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THE SPECTRE OF SPECTRUM: PUBLIC INTEREST QUESTIONS AROUND SPECTRUM MANAGEMENT IN INDIA

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ABSTRACT

Public interest in spectrum allocation is not restricted to matters of access, but includes often ignored concerns regarding freedom of speech and expression. Drawing upon the history of media infrastructure cases in India, the author seeks to identify parallels between past cases involving infrastructure for newspapers and broadcasting media, and the present situation with spectrum being licensed for use by mobile service providers. The author also examines the public trust doctrine and its applicability keeping in mind that spectrum may be classified as a natural resource. Differing from the school of thought that believes the market must determine allocation of this natural resource, the author submits that a positioning of spectrum as commons rather than private property, buttressed by the use of open-access technology, is closer to the ideal use of spectrum for the public interest.

I. Introduction

Spectrum is the potential of space to transmit energy. Its importance lies not so much in what it is, but in what it allows us to do. Different forms of radio based communications operate on different bands of spectrum – be it radio, television, cellular telephony or wireless internet.¹ Historically, spectrum has been treated as a scarce resource across the world and subject to strict government regulation.² This scarcity rationale will be brought into question later in the essay.

In India, before the introduction of mobile services, spectrum intended for commercial usage in 800 MHz, 1800 MHz and 1900 MHz was entirely in the control of the national defence force. The utilisation of spectrum for commercial purposes began with the release of a limited amount

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¹ See JENNIFER A. MANNER, SPECTRUM WARS: THE POLICY AND TECHNOLOGY DEBATE (Artech House, 2003).

² EVAN LIGHT, OPEN SPECTRUM FOR DEVELOPMENT: POLICY BRIEF (Association for Progressive Communications 2010).

of spectrum in 1995.³ The history of spectrum management in the country has progressed through varying phases. First, there was the auctioning of very limited amounts of spectrum, keeping in mind the scarcity of spectrum due to non-availability from the department of defence. Next came the phase where licenses were delinked from spectrum allocation. A fixed fee based license could be bought, while start-up spectrum was given to the buyers only as and when available. Following stricter criterion for allocation of spectrum, the next stage found the government using ascending auctions for its 3G services.⁴

Constant turf wars take place between the Telecom Regulatory Authority of India (TRAI) and the Department of Telecommunications. Unlike other telecom regulators, TRAI lacks the power to make spectrum-allocation or assignment decisions. These decisions are made exclusively on behalf of the Central Government by the Wireless Planning and Coordination Wing (WPC) of the Department of Telecommunications. Their turf wars have contributed directly or indirectly to issues like the parsimonious assignment of spectrum to service providers to the extent of affecting operations and quality of service. Further, the WPC has been guilty of using inconsistent procedures in allotting spectrum for similar services.⁵ Varied as the spectrum management policy has been, the principle that governs it – or rather, should govern it – is that of public interest. When we look at the broader language of regulation, the public interest questions may be along the lines of whether the public is best served by a large organization accountable to government, or by many entrepreneurial companies accountable to the shareholders; whether the public should be seen as the poorest, least privileged citizens, or as those most likely to generate wealth and advantage from a sophisticated, interconnected telecommunications system?⁶

When it comes to this question of spectrum allocation though, I'd like to maintain the lens of evaluating public interest as that of free speech: what approach is it that best promotes public access to spectrum and consequently free expression?

³ Rohit Prasad and V. Sridhar, A Critique of Spectrum Management in India, *ECONOMIC AND POLITICAL WEEKLY*, available at http://beta.epw.in/static_media/PDF/archives_pdf/2008/09/RPrasad_20Sept08.pdf.

⁴ Id.

⁵ VIKRAM RAGHAVAN, *COMMUNICATIONS LAW IN INDIA: LEGAL ASPECTS OF TELECOM, BROADCASTING AND CABLE SERVICES* (Lexis Nexis Butterworths, 2007).

⁶ Lelia Green, *Communication Policy and Regulation*, in *COMMUNICATION, TECHNOLOGY AND SOCIETY*, 136 (SAGE Publications Ltd., 2002).

The Supreme Court has attempted to engage with this question in its recent 2G judgment⁷. While a large portion of the clamour around the judgment has focused on the implications of the cancellation of 122 licenses issued after January 2008, it holds important implications for free speech, right to development and infrastructure jurisprudence as well. The Court raises the public interest argument when it comes to the question of the scope of judicial review vis-à-vis fiscal policies of the State. If the policy framed by the State runs counter to the public interest or constitutional principles, the Court may exercise its jurisdiction in the larger public interest.

Before analyzing as to how the Court deals with the public interest question, this essay will look back at free speech jurisprudence around media infrastructure. The 2G judgment articulates the question of spectrum assignment as an access issue, but its obvious implications on free speech require us to locate it within the line of cases dealing with media infrastructure and its relation to the promotion of public interest. Clearly, freedom of speech and expression does not operate in vacuum and it has to be acknowledged that questions of infrastructure play a vital role in creating a healthy ecology of speech. The infrastructure may either be provided by the state or by private players, but in both cases the question of public interest in such infrastructure exceeds the question of private or state ownership.

