

**NATIONAL INSTITUTIONS RESPONSIBLE FOR SPACE ACTIVITIES :
A COMPARATIVE LAW APPROACH**

by

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ABSTRACT

States have always been the initiators of space activities and, despite the emergence of private sector operators in some countries, continue to be engaged in space activities on their own behalf. The institutional framework for space activities in different countries can be compared by examining the following characteristics :

(1) general conditions concerning (a) the extent of state involvement (closely tied to each country's history), (b) the nature of the involvement (direct or indirect), which may have developed differently according to whether or not the state has a national space agency, and (c) the type of space regulations in effect;

(2) the institutional framework of the State, generally, with regard to the involvement at various levels of political and administrative authorities, and the institutional framework of public or semi-public bodies created specifically for space activity purposes (budgetary concerns play a major role with respect to both frameworks);

(3) the nature of the relations between the State and the private sector, which differs greatly according to the importance given to military or commercial purposes, and the development of non-governmental space activities and the consequent institution of regulations providing for the "supervision" and "authorization" of such space activities, in order to

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comply with international space law treaties; and

(4) the development of international cooperation both on a multilateral and bilateral level, which has had a significant influence on space institutions and which has led to the sharing of authorities with regional and international bodies.

I INTRODUCTION

States have been the initiators of space activities since they have existed, either exclusively in some countries or partly in others. However, in that case, they keep the control of the activities in some determined sectors (military notably) while they share, at the same time, the other sectors with the private operators.

The role of the States has been predominant during the "Cold War Period", which has been characterized by a rivalry between USSR and the USA, as much on the level of prestige as on the level of military abilities. Nowadays, the competition between the two great powers does not have the same reasons to be anymore, and one can see a worldwide cooperation among States being developed in definite sectors, whereas there is a fierce competition among the actors of the private sector in other sectors of activities.

However, as it is asserted in the "Outer Space Treaty" of 1967, it belongs to the States and only to them to: bear, on one hand, international, political and juridical responsibilities

for all national space activities -whether they are carried out by governmental agencies or non-governmental entities- and to ensure that the provisions of the treaty are enforced; on the other hand, it belongs to them to authorize and supervise the space activities of the non-governmental entities placed under their jurisdiction, and finally to supervise that the international organizations they are participating are complying with the provisions of the treaty. It is obvious that this triple duty applies to all the international agreements -which goal is to govern the exercise of space activities- signed by the States whatever their form is.

In consequence, whatever their direct involvement in outer space is, as actors, the States Parties of the 1967 Treaty have to participate to the drawing up and the enforcement of the international rules applicable to space activities. However, these States are, of course, free to organize, as they wish, within their national framework, the implementation of the obligations contracted under the international agreements. The actual world practice lets us notice that a great variety of situations exists, resulting from the range of answers given to this state obligation.

We can observe that, in some countries, national specialized structures exist, generally named "Agency", and that they are responsible for space activities. However, they can get very varied legal forms and different powers according to the kind of space activities

undertaken by the State itself. In other countries, there are no agencies of this kind, the responsibility of the State being shared between the already different existing national entities, which more often are ministerial departments.

The choice between these two forms obviously depends upon, first of all, the political regime of each country, and therefore upon the power of intervention given to the public authority; it also depends upon the existence and vitality of the private sector, as well as the degree of freedom granted by the State.

Within this Colloquium, it seemed to us interesting to inform the IISL Members of the results of a study which has just been done by the Center of Study and Research on Space Law (CERDE) of Paris (France) in cooperation with the European Center for Space Law (ECSL), and which results will be published later on.

The present Report will, first, briefly set out the different ways which can be used by the States in order to comply with their obligations relating to the national organization of space activities in their respective countries (I). It will then describe the conditions of the intervention of the States in the exercise of these activities (II). These questions will, of course, be studied in details in the work above mentioned.

PART I THE ORGANIZATION, BY THE STATES, OF THEIR SPACE ACTIVITIES

The intervention of the States in space activities, which will take place on their territory or which will be undertaken by their nationals, is expressly foreseen by articles VI, VII, and VIII of the 1967 Outer Space Treaty to which, it shall be recalled, nearly all the States of the world - including the space powers-are parties.

