Alternative Dispute Resolution in the Field of Satellite Communications

Focus on Harmful Interference

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Abstract

Apart from technological innovation and capital investments, the satellite industry is hugely dependent on two natural resources – a geostationary position in space for the physical location of the satellite and an interference free spectrum for the transmission of the electromagnetic signal. Geostatic positions and frequency allocations on an international level are done within the legal framework of the International Telecommunications Union and can only be assigned to sovereign Member States. At the same time, most satellite communication operators are private commercial entities, licensed and supervised by their respective national administrations. Many of these private operators have concluded special agreements amongst themselves, regulating specific issues concerning orbital positions and harmful interference. This particularity of the sector leads to a situation whereby most disputes relating to frequency allocation and interference combine a private and a public component.

Adjudication remains an available means for settling frequency and interference related disputes. As such, however, it has rarely been used. This article focuses on alternative means of dispute resolution such as arbitration as a more viable and available possibility and examines the associated advantages – such as speed flexibility and confidentiality. Furthermore, it examines potential fora for the settlement of disagreements. First of all, the ITU Constitution provides for a dispute resolution procedure in its article 56 and some 64 Member States of the Union have also acceded to an Optional Protocol on the Compulsory Settlement of Disputes Relating to ITU regulatory regime. In practice, these provisions, have never been used, however. Secondly, in 2011 the Permanent Court of Arbitration (PCA) promulgated Optional Rules for the Arbitration of Disputes Relating to Outer Space Activities in order to address the specific conflicts of States, international organizations, and private entities arising from their activities in Outer Space. It has been argued, and rightfully so for the application of these for frequency allocation and interference-related disputes. Again, recourse to this forum has not yet happened in this regard. The International Chamber of Commerce's Arbitration Court in Paris, on the other hand has seen an

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orbital/frequency utilization dispute, arising from a coordination agreement between operators. The article will analyse these three arbitration options with a view to recommend a most practical way forward for frequency/orbital resource related disputes in an increasingly commercialized, but hugely state-oriented international legal environment.

I. Introduction

Disputes are an inalienable part of any relations – be it between human, juridical persons or sovereign States. A dispute is defined as a "specific disagreement concerning a matter of fact, law or policy in which a claim or assertion of one party is met with refusal, counter-claim or denial by another party."[1] The current article deals with disputes of an international nature pertaining to the field of satellite communications, and more specifically, stemming from cases of harmful interference to these systems. An international dispute is characterized by the fact that it involves governments, institutions, juridical persons and private individuals from various parts of the globe.[2] Satellite Communications are a specific field of telecommunications, which involves the use of one or more satellites in space for reception and/or transmission of radio waves. Harmful interference, in turn, is defined, within the Constitution (CS) and Radio Regulations of the International Telecommunications Union. (ITU) as "Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with the Regulations".[3] This article is divided into three parts as the first one analyses relevant alternative dispute resolution methods; the second one presents the specificities of the satellite communications industry as such; and the last one looks into three dispute resolution frameworks applicable to disagreements, involving harmful interference, with a view to draw lessons and conclusions.

II. Alternative Dispute Resolution

"Disputes, whether between States, neighbours, or brothers and sisters, must be accepted as a regular part of human relations and the problem is what to do about them" – this is how a textbook on international dispute settlement introduces the problematic. The peaceful resolution of disagreements is one of the central pillars of the inter-state relations – political and economic alike. As a starting point, reference is made to the United Nations Charter, signed

1 J.G. Merrills, *International Dispute Settlement,* Cambridge, Cambridge University Press, 2011, p. 1.
2 Supra note 1.
3 ITU RR, Art. 1.169.

on 26 June 1945 and entered into force on 24 October 1945.[4] Currently it counts 193 signatory States and its preambles sets forward a determination to "establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained." Pursuant to Article 2(3) of the Charter – States agree to "settle their international disputes by peaceful means in such a manner that international peace and security, and justice are not endangered." A further Chapter VI of this international treaty provides provisions explicitly for the Pacific Settlement of Disputes in articles 34 to 38. Specifically, when faced with a conflict, Member States are expected to "first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice."[5] Thus, both legally binding and non-binding means of resolving disputes are being enumerated and recommended, while the biggest importance is allocated to the *peaceful resolution*. It is noteworthy, however, that the first means that are listed, and thus unofficially preferred are those means, which do not involve a judicial involvement or settlement.

From an economic perspective, as well, dispute settlement is the central pillar of the multilateral trading system, set up within the framework of the World Trade Organization.[6] The organization underscores that without a means of settling disputes, its rules-based system would be ineffective and unenforceable. The WTO offers a forum for the judicially binding settlement of disputes, but concurrently, it also stresses a preference for a non-judicial resolution. The point is not to pass judgement. The priority is to settle disputes, through consultations if possible.[7] From those two, central international law treaties, the 3 basic dichotomies can be extracted: 1) peaceful dispute settlement vs one, which involves the use of force; 2) agreement-based resolution and adjudicative such and 3) settlements respectively in and outside the courtroom.

Alternative Dispute Resolution (ADR) is the term used to refer to any means of settling disputes outside of the courtroom and typically includes early neutral evaluation, negotiation, conciliation, mediation, and arbitration.[8] Thus, it denotes both agreement-based and adjudicative approaches.