II. Media Infrastructure Cases

Take for instance the 1962 case of *Sakal Newspapers v. Union of India*⁸, which involved Article 19(1)(a) challenge to a Government order which sought to regulate the number of pages according to the price charged, prescribed the number of supplements to be published and regulate the size and area of advertisements in relation to other matters contained in the newspaper. The government argued that the order was valid since it only regulated the commercial aspects of the newspapers and not dissemination of the news and views by them.

The SC struck down the order holding that the same directly affected the freedom of speech and expression because the right to publish and circulate the publications is inherent in the freedom..

⁷ *Centre for Public Interest Litigation and others v. Union of India*, (2012) 3 SCC 1.

⁸ *Sakal Newspapers v. Union of India* AIR 1962 SC 305.

It said that the right of freedom of speech cannot be taken away with the object of placing restrictions on business activities of a citizen:

“It may well be within the power of the State to place, in the interest of the general public, restrictions upon the rights of a citizen to carry on business but it is not open to the State to achieve this object by directly and immediately curtailing any other freedom of that citizen guaranteed by the Constitution and which is not susceptible of abridgement on the same grounds as are set out in Clause (6) of Article 19. Therefore, the right to freedom of speech cannot be taken away with the object of placing restrictions on the business activities of a citizen. Freedom of speech cannot, like the freedom to carry on business, be curtailed in the interest of the general public.”⁹

Again, in *Bennett Coleman and Co. Ltd. v. Union of India*¹⁰, it was the newsprint policy of the Government that came up for scrutiny before the Court. The restrictions here were in the form of a newsprint control order that fixed the maximum number of pages which a paper could be allowed to print on the basis of their reported consumption of the commodity.

In a context of acute shortage, it seemed that the only means available to keep the newspaper industry functioning was to ration the allotment of newsprint. This made it imperative that newspapers publish not more than 10 pages. Of particular significance was the fact that newspapers would not be permitted to reduce circulation to maintain or increase the number of pages. To provide a full day’s complement of news, publishers could rationalise their allocation of space between editorial and advertisement material or maintain profitability by curtailing news coverage to accommodate advertisements.

The government defending its policy before the Court said/argued that it was intended to allow small newspapers to grow and prevent the monopolistic combinations of big newspapers. Holding that the policy was not a reasonable restriction since the newspapers were not allowed the right to circulation or the right of page growth, the Court struck it down.

⁹ Id at ¶37.

¹⁰ *Bennett Coleman and Co. Ltd. v. Union of India* AIR 1973 SC 106.

“It cannot be said that the newsprint policy is a reasonable restriction within the ambit of Article 19(2). The newsprint policy abridges the fundamental rights of the petitioners in regard to freedom of speech and expression. The newspapers are allowed their right of circulation. The newspapers are not allowed right of page growth.... Freedom of the press is both qualitative and quantitative. Freedom lies both in circulation and in content.”¹¹

The right to access was articulated in Justice K.K. Mathews’ judgment which recognized the importance of bringing all ideas into the market and that free expression would be “somewhat thin if it can be exercised only on the sufferance of the managers of the leading newspapers”.

In both these cases, the Supreme Court acknowledged the relationship between infrastructure and speech when it held that for the promotion of free speech there have to be venues through which a citizen can propagate these views and the regulation of the commercial aspects of a newspaper cannot impinge on such freedom. In other words, freedom of expression involves the right of access to media space,¹² a requirement that could be met only through the “creation of new opportunities for expression or greater opportunities to small and medium dailies to reach a position of equality with the big ones”. Sukumar Muralidharan notes how the underlying principles in these cases have a certain universality that allows them to be transported to the spectrum debates.¹³ The scarcity argument was invoked for newsprint in the seventies, as it is for the electromagnetic spectrum now.

From the newsprint cases, we come to the mid nineties where the Supreme Court made the famous declaration in *Secretary, Ministry of Information and Broadcasting, Government of India v. Cricket Association of Bengal*¹⁴: Air waves are public property. Significantly, the Court stated that “if the right to free speech and expression includes the right to disseminate information to as wide a section of the population as is possible, the access which enables the right to be so

¹¹ Id at ¶82.

¹² See Sukumar Muralidharan, *Broadcast Regulation and Public Right to Know*, 42 (9) *ECONOMIC AND POLITICAL WEEKLY*, (March 3, 2007).

¹³ Id.

¹⁴ *Secretary, Ministry of Information and Broadcasting, Government of India v. Cricket Association of Bengal* AIR 1995 SC 1236.

exercised is an integral part of the right”. There do arise certain internal contradictions in the judgment. For one, there is a diverse idea of the public that it invokes, ranging from the idea of public property to the idea of public interest to the idea of the state as the sole custodian of public interest, creating a language which actual communities could really make use of. The judgment, however, stands as a vital signpost for the emergence of a language of a right to access within the media and broadcast framework. One of the statements made by Justice Savant in this regard is particularly significant, where he categorically rejects the government’s argument that broadcasting media can be subject to additional restrictions because of spectrum scarcity. “The virtues of electronic media cannot become its enemies”, the Court noted, in opposing enlarging restrictions beyond those listed in Article 19(2).