As it is known, this intervention has to take place either if the State plays the role of actor and undertakes itself the space activities, or if it only supervises, on its territory, their execution by entities which are outside the State properly said: ie. autonomous governmental agencies, private sector, international organizations.

However, the intervention of the State can take many diverse forms. It has however to be underlined that the organization of space activities is not related to the existence or the lack, in a country, of a specific national legislation. Such a legislation does not exist in all the space powers and in that case the intervention of the State relies upon the existing general texts.

1- THE GENERAL STRUCTURES

The institutional framework within which the space activities of the States are carried out, includes, first of all, general structures that are, for most of them, related to the principal political and

constitutional authorities of the States. In consequence, it is not surprising to notice that even the heads of States themselves possess very asserted prerogatives in space affairs. One of the recent example of this tendency consists in the great powers given by the 1991 constitution of the Russian Federation to its President, completed by the authority given to the government in this matter. Of course, these powers are not exclusive of those traditionally given to Parliaments in democratic regimes; the prerogatives of the Parliament generally consist in the vote of a Funding Act which estimates the budgetary envelop fixing the appropriations given to space activities. Parliaments also play a general role of control, quite often by means of specialized committees.

Concerning the governmental structures in charge of the administration and control of programs and space activities, we have no intention here to enter into the detail of these functions. However, a preliminary remark has to be made: concerning public entities, departments, boards or offices which are in charge of space matters, we have to make a strict distinction between the democratic regimes, whether they are presidential or parliamentary regimes. In the first case, we can notice an important gathering together of the prerogatives within the hands of the President, who is assisted by different offices or boards which turn around him: this is the case of the USA where we know the decisive role played by bodies such as the

Presidential Executive Committee, the National Board for Security, the Office of Management and Budget, the Office of Science and Technology. This tendency, during the recent period of the Clinton administration, has only grown stronger. Such kind of observation could be made toward the new Russian organization, even if it is still too early to conclude on the lessons given by the development of the Russian institutions.

In parliamentary regimes, a more important role is given to the government by means of classical departments. Within the development of space activities, from their origin, the departments being in charge of the scientific research in general have been given, at first, the supervision of a space sector mostly composed of research activities. This situation has notably prevailed in most of the Member States of the European Space Agency (ESA) such as France, Great Britain, Italy or Federal Germany; and also in other countries which have undertaken a significant space program, such as Japan.

This situation has evolved with the time being when industrial and commercial aspects have taken an increasing place in the space programs. This development can also be noticed in France when, from 1962 to 1969, the supervision of space activities was assumed by a State Secretary in charge of scientific research, atomic and space questions, while since 1969, that function was entrusted to the Department of Industrial and Scientific

Development. It can also be noticed that, in Canada, and during the present period, it is the Department of Industry which is assuming the supervision of these activities.

Within the framework of complex governmental structures, other departments are in charge, at different levels, of the administration of space affairs: Department of State, Post Office Department, Department of National and University Education, Department of the Treasury for budgetary aspects,... However, a particular place has to be reserved to the department in charge of National Defense. Indeed, in consideration of the primordial interest granted by the principal powers to the strategic and political aspects of outer space, a particularly active role, sustained by important budgetary appropriations, is played by authorities in charge of the military sector. To illustrate this situation, one has only to remember the huge resources at the disposal of the Soviet military and industrial complex, and also the prerogatives and means which are today still at the disposal of the Pentagone. In the same range of ideas, it has to be underlined that, in France since 1993, the National Center for Space Studies (CNES) has been placed, for most of its activities that interest the Department of Defense, under its supervision. Otherwise, it is true that a contrary tendency consisting in the transfer of military activities to civil activities can also be noticed here and there: Russia is offering, for

example, during these last few years, the spectacle of a partial dismantling of its enormous military potential - if one thinks for example to the SS-18 and SS-20 missiles - and a reconversion to civil aims. A country such as Argentina has recently given up the construction of its program of CONDOR missiles in order to dedicate itself to scientific, remote sensing and telecommunications satellite projects. This second tendency is, however, less important than the first one and does not necessarily imply that Departments of Defense of those countries are given up the military aspects of their space programs.

