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A LEGAL ANALYSIS OF MODERN TELECOMMUNICATION IN THE LENS OF INTERNATIONAL TELECOMMUNICATION UNION

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ABSTRACT:

This paper examines the evolution of modern telecommunication through the framework of International Telecommunication Union (ITU). As telecommunication has transformed significantly with the emergence of digital technologies like internet, mobile communication 5G networks etc. has reshaped the global communication system, commerce, governance and social interaction. This study focuses on the emergence and transformation of the ITU as an International organisation that fosters corporation among member states. Further, this paper analyses the roles of ITU as a body that oversees a telecommunication and evaluate in addressing challenges and dispute resolutions. As the author views that the dispute between the actors have to be resolved through laws and regulations, whether the instruments that this organisation are bound to follow have a binding effect on these actors in order to have an effective functioning of an International Organisation. This paper takes that point and argues that the existing framework of ITU is largely recommendatory and lacks the binding authority this restricts the capacity of effective governance n rapidly growing telecommunication sector. This paper advocates for strengthening the institutional and regulatory power of ITU.

INTRODUCTION:

As we know that in the modern era, without technology, we can't have an easy life. Telephone, radio, internet, and television, are all integral parts of our life and these are being regulated in an international sphere by International Telecommunication Union. A non-popular multilateral organization known as the International Telecommunication Union was originally established to control the telegram industry and now it is responsible for all information and communication technologies (ICT). It is now in charge of crucial standard-setting and 5G regulation activities, as well as the internet's future. The developing world is particularly vulnerable to the consequences of these actions. The ITU is the leading body responsible for

developing international standards for radiocommunication systems, network connectivity, data transfer, internet security, broadcast systems, and multimedia applications, including streaming audio and video.

To guarantee that ICTs are secure and simple to use, the 193 Member States of ITU collaborate closely with more than 800 tech firms, trade associations, and academic institutions. Competitive businesses engage and reach consensus on global methods to network interconnectivity and future advancements under the aegis of the ITU's technical Study Groups. The control of the radio spectrum falls under the purview of ITU. Several daily-used kinds of communication, including cellular technology, Wi-Fi, and emergency radio services, would've been routinely interfered with without the careful supervision of this system. The global satellite system is coordinated by the ITU as well, enabling dependable worldwide connections and the GPS geolocation capabilities found in many modern products.

EVOLUTION OF ITU:

The ITU is formed way back than any organization that governs communication technologies. From telegraph till telecommunication. In the mid-19th century, there was the invention and usage of the telegraph and it has been upgraded to a translated version but they have faced problems, as information has to cross national borders the message has to be stopped and translated into a particular version which at that time 20 states from Europe had joined and formed International Telegraph Conference which established to overcome these barriers, as a result, lead to formation International Telegraph convention that happened in 1865, thus formed the International Telegraph Union which is the first embodiment of ITU.¹

Also, in the later decade there held a conference in Berlin in 1885, as they began to draw legislation for telephony. Five minutes were designated as the unit charge in an article that was introduced to the Telegraph Regulations, and calls were only allowed to last ten minutes if there were no other demands to use the phone line.² After the invention of radio singling in the 1900s, they faced similar issues of telephony when it comes to the international context of communication between the US and German which brought the necessity of amending international radiotelegraph communication. Thus, it led to the first international radiotelegraph conference, attended by 29 nations as ITU will be the main administrator.

This conference also established the concept of SOS which is a distress call that is designed for

¹ Discover ITU's History, International Telecommunication Union (Nov. 21, 2022), <https://www.itu.int/en/history/Pages/DiscoverITUsHistory.aspx>.

² Id.

maritime, after the incident Titanic in 1912, which implied a common wavelength for ships and to maintain radio silence at regular intervals. At a later period of time, they established three committees which International Long-distance Telephone Consultative Committee (CCIF), International Telegraph Consultative Committee (CCIT), and International Radio Consultative Committee (CCIR), as these three committees are specialized in their respective fields.³