4 UN Charter, available at http://www.un.org.
5 UN Charter, Art 3.
6 WTO, Understanding the WTO: Settling Disputes, available at: https://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm.
7 Supra note 6.
8 Legal Information Institute, Cornell University Law School, "Alternative Dispute Resolution", available at https://www.law.cornell.edu/wex/alternative_dispute_resolution.

II.1. Forms of ADR

The two most common and major forms of ADR are arbitration and mediation, but negotiation is almost always attempted first to resolve a dispute. Even if another method is chosen by the parties, negotiation is not displaced, but "directed towards instrumental issues" such as the arrangements for implementing an arbitral decision or the terms of reference for the inquiry.[9] The main characteristics, advantages and disadvantages of these dispute resolution techniques are demonstrated below and will be later applied to the specific subject of harmful interference with satellite communications.

Negotiation allows the parties to meet in order to settle a dispute and when it comes to inter-state disagreements, this is established via diplomatic channels, through the respective ministries of foreign affairs, foreign offices or specially designated agencies. Alternatively, negotiations can also be initiated within the framework of international organizations, at various fori or summit meetings.[10] Understandably, for a negotiated settlement to be at all a possibility, parties must be of the opinion that the benefits of an agreement would outweigh the losses[11] and in turn, the phases, the steps of the negotiation can refer to either the substantive issues of the dispute or the procedural such.[12] When it comes to the advantages of negotiation, these are most often analyzed and presented in a comparative analysis with court adjudication. In this context, negotiation is preferred since it allows parties to retain maximum control over their dispute, while adjudication, on the contrary, 'takes it out of their hands', at least when it comes to the final decision itself. As a natural consequence of this 'retaining of control', acquiescing to negotiations for the resolution of a dispute has the advantage (or in some cases disadvantage) that the process remains private and various considerations, positions or trade secrets need not be revealed to the public or to third parties. In the case of disputes concerning the satellite communications industry, which is highly dependent on technical innovation and sensitive information, this feature would be particularly important.

Mediation, in turn, is the process whereby parties to an international dispute resort to a third party as a possible means of leading the discussions, or presenting options for the resolution of a potential stalemate. The

9 Supra note 1.

10 The issue as to whether negotiations within the framework of international organizations can be regarded as appropriate alternatives to conventional negotiations has been dealt with in cases of the International Court of Justice (ex. South West Africa case, Northern Cameroon case). This subject is outside the scope of this article, however, and both forms are considered together for the purpose of this piece.

11 Supra note 1. p. 11.

12 Supra note 1.

involvement and the role of this party may vary – it may simply provide another forum for the discussions – ie. good offices, or lead those, or even advance proposals for a ways forward.[13] What is important when one considers mediation as a form of ADR, is that the parties are under no legal obligation to accept the suggestions of the mediator, which in practice means that they still retain control over the process. Concurrently, however, the presence of a third side, especially when it comes to hugely important political matters or crucial deals, generally makes the parties more willing to negotiate, talk, or compromise then during direct strictly bilateral talks.

The two important conditions for a successful mediation are the presence of a willing and capable mediator as well a genuine willingness on the side of parties to still find a solution to the dispute without resorting to strictly judicial means. Once again, the mediator's proposals are not legally binding and thus, consent to its functions is vital.[14] The function of the mediator is often assumed by international organizations or national governments. The Secretary General of the UN or his counterparts have often intervened in mediations – through institutions such as the International Committee of the Red Cross, the Pope or the European community. In the field of satellite communications and more specifically on matters, related to harmful interference, the international organization, which could potential serve a crucial function as a mediator is the International Telecommunications Union. Officially, this has not yet happened, nor has this possibility been envisaged within the founding documents of the ITU. Nevertheless, a number of factors would actually make the ITU and excellent mediator: its status as an international organization with the highest number of Member States in the world, its function as mostly a technical organization with perceived neutrality on political matters as well as the high level of expertise on scientific and engineering problems. The potential and proposed roles and functions of the ITU in relation to ADR will be analyzed in greater detail in the third part of this article.

Somehow between negotiation, mediation and arbitration on the international arena of alternative dispute resolution, attention is also attributed to inquiry and conciliation. These would normally require the setting up of specialized commission, charged with the functions of investigating the impasse. The main difference between the two methods is that "unlike an inquiry, whose whole *reason d'etre* is to illuminate the dispute, a conciliation commission has as its objective the parties' conciliation."[15] Thus, its investigative powers are simply a means to an end. Importantly as well, the recommendations or findings of said commissions are not legally binding and may be rejected by the parties at any time.

13 Supra note 1.
14 Supra note 1.
15 Supra note 1.

A non-judicial and yet legally binding method of settlement of disputes under international law is arbitration. Historically speaking, it was also the first to develop and it inspired the creation of permanent judicial institutions as well.[16] Arbitration can be led either by a single sovereign arbitrator or by a specially set up commission, as the common denominator is that these need to be agreed upon by both parties to the dispute. The procedural arrangements, as such, are the responsibility of the parties, ie – where the process will be held, how the proceedings would be paid, what specific questions would be arbitrated upon, the scope of the arbitrator's jurisdiction.

The principal advantage of arbitration over the other methods of dispute settlement that were discussed, is the fact that the decision produced is binding, while at the same time, the parties to the dispute retain a general level of control over the proceedings as such. Thus, States would take a case to arbitration with the intention that the dispute needs to be put to an end, and irrespective of the decision, both sides would comply. For this to happen, however, a number of preconditions are needed, in order to make sure that the arbitral decision will not be considered as null. That is, an arbitrator should have the relevant jurisdiction stemming from a valid and enforceable legally binding instrument. In addition, both sides should be given a fair opportunity to present their case and the reasons for the decisions should be properly outlined. Fraud or deceit can be other reasons as to why an arbitral award may be considered null.