Finally, we will add that, in consideration of the increasing international dimension taken by space affairs, due to both the strategic interests that they are developing and a constantly growing cooperation among States, the Departments of States are more and more implied in the management of space policy of their respective country.

It can also be observed that the deep involvement in space policy, of the Department of Defense as well as the Department of States, is one of the specific characteristics of space affairs marked both by their dual and international nature.

Of course, the increasing complexity of space affairs and the more and more numerous departments which are in charge of, make essential the establishment of coordination footbridges in order to insure a coherent and efficient implementation

of the space policy. On this connection, the creation in France, in 1989, of a Space Committee, a structure of coordination among the departments in charge of the preparation of the governmental rulings related to the French space policy, has to be noticed.

The diversity of the aspects which have to be taken into account, when defining a national space policy, has finally given rise to the multiplication of advisory bodies, intended to prepare the rulings taken by the executive power or consulted by the parliamentary houses within the framework of their jurisdiction in space matters. The USA, from this point of view, are a particularly striking example of a proliferation of such bodies aiming to cover all the implied sectors in the definition, the development and the supervision of the American space policy.

2- THE SPECIALIZED BODIES

The willingness of the States to carry out space activities has often been realized by setting up a specialized body for space affairs. The States which have endowed themselves with such a body are extremely numerous. Without giving an exhaustive list of them, we will just remind the most known and, first of all, the eldest one which is the American NASA, then come the French space agency (the CNES), the British National Space Council (BNSC), the Japanese NASDA, and more recently the Italian ASI, the German DARA, the Russian RKA, the Brazilian, Canadian and

Indian space agencies. At the opposite, some countries which have undertaken a space effort, have not judged it necessary to create a specialized space agency: among them we will quote Belgium, Spain, Denmark, Switzerland, ..., China being an intermediate case having wished to endow itself both with an industrial company for the marketing of the launchers, the "Great Wall of China", and more recently a National Civil Administration for Space Activities. The disintegration of USSR has finally allowed a certain number of States of Eastern Europe to take some initiatives in order to endow themselves with autonomous structures. Different kinds of space agencies, research bodies and companies have been therefore created in Poland, in Rumania, in Hungary, in the Czech Republic, and in Ukrain.

The setting up of space agencies has been done using extremely diverse methods. This diversity is the result of the different dates of founding of these agencies, at time implying for each one its own particular historical context. At a juridical level their methods of formation have also been characterized by a certain heterogeneity: it is sometimes the result of an enactment, and sometimes of a mere administrative ruling. Finally their legal status strongly varies from an agency to another: departments as well as autonomous bodies, public institutions (France), even commercial companies (Germany) can be found.

Despite this diversity, these agencies have in common a certain number of purposes.

Their main missions and functions, pursue the establishment of space programs, the assessment of budgets, the promotion and implementation of projects realized by space industries. Finally they keep close relationships with international space organizations, either for the realization of programs, or within the framework of their partnership to international programs: this is in particular the case of the European space agencies of the Member States of the European Space Agency.

The functions of the agencies, corresponding to these different missions, can be analyzed as it follows:

-In a first category, functions of reflexion and coordination can be found: they concern the preparation of governmental rulings within the framework of the working out of a national space policy, taking into account the opinions of the various departments, boards, and offices in charge of this working out; secondly they are related to the preparation of the governmental position and its representation within the international institutions or within the programs of international cooperation of which they also have to follow the implementation, as well as the development of their own programs; thirdly, the agencies have for mission to promote, inside as well as outside the country, the space industry of their own country. Within this action, they have to give incentives to the efforts of industries by granting contracts of study and technology. Of course, they also have, for

the same reason, to participate to the definition of a national industrial policy in the space sector.