In 1932 at Madrid Conference, it was decided that a new name was to be adopted as it must include a wide range and its aspects for it which resulted in the International Telecommunication Union at that time all other conventions are combined into International Telecommunication Convention. After World War II, the boom of television happened which catch the attention of ITU and in 1949, ITU has released its first technical standards for television. Also, it was noted that for space communication, in 1963, ITU had an Extraordinary Administrative Conference that assigned frequencies to the various services with respect to space communication. Later conferences made additional distributions and established rules governing the use of orbital slots by satellites. Satellites are employed in mobile communications in addition to connecting broadcasting and landline telephone lines, offering navigation services, and other purposes. For instance, satellite phones might be essential in emergency situations or in locations lacking access to other networks. And in 1992, ITU allocated spectrum for the first time to meet the requirements of satellite-based global mobile personal communications (GMPCS)⁴

Further, it not only deals with telecommunication but also the internet, as ITU does have a long history of serving as a forum for exploring the best ways to assure that everyone can use the Internet. ITU was given the authority to lead this initiative and bring together all relevant parties by the World Summit on the Information Society. The Union's membership has also ordered ITU to work on issues like cybersecurity, etc. Also, later it was reflected in governing mobile phones. At the World Radio communication Conference in 1993, the ITU approved radio-frequency spectrum allotment for 2G mobile telephony. But as technology developed, many mobile phone platforms appeared in a distributed market. At the meeting convened in 2000, a significant decision was made after more than 10 years of work under the direction of ITU: the unanimous ratification of technical requirements for 3rd generation systems under the designation IMT-2000.⁵

Here, ITU which acted as a techno-diplomatic actor created an international network that can

³ Overview of ITU's History, International Telecommunication Union, <https://www.itu.int/en/history/Pages/ITUsHistory.aspx>

⁴ Id.

⁵ Id.

include nation-states and institutions which are transnational i.e.; UNESCO, ICANN, etc. as they have seen and negotiated such strategic plans as it includes the tension between the public and private management in telecommunication. But from, historizing the ITU, we can divide it into three periods. Firstly, from 1865 to 1947, it was considered to be Euro-centric as most of these developments are being adopted from them as they mostly focused on their telecommunication.

Secondly from 1947, when it becomes the branch of the UN, it started to absorb the technologies and ideas from around the world. By early 2000, it was dominated by the United States in the case of world communication. Thirdly, it has started to support new technologies which is a multilateral one for internet governance and it was influenced by various countries such as BRICS, etc.⁶

ROLE OF ITU IN TELECOMMUNICATION INDUSTRY:

ITU is considered to be one of the specialized agencies and it is categorized under the UN development group as one of its main functions in having meetings that include development goals. The ITU covers the whole of the ICT sector which is from radio broadcasting to digital broadcasting, from the internet to 3D. Apart from these, ITU has various functions to take on such as allocating the radio frequency globally, developing and managing the technical standards of telecommunication services and networks, allocating the satellite's orbits, developing cybersecurity, promoting technologies in developing nations, finally promoting international corporation among the nation in respective to telecommunication.⁷

It was seen that from 1932 Madrid Conference, it combined all the other conventions into a single one, so Article 1 of the Constitution of ITU states its purposes, as to maintain international corporations and promote the technologies by joining with entities and organizations, offering technical assistance to developing states, improving telecommunication services effectively, further it must reach all people around the world, also must adopt the border approaches when it comes to telecommunication in the global information economy and

⁶ History of International Telecommunication Deutsche Nationalbibliothek, (2020), https://books.google.co.in/books?hl=en&lr=&id=PFXrDwAAQBAJ&oi=fnd&pg=PA1800&dq=role+of+International+Telecommunication+Union&ots=ePOv0XgVII&sig=6Uhuby20UQ9XwXqcjJThclWlw3E&redir_esc=y#v=onepage&q=role%20of%20International%20Telecommunication%20Union&f=false

⁷ Uchenna Jerome Orji, *International Telecommunication Law and Policy*, (Cambridge Scholar Publications, 2018), https://books.google.co.in/books?hl=en&lr=&id=FHSFDwAAQBAJ&oi=fnd&pg=PR5&dq=+International+Telecommunication+Union+and+law&ots=kPo2_DH-4s&sig=PpF8eVM6CgSCRfkTzS7zxUFqzfM&redir_esc=y#v=onepage&q=International%20Telecommunication%20Union%20and%20law&f=false

society, must cooperate with another world, intragovernmental, regional, non-governmental organization.

