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INTER-RELATION BETWEEN STATE AND PRIVATE ENTREPRISES IN THE COMMERCIAL ACTIVITIES IN THE OUTER SPACE

Dr. Marialetizia Longo
University of Latina (Rome)
Italy

Abstract

Today the commercial activity is an important sector for the development and exploitation of the outer space.

In consideration of growing application of space technologies in the field of improvement of life, private enterprises have now a great interest into outer space.

In the space law there is not a clear distinction between commercial activities and non-commercial ones so it is necessary a particular attention toward a regulation that can be applicable to the new cases.

The activities of private enterprises in the space are going to concentrate, for example, in the field of development of telecommunications, earth and space observation and satellite monitoring, as well as in the sector of launching of space object through the reusable or non-reusable vehicle.

The expansion of private space activities enterprise carries many problems connected to the distribution of responsibility between the private companies and the related States.

The paper underlines the possible conflicts that can arise in the field of attribution of responsibility.

It is necessary to specify what "national activity" means and if it could be reflected in the future only to the State activities.

It is important to establish where the boundary of State responsibility can be defined in relation to the commercial space activities carried out by national space enterprises to warrant the protection of third States.

In the field of regulation for commercial space activities it is useful the analysis and the comparison of the related ones in the different nations.

In consideration of the State function as warrantor of private activities it could be interesting to individuate if it can define or negotiate some limits to the commercialisation of data for security reasons.

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It is also important to analyse how a private enterprise can replace a State in operating activities as in the case of Mir.

National State and Appropriate State

The provisions of Corpus Iuris Spatialis concern the States and they are considered the direct subject of Space Law

The article VI of Outer Space Treaty states the State responsibility for national activities even if governmental agencies and non-governmental agencies carry them on. It underlines that the private enterprise cannot be defined as subject of international space law.

It is important to underline that the first treaty of corpus juris spatialis has been written on 1967 and the last one on 1979: in that period the dimension of commercial sector in space activities was quite inhexistent.

This justifies the absence of term "commercial" in the treaties.

The activities of non-governmental entities have to obtain the authorisation and continuing supervision by the appropriate State[1].

The State can be defined "National State" in the activities carried out by "governmental" entities. In the case of activities carried out by "non-governmental" entities the related State can be defined "Appropriate State[2]"

In the last years some space lawyers underlined the difference between National State and Appropriate State[3].

The National State is the State that has *jurisfaction* and *jurisaction*, the Appropriate State has only the *jurisaction*[4].

This is the first kind of "relation" between the States and the private actors.

The State's duty of authorisation and supervision is clearly underlined by the art.VI of Outer Space Treaty and it is a kind of warranty in order to the right exploitation by the private actors.

Even if there is this kind of distinction, the liability is connected to the concept of "launching State" that could be referred to the National State or Appropriate State without any kind of importance.

State's Liability for Private Space Activities

Today, the growing of commercial activities underlines the need of new rules in order to clarify the position of States relating to the activities carried out by national "enterprises".

On this purpose it could be interesting to underline the difference among the various kind of space activities.

The public space activities are the activities carried out by public entities; the private space activities are the activities carried out by private entities.

The commercial space activities are the activities that can be undertaken by private and public entities.

It is important to understand when a commercial activity is carried out by a public entity in

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the national interest and when it is carried out in a commercial interest.

In the Space Law there is no provisions in order to connect the liability[5] directly to the private entities.

In the air law, instead, there are already some particular provisions that make the private carriers and the operators liable for particular kind of damages such as the damages occurring on board aircraft and on the ground.

According to the Space Law there is always a State that can be considered liable or responsible for the space activities[6].

The State can not be considered extraneous in order to the liability and responsibility for the "national" activities even if it can prove his diligence in the field of control and monitoring.

The increase of number of space activities needs some new dispositions in order that the State can be considered liable and responsible according to its position in the specific activity.

It is important to analyse the nature of single space activity because in the case of commercial purpose the compensation could be more expensive in order to safeguard the people and the property from the bigger risks of commercial exploitation of outer space.

In the Liability Convention there is no provisions about the limit of the compensation of the damages resulted from space activities. This kind of approach is not acceptable in the case of commercial development of space activities.

The enterprise has to know the limit of compensation. This limit of compensation is required also in the case of insurance.