-In a second category, space agencies have more operational functions: in that respect, they manage the national space effort either directly, implementing projects with their own resources, or making them executed under contracts with industrial firms which they control. They can found subordinated bodies or subsidiary companies in charge of the promotion of these commercial uses (so the companies Spot Image or Arianespace have been created in France). Finally they give effect to international obligations resulting from the international agreements, particularly by granting licences for space operations, by supervising the beneficiaries of these licences and finally by keeping a registration list of the space objects.

This double mission of the national space agencies is not without leading to some critical problems for the European States members of the ESA.

As a matter of fact, the problem to resolve is indeed to share out, rationally and with efficiency between the European programs of the Agency and the national programs of the Member States, the fundings and others resources -which, of course, are limited- at the disposal of these States for their civil and military space activities. Then, it is obvious that the answer relies upon factors that are specific to each Member State, which is leading to a

great disparity among them. The ESA only being ruled by its own convention and being outside the legal order of the European Union (which scope in space matters is besides limited), the disputes in this field can only be solved within the framework of the Agency itself, no exterior body being entitled to arbitrate them.

Concerning the legal status and the organization, properly said, of the national space agencies, the diversity is the outstanding feature. Indeed, we are meeting with a certain number of common procedures, and particularly the relations which necessarily have to exist between the Funding Act and the appropriations foreseen for the functioning of these agencies. In a certain number of cases, we are also in presence of cooperative contributions of public and private funds for the realization of space programs under the aegis of the agencies. Finally, common procedures of control on the utilization of these funds can also be found. On the other hand, it can easily be understood, if we consider for example the sizes of agencies such as the NASA, the Dutch space agency or the Argentinian and Indonesian space agencies, that no common measure exists in fact among these agencies as regard to their manpower, the budgetary funding which they assume the management, and the complexity of the implementation of the programs. In order to have an idea of this complexity for States such as the USA, Japan or Russia, one only has to list the different bodies which must be consulted while

defining or executing the space programs. Finally, the development of the commercialisation of space activities has led to specific problems in countries, such as the USA, where a growing tension is taking place between a private sector which wants to act in a more and more independent way, as its role is growing, and a NASA, which wants to preserve its prerogatives but sees its status call in question again. There is no doubt that the relations between the private and public sector, and the increasing tendency of the private sector to cast off the states' restraints to its development, will constitute one of the major problems of the years to come. Will we see in a certain number of States (USA, France, Great Britain, Japan,...) a public sector that will, more and more, dilute itself with a private sector which thinks that it is the only one able to take the initiatives corresponding to the development of the space sector in the decades to come?

PART II : THE INTERVENTION OF THE STATES IN THE EXERCISE OF SPACE ACTIVITIES

It is obvious that the States will still try, for a long time, to keep under their direct control a certain number of activities related to their sovereignty or which nature cannot concern the private sector, either by mean of Departments or by mean of specialized Agencies. However, even when the State is implied, it can take no further interest in the control of some space activities which have consequences on the common interest. Finally, there is the case when space activities are carried out by several States within the framework of an international cooperation.

1- THE ACTIVITIES RESERVED TO THE STATES

All activities related to National Defense, to the exploration of outer space in general and to strictly scientific space research are undeniably under the only responsibility of the States, the private sector having no competence for them.

This fact is obvious for military activities, which we have moreover seen that they have been playing a decisive role in the development of civil activities. The same remark also applies to activities related to the sole exploration of outer space -and not to its use-. Finally, this is also the case of scientific activities which, as fundamental research, cannot be undertaken by the private sector; these activities being, by definition,

opposite to the concept of return on investment.

2- THE ACTIVITIES OF THE PRIVATE SECTOR

If we consider activities which are under the responsibility of the private sector because of their nature, we have to remember that, except States which until a recent period, ie. up to the disintegration of USSR, were unwilling to create a private sector in the field of space matters, nearly all the other States have estimated that it was not only unavoidable but also necessary that a sector properly of private nature, with commercial purposes, be set up close to a public sector. This has been the case both in States where the principle of free enterprise is highly proclaimed, and in those States which want to maintain a strong state presence going further than the traditional sectors devolved to the States (activities belonging to the defense).