From Art.1 it's clear that they should be allotting the frequency around the globe, as it would not cause harmful interference as it would be involved in the interference of signal with respect to safety signal or radio communication as it interprets the services which are relevant to Radio Regulations. As it comes to legal aspects, before 1992, it was governed by International Telecommunication Convention which was combined with previous instruments, in 1992, ITU was divided into two parts which are convention and constitution. And in the same year, they also adopted the Plenipotentiary Conferences, and at a later period, it was further modified in 1994 and 1998.⁸

And in present, the ITU consists of Constitution, convention, and administrative regulations as it includes both radio and telecommunication regulations⁹. Member states are being governed by these regulations as this can be viewed from Art.6 of the convention of ITU which establishes the states do not cause any harmful interference and must follow these regulations, exceptions are allowed for national defence or military radio stations of member states.

The provision that ITU consists of is likely to be amended by consecutive Plenipotentiary Conferences, as a convention that generally contains the additional rules that might get changed over a period of time as its support constitution. Whereas Administrative Regulation is considered to be a set of binding general principles that are supposed to be observed in relation to international telecommunications services and networks. Further, if there is any inconsistency with these instruments, the constitution will always prevail. And in the case of convention and administrative regulation, convention prevails.

ITU has distinct features to its legal instruments as compared with public international law as one of them is that the private sector has a specified role in decision-making activities. Also, when comes to administrative regulations, it does have a fixed period for implementation and if not opposed by the member state, then it has immediate provisional application. The member states consented to follow this regulation within a period of three years and if they fail to notify the Secretary general of ITU as they are not bound by that revision. Further, if they want any reservations, they must have to notify us before signing the Plenipotentiary's final act. It was designed in such a way that in case of any critical element when it comes to the implementation of technical issues.¹⁰

⁸ Id.

⁹ Constitution and Convention of the International Telecommunication Union art. 4.

¹⁰ Orji, supra note 7.

¹⁰ Id.

Apart from this ITU also adopts recommendations, resolutions, and decisions through various organs. The recommendation includes ITU Telecommunication Standardization Sector (ITU-T), ITU Radiocommunication Sector (ITU-R), and ITU Telecommunication Development Sector (ITU-D). But these recommendations don't have a binding effect like instruments of ITU.

The ITU-R Sector, the World Radiocommunication Conference, has the authority to partially or, in extreme circumstances, fully amend the Radio Regulations and to address any global issue that falls within its purview and is pertinent to its agenda. Radiocommunication assembly, which may be related geographically and temporally to international radiocommunication conferences, is obligated to supply the required technical support for the activities of the conferences and to reply to all inquiries. The world telecommunication standardization arrangements have been created in the ITU-T Sector to carry out the ITU's telecommunication standardization objectives by researching technical, operational, and tariff issues and adopting recommendations on them.¹¹

While considering World and Regional telecommunication development conferences have been established within the ITU-D to serve as a place for discussion and consideration of issues, projects, and programs pertaining to telecommunication development as well as to further assist the Telecommunication Development Bureau with direction and guidance. These development conferences, in accordance with the ITU Constitution, do not issue Final Acts; instead, their conclusions are presented in the shape of recommendations, resolutions, proposals, or findings.¹²

Unlike the conventions and constitution, all the resolutions, recommendations, and decisions are non-binding and the nature is voluntary. Here the constitution has established the rights and obligations listed under Article 3, where the member state recognizes the right of the public which corresponds with respect to international communications. With respect to service charges and safeguard all the user without giving any preference. But here they are except for the liability in case of claims of damages that arises from the service provided in international telecommunication services as it is similar to the concept of common carrier protection used here. On the side of the constitution, mostly concentrates on the safety of life on land, sea, land, and space well this also includes communication that is important and urgent and related to

¹¹ Jens Hinricher, The Law-Making of the International Telecommunication Union (ITU) - Providing a New Source of International Law?, Max Plank Institute (2004), https://www.zaoerv.de/64_2004/64_2004_2_b_489_502.pdf

¹² Id.

epidemiological in relevance to WHO.¹³

Some of the rights that the state should follow seriously is to have to ensure privacy when it comes to international communications, but they do have reservations that are subject to any national law or international convention to which they are parties. As they can intercept communication like the internet, which can be used to justify the mass surveillance of international telecommunication.

Further Article 34 of ITU Constitution, has provided the states to have right to stop or cut off the transmission of telecommunications which is under national laws to protect the peace and security of the state or public order. Even though the notification must be given to the office of the origin, the provision itself doesn't impose a "must" as when it comes to national security, the state can block communication without even sending a notification. Also, with help of Article 35, which speaks about the suspension of international telecommunication, they will allow the state to block and filter the internet and other communication.