The enterprises have to know the limit of compensation in order to analyse if the comparison between risks and benefits-profits is advantageous.

With the growing number of international ventures the exception to the total compensation, according to the art. VII of Liability Convention, is a theme that could prejudice the defence of the victims.

Are the nationals of private enterprises parties to the venture excluded by any kind of compensation? Is it possible to have only one launching state in the case of ventures' activities?

One of the possible solutions of conflict between States' interests and private actors' ones in the field of liability could be the introduction on the concept of preventive liability in the space law[7].

The key point of preventive liability is the damage prevention rather than the damage remedy.

This "new" kind of liability could make possible to have more attention in order to prevent the possible interference among space objects (satellites first of all) and also the human error in manufacturing and technical malfunction.

The preventive liability could be a incentive for a growing competition in operating space activities so it could be a key role in the field of improvement of quality of commercial space operations.

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Some National provisions in the field of Liability

The liability is a theme that is just regulated at national level so we could face some different provisions in the same case that could make difficult to find the solution of juridical questions.

In this case an enterprise that wants to carry out some space activities could choose to be registered in the nation where the provisions are more convenient.

It could not be a good idea to let the Single State regulate the question according to its own needs.

Some States involved in commercial space activities, in fact, have already realised some specific agreement in order to clarify the inter-relation between the State and their own enterprises. They are: United States, France, Sweden and United Kingdom.

In the Commercial Space Launch Act of 1984, amended on 1988, the United States provided a defined cap on liability but also in order to the specific activity carried out[8].

In a particular agreement about the Arianespace activities, France states the maximum limit of compensation in 440 million FF that Arianespace has to pay to the national government in case of damages.

Sweden and United Kingdom have only translated in his national disposition the principle of unlimited compensation of Liability Convention.

The themes of responsibility and liability are connected to the concept of damage.

According to the Space Law the damage is defined as "loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons, natural or juridical, or property of international intergovernmental organizations.

In the last years some authors[9] have already observe that the list of damages of art.1 of Liability Convention is not complete.

Nowadays this definition could be not good to cover all damages that can arise by future commercial space activities.

In order to make sure the defence of enterprises in operating in outer space it could be important to define all the typologies of damages that can occur to a space object or a space system.

In the field of telecommunication, for example, it could be possible that a private actor has to suffer a particular kind of damage that can be defined as loss of profit.

At the moment if a space damage occurs, there is not any kind of provision in order to compensate a private actor that experiences a great prejudice in his operating space activities, so in his capacity to make profits.

A private actor could be suffer an indirect damage or a deferred damage but also in these cases the Liability Convention doesn't provide any kind of recognition.

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In a commercial approach to the space activities, perhaps, there is a need to provide a system of protection of enterprises' loss of profits even if only some national States Parties recognise theses kind of damages in their own regulations.

In order to the operating of the new Space Station it could also important to introduce among the "space" damages also the biologic one. The persons that will live in the Space Station has to support some particular conditions that could be a prejudice for their health. This people need a particular kind of defence.

These "envoys of mankind" have to be safeguarded by a possible exploitation by private enterprises involved in commercial activities on the Space Station.

Commercialisation of Space Station and Launch Services and Privatisation of International Space System

Among the cases of private space activities in the near future there are the possible commercialisation of Space Station and Launch Services and the international satellite systems.

The future activity of Space Station[10] is a focal point in the field of inter-relation among States, international enterprises and international organisations.

The economic and commercial development of Space Station activity is already clear by public position of some of the Parties such as ESA and USA.

There are already two documents that analyse the possible development of Space Station activities as demonstrated by the "Commercial Space Act" of 1998 and the "Commercial Development Plan for the International Space Station".

This commercial approach for the Space Station activity could make possible the reduction of costs. The States and the International Organisations parties could have to face the guide-lines of the commercialisation of data to private enterprises.

Nasa have just supported the commercial approach with many reports and documents to underline all the positive aspects of privatisation of some activities.

In the sector of relation between States and private actors another kind of problem concerns in the real property right.

For the space activities this concept can't be referred to the national sovereignty because it is not possible for any State to claim sovereignty right on Outer Space.

At the moment the art.21 of IGA already statues the applicability of national law of launching State to research results.

The theme of property right could be linked to the question of National State's obligation to retain jurisdiction and control[11].

Only the USA has provided a particular legislation in order to define the question of patents[12].

