.250 et seq. Martin argues that national space legislation would be required in France before claims for damages arising out of space activities come before French courts.