It is noteworthy to point out that arbitration as such has retained an important plane in international treaty practice and is to be found in the dispute provisions of multilateral and bilateral conventions on a wide array of subjects.[17] Some international documents provide for compulsory arbitration, while others include it as an optional procedure. In many cases, as well, the treaties themselves even specify how the parties are to accept arbitration in advance as well as how the proceedings should be organized. The field of telecommunications makes no exception thereby.

In addition to that, and of importance to the topic of this article, is the differentiation between private and public arbitration. Arbitration set up by States to decide a case between them must be delineated from the type, whereby individuals or corporations are involved in the disputes. The second type is also referred to as international commercial arbitration and basically, it represents an extension of the public procedure to private disputes with an international element, a way of resolving disputes outside of the traditional institutions.[18]

16 Supra note 1.
17 Supra note 1.
18 Supra note 1, p. 107.

II.2. Parties to the Dispute; Advantages and Disadvantages of ADR

Any dispute settlement procedure is primarily about the parties to the discord and these can be three different types – sovereign States, intergovernmental organizations and private parties.[19] When the advantages of the system are being delineated, it is important to point out whether these are being considered from the point of view of the parties to the dispute, from the point of view of the general public or public policy, or whether the mere end of the conflict as such is considered as the main goal. For the current analysis, the point of view of the parties to the dispute will be considered in outlining the main advantages and disadvantages of ADR.

The main questions of concern to the parties to the disputes are those of costs, control, privacy vs transparency and enforceability. Generally, negotiation and mediation are less costly than arbitration or adjudication and in addition those two methods also guarantee that control over the decision remains with the parties to the dispute rather than being handed over to an external body. As such, sensitive information – commercial, economic or political also remains outside the public domain. This gives the parties a certain level of comfort, control and certainty when it comes to the process itself. The main disadvantages, at the same time, is that negotiations and mediations may be used simply as a stalling tactic by one party and a final binding result is not in itself a guaranteed. This is why, compared to those two methods, arbitration is chosen when faced with a greater impasse and when a binding result is needed. Indeed, arbitration is an important means of handling international disputes, but it also has some significant limitations. States would be unwilling to resort to it for much the same reasons that they would also be unwilling to pursue a judicial settlement. A lot of legal academic discourse has focused around the advantages and disadvantages of arbitration. The most widely cited work is that of Owen Fiss – Against Settlement from 1984. Fiss objected to settlement for, among other things, securing the peace while not necessarily delivering justice and denying the court the opportunity to interpret the law.[20] Ever since many academics and practitioners alike have aboarded the subject, with differing or supporting views. In any case, despite its critics, arbitration remains the method of

19 Frans von der Dunk, "Space for Dispute Settlement Mechanisms – Dispute Resolution Mechanisms for Space? A few Legal Considerations", Space and Telecommunications Law Program – *Faculty Publications*, Paper 38, http://digitalcommons.unl.edu./spacelaw.

20 Owen Fiss, "Against Settlement". *Faculty Scholarship Series*. Paper 1215. Available at http://digitalcommons.law.yale.edu/fss_papers/1215.

settling disputes, which most completely combines the positive features of a court adjudication and parties-led negotiation.[21]

On the international arena, one of the biggest advantages of arbitration over adjudication when it comes to the private sector, is enforceability. On the basis of the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards from 1958 (hereinafter the New York Convention), an arbitral award made in one contracting State is to be recognisable and enforceable in another contracting State. At the time of this article, the New York Convention has 156 contracting parties. It applies to arbitrations which are not considered as domestic awards in the lieu where recognition and enforcement is sought.[22] The Convention was advanced and lobbied for by the International Chamber of Commerce, whose relevance in the field of satellite communication disputes will also be analyzed in the third part of this article.

An additional particularity, especially important when it comes to disputes relating to the field of satellite communications is the issue of expertise. In an ordinary trial involving complicated and technical issues that are not understood by many people outside a relevant industry, a great deal of time has to be spent educating the judge or the jury, just so they can make an informed decision. This large time investment often translates into a great deal of money being spent. When it comes to ADR, and arbitration in specific, this problem is hugely minimized and the parties can choose to have their dispute arbitrated (or mediated for that matter) by a recognized expert in the relevant field.

III. Disputes in the Field of Satellite Communications

Disputes can be particularly damaging in the field of telecommunications – this is an industry, which offers high rewards for participating parties, but also necessitates huge investments and technological challenges.[23] Even a

21 Michael Moffitt, "Three Things To Be Against ("Settlement" Not Included)", 78 *Fordham Law Review* 1203 (2009). Available at: http://ir.lawnet.fordham.edu/flr/vol78/iss3/6.

22 Additionally, there are three types of reservations that countries may apply: Conventional Reservation – some countries only enforce arbitration awards issued in a Convention member State; Commercial Reservation – some countries only enforce arbitration awards that are related to commercial transactions; Reciprocity reservation – some countries may choose not to limit the Convention to only awards from other contracting States, but may however limit application to awards from non-contracting States such that they will only apply it to the extent to which such a non-contracting State grants reciprocal treatment.