Of course, according to States, the private sector has known diverse expansion conditions, but it also has been tied down to a certain number of common obligations. Concerning activities which are under the market logic, it can be noticed that a certain number of programs are more adaptable to this logic because of their nature, without, however, a strict distinction between the programs of private nature and those of public nature. As an example, it can be noticed that, on the one hand, the telecommunication industry is undoubtedly under the market logic but that, on the other hand, its satisfactory development is

still, quite often, depending upon a state support: with this respect, we are particularly aware of the way the order of operational systems of satellite launchers and of satellites for purposes which are under the state authority (and in particular for the defense) amply benefit to the American industry. Similar examples could be found in other countries such as Japan, where the capital role played by the Ministry of International Trade and Industry (MITI) in the promotion of the Japanese space industry and for its penetration on international markets, is well known. In France, the CNES, which in its beginning has incited the industry to increase its competences, is now entertaining with the private sector, but not in an exclusive way, promotor to executioner relationships, notably by contractual means and by using more and more various forms of partnership. In the same way, we can observe in Canada, similar modes of cooperation on a contractual basis, aimed particularly to carry out activities of research or development of facilities by the private sector on behalf of the Canadian Space Agency.

States could not only limit themselves to promote actions of private activities, or of research activities of a partnership according to various procedures. For reasons related to the nature, the economic and financial importance of space investments and related to the consequences on an international level of space activities, a certain number of States, including those

where a preferential role is given to the private enterprise, have judged necessary to establish a political and legal framework for private commercial space activities. Indeed, the 1967 Outer Space Treaty binds the States to authorize and supervise the space activities of the non-governmental entities under their jurisdiction. As a result of this, specific provisions have been taken in the USA with the Nasa Act, the Comsat Act, the Launch Service Act and the Remote Sensing Act. These texts concern general enactments, completed by other texts adopted by Administrations (FCC, NOAA, ...) and by the States of the Federation. The same kind of provisions have been taken by States such as Great Britain, Sweden, and more recently Russia, particularly for the grant of licences.

Some States have not, however, established such a legislative framework, either because the States in these countries are the only ones to undertake space activities, or because the entities undertaking these activities are, in fact, closely controlled by the State. This is precisely the case which prevails in France, as regard to the activities of Arianespace or Spot Image. This lack of specific legislation does not, however, mean that the States have given up to exercise their supervision on the activities of private entities. Indeed, in some States, such as France, a specific legislation is unnecessary in order to make compulsory, on their territory, the international provisions of the 1967

Treaty; the international agreements that they have signed being likely to be immediately enforced in their own country.

However, it has to be noticed that this does not mean that a national specific space legislation, in order to complete or modify the national law, and in order to adjust it to the exercise of space activities, would not be useful in some countries.

3- THE INTERNATIONAL COOPERATION

Finally, space activities are obviously strongly marked by their international nature. Therefore they have been promoted for an international cooperation already specially foreseen in the 1967 Outer Space Treaty and which have taken different forms. They are carried out within the framework of bilateral intergovernmental relations, mainly on a par with space agencies. They have been also strongly developed within a multilateral framework, either by means of agreements, or by the way of creation of new and specialized structures, such as international organizations. The development of this international cooperation has had a significant influence on space institutions of States, which has also led to the sharing of authorities with regional and international space bodies.

CONCLUSION

From the above mentioned study, and from this paper which purpose is to summarize its results, three conclusions can be drawn:

(1) The first conclusion is that the institutional framework for the exercise of space activities is mostly characterized by a great diversity. Indeed, it goes from mere recourse to the existing institutions to the creation of agencies exclusively devoted to space matters, the status of these agencies -when they exist- being itself extremely varied.

(2) The second conclusion is that few countries have enacted a specific space legislation, and this for very different reasons. Moreover, it has to be recognized that such legislations do not have only for purpose to create an institutional framework, but also to complete the national existing legislations in order to take into account the juridical specificities of space activities.

(3) The third conclusion is that the States are and remain the actors of the exploration and use of outer space, but their role, in reason of the emergence of private activities, is now becoming secondary. On the other hand, the States, even outside them, are and remain bound by the 1967 Treaty to authorize and supervise space activities which are carried out in outer space.