Further from Article 38 of the Constitution of ITU, the state has the obligation to safeguard the international telecommunication channels and their installations with respect to their jurisdiction and to maintain them as they are taken under special arrangements. Further, they are also mentioned under Article 6 of the International Telecommunication Regulation (ITR). Further in this article, states have the obligation not to cause harm to the operation of telecommunication as it involves the state to take a measure which includes criminal laws or regulations for deterring any person who disrupts the telecommunication as it involves other states and non-state actors as we view from the perspective of national level telecommunication networks, as states need to have control over their territory.¹⁴

Also, when it comes to radio stations, they must establish in a manner that would not cause harmful interference as they should be operated in accordance with radio regulations which is under Article 45. States must also ensure that the authorized operating agencies are being under their jurisdiction. Further, if the state doesn't fulfill its obligation with respect to radio station harmful interference, then it will be considered to be a breach of international law. Even though the authorized agencies can enter into special arrangements but they are supposed to follow the constitution and avoid causing harm.¹⁵

¹³ Orji, supra note 7.

¹⁴ Id.

¹⁵ Constitution and Convention of the International Telecommunication Union art. 42.

DISPUTE RESOLUTION UNDER ITU:

As we know, there are states and non-state actors who are being linked to ITU and its procedures yet disputes will arise if they violate the rules prescribed by the convention. Article 56 of the ITU Constitution deals with the resolution of disputes arising from ITU agreements. This Article states that the Member States may resolve their disagreements over the application and interpretation of the Constitution, the Convention, or the Administrative Regulations (including the Radio Regulations governing space communications) through negotiations, diplomatic channels, or in accordance with the procedures outlined by any bilateral or multilateral agreements they have made for the resolution of international disputes. Member States may also use any other method that they deem appropriate. Any Member State that is a party to a dispute may turn to arbitration in compliance with the relevant procedure outlined in Article 41 of the ITU Convention if neither of these methods of dispute resolution is used.

There is also an Optional Protocol on the Compulsory Settlement of Disputes Relating to the ITU Regulatory Regime that Member States of the ITU have agreed which is applicable only to states that are party to that Protocol. The arbitration process described in Article 41 is effectively made mandatory by this Protocol for the resolution of disputes between States Parties to the Protocol.¹⁶ But in practice, neither protocol nor convention is used, and mostly for the case of harmful interference in the case of radio stations, Article 15 of Radio Regulations is used.

Even in the Radio Regulation under Article 15, through ITU, they are required to act with the greatest goodwill and cooperation when applying the provisions of Article 45 of the Constitution and Article 15 of the Radio Regulations to the resolution of issues with harmful interference, the involved States primarily resolve the interference issues through bilateral negotiations. Only when a State requests it will the Radiocommunication Bureau of the ITU Secretariat step in.

Additionally, the Bureau's only duties provide for the assessment of the issue and adoption of findings with a non-binding proposed action, which it might notify the involved parties. As a result, the Bureau is not especially powerful. The following ITU World Radiocommunication Conference would be tasked with hearing the unresolved issue (WRC). Such matters are discussed at WRC plenary meetings, where decisions are mostly based on larger political factors irrelevant to the Radio Regulations. As a result, the proper implementation of the Radio

¹⁶ Ram S. Jakhu, Dispute Resolution under ITU Agreements, <https://swfound.org/media/48115/jakhu-dispute%20resolution%20under%20the%20itu%20agreements.pdf>.

Regulations as well as the ITU's fair and effective dispute settlement are jeopardized.¹⁷

Apart from this, we have ITU -RR and ITRs which are the regulatory instruments that support ITU. First ITU-RR, the radio spectrum is a limited natural resource that crosses international borders and requires global harmonization. The ITU Radio Regulations guarantee the interference-free operation of radiocommunication networks and grant all nations equal access to them. Adhering to the constitution and its purpose it grants an equal distribution of radio access. It basically includes various kinds of telecommunication such as radio services, mobile services, space services, etc. as it mostly covers and regulates frequency, establishing stations and its services as it includes air, land, and space. As this regulates harmful interference is considered to be a violation under Article 15 of ITU-RR. Further talks about the privacy of telecommunication, licensing, safety or distress communications, aeronautical services, and maritime services under this regulation.