23 Raymond Bender Jr, "International Arbitration – Satellite Communications: Arbitrator Perspective," in (eds). Horacio A. Grigera Naon and Paul E. Mason,

short-lived dispute, affecting the everyday operations within the industry can lead to enormous financial losses and a protracted one can endanger continued operations as such. Satellites are the vital component of modern telecommunications infrastructure and are being used to deliver voice, data and video signals across the entire planet.

III.1. Regulating Satellite Communications

The governmental nature of the body of law governing activities in outer space – that is anything happening at an altitude of more than 100 kilometers upwards – where satellites are placed[24] – has created a paradigm whereby any relevant international disputes would be exclusively the responsibility and within the authority of State agencies and diplomats.[25] The same is true for the specific branch of international law, dealing with satellite communications the allocation of electromagnetic frequencies for communication and issues of harmful interference. These issues are governed by space law provisions to the extent that satellites are placed in outer space, but primarily by the texts adopted within the framework of the International Telecommunication Union – the Constitution, the Convention and the Administrative Regulations of the ITU.

Private interest and activities, however, are increasingly becoming more prevalent in outer space and in satellite communications. These areas of international law have begun to merge with area of traditional law, such as property law, intellectual property law, contract law.[26]

The communications satellite industry is heavily regulated at the national level by government agencies, responsible for overseeing the operation of satellite networks.[27] Reference is made to article VI[28] of the outer space treaty

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International Commercial Arbitration Practice: 21st Century Perspectives LexisNexis, 2010.

24 Sten Odenwald, NASA, "Where does the atmosphere end and outer space begin?", available at http://image.gsfc.nasa.gov/poetry/ask/q2136.html.

25 Michael Listner, "A New Paradigm for Arbitrating Disputes in Outer Space", *The Space Review: Essays and Commentary about the Final Frontier*, Jan 2012, available at http://www.thespacereview.com/article/2002/1.

26 Supra note 25.

27 Supra note 23.

28 Art VI OST states that "States 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 by 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 of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the moon and other celestial bodies, by an international organization, responsibility for compliance

as well as to the constitution, convention and radio regulations of the International Telecommunications Union. Thus, "the activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty."[29] In a much similar way, the ITU Constitution provides that Member States of the Union are supposed to take the necessary steps as to impose the observance of the provision thereby upon operating agencies authorized by them to establish and operate telecommunications and which engage in international services or which operate stations capable of causing harmful interference to the radio services of other countries.[30]

Deployment of satellite systems is regulated on the basis of the OST while the frequencies upon which they transmit are regulated pursuant to the ITU framework. In both cases, the parties to these instruments of international law are sovereign governments and private actors are to be supervised accordingly.

Potential parties to a satellite communications dispute can thus be:[31]

1. Satellite system operators that deploy the satellite systems and offer services to consumers and broadcasters.
2. Spacecraft manufacturers.
3. Launch service providers, which provide the launch vehicles and the placing of the satellite into orbit.
4. Insurance carriers, which are responsible for the insuring the risks associated with the construction, launch and operation of a satellite.
5. National regulatory agencies – which are entrusted with the authorization and overseeing of private activities in outer space, pursuant to the Outer Space treaties and the ITU legal documents. In addition to that, a potential party can also be the State, which is qualified as the 'launching State', pursuant to the Liability Convention.[32]

Apart from national governments active in outer space, the first global satellite systems were actually first deployed by intergovernmental organizations (IGOs) – INTELSAT, INMARSAT, Eutelsat and Intersputnik. It was in 1962 that the 85 world countries signed the agreement on the International Telecommunications Satellite Organization (INTELSAT), which

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with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization."

29 610 UNTS 205 / 6 ILM 386 (1967) / [1967] ATS 24, Art VI.

30 ITU CS, Art 6.2.

31 Supra note 23.

32 LIAB, Art I(c).

was to provide international phone calls and television signal relay.[33] In turn, in 1977, another IGO was created with the purpose of developing a satellite-based telecommunications system for Europe – Eutelsat. Both these organizations were later privatized and are now operating a fleet of satellite as private companies. Intersputnik, in turn, which was the equivalent IGO of the Soviet Union and the countries from the Eastern bloc, is now also restructured, although it continues to operate as an international organization. Even before the, privatization and restructuring of these entities, there was a shift towards an increased commercialization of space activities by private actors.[34] Nowadays, the satellite services market is a highly competitive one with numerous private actors, in addition to those mentioned already. Thus, SES Luxembourg nowadays operates more than 50 satellites in orbit, Sky Perfect JSAT, Japan – more than 16; Telesat Canada – 10 satellites in orbit. Successful operators with huge investments are also based in Saudi Arabia, China, Brazil, Spain and Australia.[35]

Satellite manufacturers, in turn are those companies responsible for the design, production and testing of a satellite. This is a product costing within the range of 100 to 200 million euros[36] and not surprisingly, there are not many companies that are offering this service. The main manufacturers of big commericial satellites are Boeing, Lockheed Martin, EADS/Astrium, Thales Alenia Space, Mitsubishi Electric, Orbital ATK, Space Systems Loral, JSC Russia, and INVAP.[37]

The next player in the chain of events is the provider of the launch service – again an extremely risky and complicated operation. The process includes the placement of the satellite on a launch vehicle, to be delivered to a certain orbital spot. At a certain moment during the flight of the launch vehicle, the satellite is released and boosted into higher orbit by its own motors.[38]

Given the immense costs associated with this entire process – the production, launch and operation of satellites, it is only reasonable to expect that insurers would play a huge role. Not only, having appropriaye insurance is sometime even a requirement for those private companies that want to undertake space activities, pursuant to the national laws of many countries. In this regard, talk is of pre-launch insurance, launch and in-orbit insurance.