Because of the high costs the launch services[13] is another of the most important commercial sectors of space activities is the launch market.

At the moment there are many entities that make launch

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services in the Outer Space for other enterprises.

On this purpose it could be important to clarify the position of "launching State".

It can not be always considered liable for the damages caused by a space object launched from its territory by a non-governmental entity for another private actor. The State could be considered liable at least for the damages occurred in the launching phases for a malfunction of site.

There are only two States – UK and USA[14]- that provided to regulate the question but according to the new trend of the sector these agreements could be no more exhaustive to regulate the activities.

At the moment the launch services are regulated only by particular bilateral agreements related to the specific activities.

With the increase of launch service ventures there will be also a problem about the identification of Supervisor State.

The supervisor State could be the national State of launch service enterprise, the national State of enterprise owner of the launched object or the State from whose territory or facilities the space object is launched.

Another important point of inter-relation between State and Private actors concerns the trend in the privatisation of space object and space activities.

One of the most actual cases of privatisation is the Mir one.

On February Energuia, the Russian society that was the exploiter of Space Station Mir, signed an agreement with a new society MirCorp. This agreement changes the destination in utilisation of Mir.

Mir will use with commercial aims in the field of tourism, advertising, scientific research and industrial production.

The example of Mir underlines the question of regulation in the field of privatisation because it is important to establish some limits in utilisation of space object and its conversion in order to prevent a bad exploitation.

We have to understand if a new actor who buys a space object of a space system can change its nature according with private interests without any kind of limit.

In the nineteen sixties, many States jointed the realisation of inter-governmental telecommunication systems such as INTELSAT, INTERSPUTNIK, ARABSAT, EUTELSAT[15]. States controlled the operations of these kinds of satellite systems so they were connected to political and institutional decisions.

Thirty years later, we are facing the growing privatisation and the related liberalisation of telecommunication sector.

It is clear that the attention of private enterprises in the exploitation of telecommunication systems focuses the satellites sectors where they can realise larger profits.

The first system that has been privatised was Inmarsat[16]. From a general analysis it is clear that the private enterprise replace the international organisation.

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From a commercial point of view the companies are free to establish the level of investments in order to influence the market but the international organisation maintains a role of supervisor.

This role of States in controlling and monitoring underlines the involvement of the States in relation to a possible liability.

From a juridical point of view it is interesting to underline that every enterprise has a nationality so there will be a national law that could be applicable to the related operations; So we are going to move from an international approach where the decisions are connected to political and institutional reasons to a system market-oriented.

The future space commercial activities will be regulated by bilateral or multilateral specific agreements among the parties of commercial space activities – States and Private actors – in order to define the themes of intellectual property[17] and the related patents, the limit of compensation and the sharing of responsibility.

It could be interesting also to realise some general agreements with a distribution of competencies, liabilities and monitoring services of different kind of activities in order to the different phases and different roles of the actors.

The project UNIDROIT[18] could be a good answer to both these legal and economic problems because it aims to find the right compromise between the juridical exigencies and the economic ones.

Conclusion

The particular nature of space activities, their risks, their alea, their subject underlines the actual impossibility to translate from an approach founded on the figure of States as warrantors to a commercial approach in which the interests of enterprises could be considered the only guide line.

There are some principles that have to be defended from a risky exploitation of outer space as the safeguard of astronauts involved in commercial activities, the equal possibilities of access to the outer space resources and the maintenance of a real defence of public interests.

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[2] Art. VI Outer Space Treaty

[3] BOCKSTIEGEL *"The term appropriate State"* in Proc of the 37th Colloquium on the Law of Outer Space, Jerusalem 1994 *international law"* in Proc of the 37th Colloquium on the Law of Outer Space, Jerusalem 1994

[4]WASSEMBERG *"Public law aspects of private space activities and space transportation in the future"*

[5] VON DER DUNK *"Commercial Space Activities: an inventory of liability – an inventory of problems"* in Proc. of the 37th Colloquium on the Law of Outer Space, Jerusalem 1994,

[6] Art VI Outer Space Treaty *"State Parties to the Treaty shall bear international responsibility for national activities in outer space, including the moon and other celestial bodies, whether such activities are carried on by governmental agencies or non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty, The activities*

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of non- governmental entities in outer space,shall require authorisation and continuing supervision by the appropriate State Party to the Treaty..."

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