Apart from this, we have ITRs which also regulate telecommunication irrespective of the charges and accounting, the safety of life and priority of telecommunication, the suspense of services, dissemination of information, accessibility, etc. are being governed here.¹⁸ Even if these rules and regulations are existing if they are controversial to the constitution or conventions, they are not applicable, and if they are in violation of any national laws or regulations that particular member states follow, they can send notice that they are not inconsistent with them.

And here mostly the dispute settlement happens on a voluntary basis as it neither possesses any mechanism nor power of enforcement even if it can impose sanctions against the states or parties who violated these regulations. As it relies on a peaceful settlement and further on a dispute settlement procedure which is bilateral is considered to be an old one and it is not being meet the requirements that are supposedly outdated compared to the current internet era.¹⁹

But if we take the whole of the ITU along with the convention and constitution, and administrative regulations, except for the convention and constitution, others are non-binding and voluntary in nature as it seems that we can adopt them if we want it. It makes states and parties violate the rules even if we amend many regulations from recommendations and resolutions. It doesn't have much binding effect. Only when it comes to harmful interference, do the legal instruments have a binding effect.

This leaves us open to arbitrarily use the dispute resolution provision to abuse the

¹⁷ Id.

¹⁸ Regulatory Challenges and Opportunities in The New ICT Ecosystem, International Telecommunication Union,(2018), https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-BB.REG_OUT03-2018-PDF-E.pdf

¹⁹ Id.

telecommunication services as we take the example of secrecy or charges and tariffs as they will use these provisions for surveillance done by various private organizations and even governments which invades privacy as one of the fundamental human rights which is protected by various international organizations. Also, when comes to rates of charges for the services, it is different for every country but they don't have any provision which can bring an issue to ITU as a regulatory if that particular party or any member feels that the member state set arbitrary prices for their profit. And mostly it relies on national and regional regulations and dispute mechanisms to resolve the issue that doesn't have much impact on international standards. Another issue is of monopoly over technologies that was held by various private actors in name of intellectual property which not only kept their tech to themselves but also, they have violated the provision of Article 1 of the Constitution of ITU.

On the bright side regulating depends on national laws to govern they have national regulatory bodies which actually in most of the developed countries take charge of regulating the telecommunication sector in India we have TRAI, in the USA they have FCC, in Singapore, they have IDA, etc. which are regulatory bodies that govern telecommunication sector. On the competition aspect, ITU itself promotes to have healthy competition but it doesn't even have any specific rules that would speak and regulate from a competition perspective, rather it again deals with competition law like CCI in India.

The regulation provision is viewed to be a dead one as it is not much provided to be effective and while promoting a competitive practice, they must also have anti-competitive recommendations or resolutions which should be binding that can prevent from having unfair practices that have wide influence on the consumer. This international organization is more of a standardizing and promoting body for telecommunication rather than a regulatory body since it doesn't have any strict or mandate provision to enforce other violations.

CONCLUSION:

Even though the ITU has high standards for promoting telecommunications around the globe even though its members are accepting the standards and regulations as it mostly speaks on the technical side, the inclusion of a socioeconomic and political discussion in their conference, they have left open the cases of dispute resolution which they solely rely on arbitration or bilateral dispute resolution. Further only in case of harmful interference, safety or distress signals, and secrecy, or with respect to convention or constitution or administrative regulation in relevance to adoption or interpretation is the case the provision in the constitution applies as it can be used for the long run.

So, the suggestion here is that they need to amend articles to constitution and they must establish a dispute settlement body that deals on issues with international and national, as it includes both state and private actor cases which will solely dedicate to solving disputes related to telecommunication. Secondly, they must have amended regulations and resolutions which is a must to be binding on those actors and they should not only have study groups dedicated to market competitiveness but also must impose study groups on the legal aspects to protect and promote, must bring the technologies to the developing countries and not allowing a monopolistic practice that takes the choice of the consumer to have services they desire.²⁰ Also, they should make a mandatory dispute settlement mechanism rather than a voluntary one to resolve and maintain fair and just promotion and regulation as it pertains to being the controlling body of telecommunication around the globe.



²⁰ Kritika Krishnakumar, The Monopoly Monochrome: Telecommunication Industry To Be Ruled By One Company? From 5G Connectivity To Digital Payments, The Indian Wire, <https://www.theindianwire.com/business/the-monopoly-monochrome-telecommunication-industry-to-be-ruled-by-one-company-from-5g-connectivity-to-digital-payments-287270/>