Lastly, it is also very important to mention the role of national regulatory agencies that control, oversee and authorize the activities of satellite

33 Supra note 23.
34 Supra note 23.
35 Lance Marburger, "2014-Top 26-FSS-list", *Space News*, available at http://spacenews.com/wp-content/uploads/2015/07/2014-Top26-FSS-list.jpg.
36 The reference is to fixed geostationary satellites used for communications.
37 Supra note 23 and also: Jorge Ciccorossi, ITU, Interview conducted on 1 September 2016.
38 Supra note 23.

operators and launch companies. In the United States, for example, this is the Federal Communications Commission, while in Luxembourg – it is the Institut Luxembourgeois de Régulation (ILR).[39]

III.2. Potential Disputes in the Satellite Communications Industry

Given the wide array of contractual relationships that are present between the different parties to a satellite communications launch and operations, the potential disputes could be numerous as well. The types of disputes in the satellite communications sector can be multifaceted – relating to infrastructure, interconnection, investment, trade or contractual and consumer matters.[40] Most often, these pertain to the allocation of the risks between the different private actors – during the manufacturing of a satellite until its put into operation and after that. Many satellite disputes have to do with the clauses on limitation of liability: the extent to which such provisions are enforceable is a recurring issue. Generally, satellite industry parties resort to international arbitration whenever they are faced with such an issue of contract law.[41] Arbitration is the method of resolving disputes most preferred by the satellite industry in that regard. A notable examples includes – a case involving Eutelsat and Alcatel Space – whereby the operator filed a claim with the ICC for some 191 million USD for damage to a satellite, which resulted from a fire in the test chamber of manufacturer's facility.

Apart from strictly contractual disputes, however, an often recurring problem in this field is that of harmful interference, as it was defined in the introduction. Thus, the following section will look into the ways ADR can be applied to issues of HI.

IV. ADR in Satellite Communications – Focus on HI

Effective and efficient dispute resolution mechanism are particularly vital for the sustainable development of global telecommunications – increasingly so in light of the magnitude of investments in the field, the multiplying number of actors in the field, the disparity in development between countries, and the increased deregulation of the sector at a national level.[42]

In the early stage of activities in outer space disputes were more likely to occur among subjects of public international law. Therefore, the International Court of Justice (ICJ) appeared as the natural place for a

39 See the resepctive websites at: http://www.ilr.public.lu/services_frequences/index.php; https://www.fcc.gov/.

40 ITU, "Dispute Resolution in Telecommunications", available at http://www.itu.int/itunews/manage.

41 Supra note 23.

42 Supra note 40.

decision on any such dispute. Arbitration was the second possibility, either in the context of the Permanent Court of Arbitration (PCA) or ad hoc. Yet, neither the ICJ nor the PCA ever became involved in the settlement of space law disputes on their merits.[43]

IV.1. ICC Arbitration

Thus, the first ADR option that will be examined is international commercial arbitration within the special body of the International Chamber of Commerce – the International Court of Arbitration. Notably, the Court has developed resolution mechanisms specifically conceived for business disputes in an international context: disputes posing unique challenges, usually because the parties will be of different nationalities, implying varied linguistic, legal and cultural backgrounds.[44] Pursuant to the explanation on its very website, the Court provides parties with a "flexible and neutral setting for dispute resolution."[45] It offers confidentiality as well as great freedom for parties to choose the framework for how and where they want to resolve their disagreements. While the dispute itself is resolved by independent arbitrators, the Court supervises the process from beginning to end, increasing the quality of the process and enforceability of the awards. There are no restrictions as to who can use ICC Arbitration or who can act as arbitrators.[46]

One of the reasons why ICC arbitration is a viable and often very sought after option by satellite operators, is the fact that it brings together private parties with a view to arrive at a binding decision. Here two important clarifications as to the specific problem of Harmful Interference is needed. Firstly, HI can be both intentional and non-intentional. Cases of non-intentional interference are many more than the relatively rare cases of intentional occurrences.[47] At the same time, however, non-intentional cases are much easier to resolve and this normally happens with pure consultations at the level of the private satellite operators themselves. Secondly, the way that HI is currently codified within the legal framework of the ITU, private operators do not have any rights of complain on the international arena –

43 Maureen William, "Dispute resolution regarding space activities" in (Ed.) by Frans von der Dunk, *Handbook of Space Law; Research Handbooks in International Law series*, Elgar Online, 2015.

44 ICC, Arbitration, available at http://www.iccwbo.org/products-and-services/arbitration-and-adr/arbitration/.

45 Supra note 41.

46 Supra note 44.

47 ITU, BR Director's Report to WRC-15 dealing with Harmful Interference to Space Services, Annex 2 to Addendum 1 to Doc. 4. Available at http://www.itu.int/md/R15-WRC15-C-0004/en.

alternatively it is the Member States of the ITU, who have registered the specific frequency assignment that can take the matter further.[48]
Thus, it is most likely the case that satellite operators would approach the ICC when they are not able to reach a solution between themselves; when they do not see the utility of leaving the issue to be managed by their Member State administration, when it is a rather commercial issue and when a swift, yet confidential resolution is needed. Al already outlined, businesses choose arbitration over litigation because of its neutrality, finality, enforceability, procedural flexibility, and the ability to choose the arbitrators.
The most well-known example of an ICC arbitration related to harmful interference is the one between Eutelsat and SES that was initiated in October 2012 under the rules of the International Chamber of Commerce (ICC) in Paris.[49] Although the case was mainly based upon an alleged breach of an Intersystem Coordination Agreement signed between SES and Eutelsat, the issue at its heart had to deal with the right of use of specific 500 MHz of bandwidth in the 28.2/28.5° East orbital arc.[50] This right of use would also imply that HI to the operations would not be permitted. The ICC did come out with two main preliminary findings,[51] but eventually the two companies reached a number of settlement agreements between themselves. Thus, the maxim still applies: "A bad deal is always better than a good arbitration," signalling to the need for a quick and private decision making process.

IV.2. Permanent Court of Arbitration and Satellite Communications

The PCA is an independent international governmental organization that was established in 1899 by the Convention for the Pacific Settlement of International Disputes (the Hague Convention) during the conclusion of the first Hague Peaceful Conference. The Convention was revised in 1907 during the Second Hague Peaceful Conference, and it currently has more than 100 signatory States.[52] Article 15 of the revised Hague Convention defined international arbitration as "recourse to the pacific settlement of disputes between States by judges of their own choice based on the respect for law",

48 ITU CS, Art 6.
49 SES, "SES and Eutelsat settle their dispute and conclude a series of agreements concerning the 28.5 degrees East orbital position", available at http://www.ses.com/4233325/news/2014/16846982.
50 Eutelsat, Press Releases, 2013 Archive, available at http://www.eutelsat.com/home/news/press releases/Archives/2013/press-list-container/eutelsat-statement-on-operatio-1.html.
51 The ICA does not bar SES from using the disputed bands if and when Eutelsat does not hold the "regulatory" right to operate in these bands; SES did agree that Eutelsat would use the disputed bands as long as Eutelsat held the "regulatory" right to operate in these bands.
52 1907 The Hague Convention for the Pacific Settlement of International Disputes, 1971 U.K.T.S. 6, 1 Bevans 577, 2 A.J.I.L. Supp. 43 (1908), Art 37.

with recourse to arbitration representing an engagement with good faith to the award.[53] As previously demonstrated modern day arbitration is much more flexible than that and may include a number of different types of parties or disputes.

On the 6th of December 2011, the PCA promulgated Optional Rules for the Arbitration of Disputes Relating to Outer Space Activities in order to address the specific conflicts of States, international organizations, and private entities arising from their activities in Outer Space. The Rules are a voluntary mechanism for the settlement of disputes and are open to all parties, who also have the ability under the Rules to keep their confidential interests protected throughout the course of the arbitration.[54]

Specifically in relation to activities in Outer Space and by extension as well to satellite communications, international arbitration within the PCA framework has several advantages which makes it particularly well suited to the resolution of contemporary space-related disputes: it is open to all parties, it is voluntary, the awards are final and binding, it is internationally recognized by the New York Convention, it is flexible and can be modified on the interest of the parties through an agreement, the parties are able to choose their own decision-makers, and the parties can also preserve confidentiality.[55]

The scope of the Space Rules is also conveniently very broad. For example, the characterization of a particular dispute as relating to Outer Space is not necessary for the establishment of jurisdiction where the parties have agreed to settle a specific dispute under these Rules.[56] Thus, this forum certainly remains a very appealing and option for those involved, but it is yet to be demonstrated how it would function in practise.

IV.3. Dispute Settlement under the ITU Framework

IV.3.a. The Legal Status of the ITU

In order to analyze the dispute settlement system under any international body, it is important to begin with the statute of that body and its legal framework – the competencies it may or may not possess with a view of settling disagreements. The ITU is an agency of the UN – and it is the sole

53 Supra note 52.

54 Permanent Court of Arbitration, Optional Rules for Arbitration of Disputes Relating to Outer Space Activities, Introduction.

55 Juliana Macedo Scavuzzi dos Santos, "The PCA's Optional Rules for Arbitration of Disputes relating to Outer Space Activities and Dispute Resolution in the ITU Regulatory System", available at http://swfound.org/media/121731/2013_iac_manuscript_juliana_macedo_scavuzzi_dos_santos_4.pdf.

56 Supra note 52.

one specialized for information and communication technologies.[57] Its main functions, as per its website are to allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, as well as strive to improve access to ICTs to underserved communities worldwide.[58]

The legal basis of the status of a specialized agency has three determinants:[59] the constitutive documents of the organization, the agreement with the Unite Nations and the Convention on Priviliges and Immunities of the Specialized Agencies, adopted by the UNGA and entered into force in 1949.[60] It is Article 1 Section 1 of this convention, which explicitly lists the ITU as a "specialized agency".[61] Further to that, article 3, confirms that these agencies shall possess juridical personality, the capacity to contract and to institute legal proceedings. On the subject of settlement of disputes, the Convention puts forward an obligation to the agencies to make provisions for appropriate modes of settlement of "disputes arising out of contract or other disputes of private character" as well as any disputes involving officials from the agency.[62] When it comes to differences arising between the ITU, on the one hand and a member, on the other hand, "a request shall be made for an advisory opinion on any legal question involved in accordance with Article 96 of the Charter and Article 65 of the Statute of the Court". The convention, however, says nothing on the subject of settling disputes between member states within the framework of the UN agency – the ITU in the case at hand. Thus, this is left to the discretion of the founding documents and the member states.

IV.3.b. Dispute Resolution within the System

At a national level, there are different types of official as well non-official approaches to resolving disputes in the sector – ranging from regulatory or court adjudication to alternative methods such as – mediation or arbitration.[63] Internationally – the same general means of recourse are

57 ITU official website, available at: www.itu.org.

58 Supra note 57.

59 The three main determinants can also be supplemented by other legal sources of an implementing character, such as any cited national legislation or site agreement concludes between the agency and the country, where it would have its seat. These are however immaterial to the current analysis.

60 Kuljit Ahluwalia, "The legal Status, Privileges and Immunities of the Specialized Agencies", *The American Journal of International Law*, Vol. 42, No 4 (Oct 1948) pp. 900-906.

61 UN General Assembly, *Convention on the Privileges and Immunities of the Specialized Agencies*, 21 November 1947.

62 See Art IX, Section 31 of the Convention.

63 ITU, Dispute Resolution in Telecommunications, available at http://www.itu.int /itunews/manage.

available, with the exception of regulatory adjudication. Even if the ITU could maybe be seen as playing the role of a world regulator in the field of telecommunications, it is an international intergovernmental organization, fully recognizing the *sovereign* right of each State to regulate its telecommunications.[64] Additionally, an eventual exit from the Union is also legally provided for – within Art. 57 of the Constitution, which outlines that Each Member State which has ratified, accepted, approved or acceded to this Constitution and the Convention shall have the right to denounce them."[65] As such, the ITU does not have any enforcement powers, although it does provide for some dispute settlement mechanism, which will be examined in detail in the subsequent parts of this article.

The legal documents forming the International Telecommunications Union contain two main references to dispute resolution. The first one is Article 56 CS, found in *Chapter IX – Final Provisions*. The Convention, in turn, in its *Chapter IV – Proposal, Adoption and Entry into Force of Amendments to These General Rules*, contains the Optional Protocol on the Compulsory Settlement of Disputes Relating to the Constitution and the Convention of the International Telecommunication Union and to the Administrative Regulations.

Article 56 CS has 3 paragraphs and it provides for dispute resolution through "negotiation, through diplomatic channels or according to procedures established by bilateral or multilateral treaties concluded between them (Member States) …, or by any other method mutually agreed upon."[66] It is worth pointing out that this possibility is not mandatory, as States "may settle" their disputes in this way and if none of them are adopted, any Member State "may" have recourse to arbitration in accordance with the procedure defined in the convention. It is important to note that while the Constitution does provide for possibilities for dispute resolution, none of those are made mandatory and these refer to instruments, treaties outside the scope of the ITU framework, even if the eventual disagreement are to concern the "interpretation, or application" of the Constitution, Convention of the Administrative Regulations. Thus, logically, pursuant to the ITU CS, parties could refer their disputes to the PCA or another recognized body. The Union as such does not take it upon itself to establish any dispute resolution body, organ or function.

64 Preamble, ITU Constitution; This point is further 'solidified' within Art. 2, which goes to elaborate that The International Telecommunication Union is an intergovernmental organization in which Member States and Sector Members, having well-defined rights and obligations, cooperate for the fulfilment of the purposes of the Union.

65 ITU CS, Art. 57.

66 ITU CS, Art. 56.1.

The Arbitration procedure, outlined in Article 56 CS is further elaborated within Article 41 of the Convention. It deals predominantly with the procedural and logistical details of the arbitration should it be chosen as a method of dispute resolution. According to it, the "party which appeals to arbitration shall initiate the procedure by transmitting to the other party to the dispute a notice of the submission."[67] Pursuant to it, the arbitrators can be either individuals, administrations or governments and if no agreement on that is reached, arbitrations is to be entrusted to governments. The article further elaborates the deadlines, the costs allocation and conditions for nationality, domiciliation and independence of arbitrators. The venue and the rules of procedure to be applied to the arbitration is to be left to the arbitrators – they "shall be free to decide" upon those.[68] Furthermore, as is customary as well, the Convention provides that the decision of the arbitration shall be considered "final and binding upon the parties" to the dispute.[69] Thus, as such, the article detailing the procedure for arbitration within the ITU Convention is a rather standard one and it leaves considerable freedom to the parties as well as the arbitrators.

On the subject of dispute settlement, the most noteworthy mechanism within the ITU legal framework is the *Optional Protocol on the Compulsory Settlement of Disputes Relating to the Constitution of the International Telecommunication Union, to the Convention of the International Telecommunication Union and to the Administrative Regulations*. This document was adopted during the Additional Plenipotentiary Conference in Geneva in 1992 and has not been amended since. It is a relatively short document consisting of only 6 articles and it is only applicable to those State parties, which have acceded to it. This Optional Protocol makes the optional arbitration clause of article 41 of the Convention compulsory in case of disputes between the parties.

Thus, State Parties to the ITU are to settle their disputes through negotiations or any other available means, and if they are also parties to the optional protocol, then they should resort to arbitration. Unfortunately, these available means have never been used or invoked until now. As such, they remain an available solution on paper, but a practically moot one.

Further possibilities and clarifications in relation to specific disputes and cases of harmful interference are also provided within the Radio Regulations of the Union, which are Administrative Regulations and thus, also binding on Member States. Notably, the RRs give more focus on prevention than on dispute resolution, as they provide that "all stations must be established and operated in such a manner as not to cause harmful interference to stations of other Members which operate in accordance with the RR." Should HI related

67 ITU CV Art. 41.1.
68 ITU CV Art. 41.9.
69 ITU CV Art. 41.10.

problems occur, the procedure for solving them is indicated in Section VI of Article 15 of the RR. In case of harmful interference, full particulars relating to the case shall be given using a specialized form, requiring various technical data about the occurrence.[70]

Generally, member states administrations are expected to cooperate in the detection and elimination of harmful interference. Where practicable, the case may be dealt with directly by their monitoring stations or between the operators. If the direct contacts do not enable to resolve the harmful interference, the concerned administration may request the assistance of the Bureau.[71] If a state party, decides to do that, it bases itself upon article 13.2 RR, which provides that when an administration has difficulty in resolving a case of harmful interference and seeks the assistance of the Bureau, the latter shall, as appropriate, help in identifying the source of the interference and seek the cooperation of the responsible administration in order to resolve the matter, and prepare a report, including draft recommendations to the administrations concerned.[72]

The exact procedure to follow if an administration experiences a case of HI, which it is not able to resolve is set forth in Article 15 RR, There is a stipulation that the problems of harmful interference are to be resolved on the basis of goodwill and mutual assistance.[73] If no satisfactory resolution is found on this basis, then the administration concerned shall forward details of the case to the Radiocommunications Bureau for its information.[74] In such a case, request of assistance may also be sent with all the technical and operational details and copies of the correspondence.[75] In case of a request of assistance, the Bureau contacts the responsible administration in order to resolve the matter. If the harmful interference persists, the Bureau prepares a report for consideration by the Radio Regulations Board. Upon receipt of such a request for assistance, the ITU normally reacts within 24-48hrs and contacts in turn the indicated cause of the interference. Thus, it acts as a facilitator in relation to this official exchange of information.[76]

Only 1-2 cases per year actually get escalated to the Board, which is then entrusted with investigating the case and holding the rounds of questions and answers sessions. It is important to note, that this process is a private one and no information is shared or made public by the ITU. The case becomes public only when it is finally submitted to the Radio Regulations Board.[77]

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70 RR, Art 15.
71 Jorge Ciccorossi, ITU, Interview conducted on 1 September 2016.
72 ITU RRs, Art. 13.2.
73 RR Art. 15.22.
74 RR Art. 15.41.
75 RR Art. 15.42.
76 Supra note 71.
77 Supra note 71.

Thus, the ITU lacks a specific mandate for the settlement of disputes related to harmful interference between two or more states. The ITU RRs state that all states shall cooperate to find good solution of these problems. Concurrently, the ITU Radiocommunication Bureau can only intervene in a case if a state requires its service. Moreover, the only actions that the Bureau is supposed to take at the request for cooperation of the concerned states are the analysis of the situation and the adoption of a conclusion with a recommended actions. It does not have any enforcement authority.

It is certainly interesting to observe, however, that even without an official mandate for a mediator, the ITU is essentially serving this very purpose – especially when cases of HI are reported to it. Practically, the Union acts as the connection between the two Member States on opposite sides. It provides a channel as well as a means of communication. Thus, it would be worthwhile to consider whether allocating a more official mediation function and purpose to the ITU would not be beneficial for resolving HI related problems – both in terms of parties' willingness to engage in a dispute resolution process as well as in terms of credibility and enforceability of the solution reached.

V. Conclusion

The exploration and use of outer space and especially the use of satellite communications was initially undertaken by sovereign states through their institutions. The major codifications of the relevant branches of law still reflect that practice.[78] The specific subject of harmful interference with telecommunications is predominantly legislated within the framework of the International Telecommunications Union. ITU law can be classified as lex specialis of public international law and as such, the basic legal documents are applicable to states only. From then on, states are responsible for authorizing and supervising the relevant activities of private actors.

When disputes arise public and private parties are likely to seek different means and ways for resolving them. It was demonstrated that private companies favour bilateral negotiations and in the case of an impasse resort to international commercial arbitration. States, on the other hand, even though having the possibility to resort to arbitration, as per the ITU Constitution and Convention have not yet done so.

This article has considered three very different, but potentially applicable alternative dispute resolution frameworks/fora for the settlement of disputes pertaining to harmful interference. It comes to no surprise that the industry

78 Karl-Heinz Böckstiegel, "Some Reflections on Dispute Settlement in Air, Space and Telecommunication Law"; Available at http://www.arbitration-icca.org/media/4/90500728926201/media1132021559836104/dispute_settlement_in_air_space_and_telecommunication_law.pdf.

normally looks to international arbitration for the resolution of its disputes.[79] Thus, a binding and legally enforceable decision is guaranteed as well as privacy and a certain level of qualification of the arbitrators.

The framework offered by the PCA with its special rules for the resolution of space-related disputes is certainly a worthwhile one to consider, but it has not yet been tested in practice when it comes to HI. Its advantages are that it welcomes both private and public parties and is also able to render a legally binding decision. It remains to be seen whether any HI disputes could be settled on that arena.

For the specific questions of satellite communications, however, the ITU system offers a curious alternative. Although the Union lacks a specific mandate, in practice, it seems to act as mediator in many instances of disagreements between states parties – through the Radiocommunications Bureau and the Board. The ITU, as an institution has the advantage of possessing enormous technical expertise as well as a perceived impartiality – in that it is made up of its member states, and it could therefore be entrusted with greater procedural powers of ADR. It is already practically assuming some of the functions of a mediator without officially bearing this mandate. Therefore, it would be useful to explore possibilities and opportunities of officially entrusting more of the satellite communication disputes regarding harmful interference within the ITU framework.

79 Supra note 23.