The next section will focus on how the public interest question is located vis-à-vis spectrum, with special reference to the 2G judgment.

III. Public Interest in Spectrum

The National Telecom Policy of 1994¹⁵ was the first major step towards deregulation, liberalization and private sector participation. Amongst the notable objectives of the policy were “affording telecommunication for all and ensuring the availability of telephone on demand” and “providing certain basic telecom services at affordable and reasonable prices to all people covering all villages”. The New Telecom Policy of 1999¹⁶ took these concerns further, aiming to “to make available affordable and effective communications for the citizens, considering access to telecommunications is of utmost importance for achievement of the country’s social and economic goal” and “to provide universal service to all uncovered areas including the rural areas and also provide high level services capable of meeting the needs of the country’s economy by striking a balance between the two”. The need to achieve efficiency and transparency in spectrum management was also encompassed under the policy. The policy on spectrum management further expressed the need for a transparent process of allocation of frequency spectrum for use by a service provider, and one that was, to stress the point, effective and

¹⁵ NATIONAL TELECOM POLICY 1994, available at http://www.trai.gov.in/TelecomPolicy_ntp94.asp.

¹⁶ NEW TELECOM POLICY 1999, available at http://www.trai.gov.in/TelecomPolicy_ntp99.asp.

efficient. The Draft Telecom Policy of 2011¹⁷ concerns itself with looking into questions of paucity of spectrum, making inroads for spectrum sharing and trading, as well as freeing additional spectrum.

The public interest question becomes a focal point of the 2G judgment. When it comes to the question of scope of judicial review vis-a-vis fiscal policies of the State, the Court recalls the principle that when it is clearly demonstrated that the policy framed by the State or its agency/instrumentality and/or its implementation is contrary to public interest or is violative of constitutional principles, it is the duty of the Court to exercise its jurisdiction in larger public interest.

One of the primary issues framed by the Court was whether the Government has the right to alienate, transfer or distribute natural resources/national assets otherwise than by following a fair and transparent method consistent with the fundamentals of the equality clause enshrined in the Constitution. So what is the question of public interest here? The Court elaborates by affirming spectrum within the ambit of the public trust doctrine, then going on to elaborate on the kind of duties placed on the State due to spectrum being a public good. This section will look individually at these two major components of the judgment.

a. Spectrum in the Public Trust

The Court invokes the environmental law doctrine of public trust, situates spectrum as falling within it, and then discusses duties placed on the State in respect of public goods. The public trust doctrine hinges on the idea that certain common properties such as rivers, seashore, forests and the air are held by the Government in trusteeship for the free and unimpeded use of the general public. Under the Roman law, where this doctrine was developed, the resources were owned by no one or by everyone in common. Under the English common law, however, the Sovereign could own these resources but the ownership was limited in nature, the Crown could not grant these properties to private owners if the effect was to interfere with the public interests

¹⁷ DRAFT NATIONAL TELECOM POLICY 2011, available at <http://www.dot.gov.in/NTP-2011/NTP2011.htm>.

in navigation or fishing. Resources that were suitable for these uses were deemed to be held by the Crown for the benefit of the public.¹⁸

Joseph Sax, in propounding the Modern Public Trust Doctrine, emphasized two points with respect to the Roman and English doctrines.¹⁹ One, that certain interests such as navigation and fishing, were sought to be preserved for the benefit of the public. Therefore, property used for those purposes was distinguished from general public property which the sovereign could routinely grant to private owners. Second, Sax pointed out that it was never clear as to whether the public had an enforceable right to prevent the infringement of the interests that vested in it in the first place. He outlined three restrictions that the doctrine imposed on governmental authority: that the property held in trust had to be used for a public purpose and be held available for use by the general public; that the property could not be sold, even for a fair cash equivalent; and finally that the property had to be maintained for particular types of uses.

Following its invocation by the Supreme Court in *M.C. Mehta v. Kamal Nath*,²⁰ the doctrine has served as a touchstone to test executive action with a significant environmental impact over the years.²¹ Before the 2G case, it was significantly invoked in the Reliance matter,²² where the Court said that gas was an essential natural resource, not owned by either of the two competing public enterprises. The Government held it as a trust for the people, with the constitutional mandate being that natural resources belonged to the people of the country.

b. Distribution of Spectrum

Since natural resources are public goods, it is the doctrine of equality, emerging from the concepts of justice and fairness that must guide the State in determining the actual mechanism for distribution of natural resources. Equality here, maintains the Court, can have two prongs:

¹⁸SHYAM DIVAN AND ARMIN ROSENCRANTZ, ENVIRONMENTAL LAW AND POLICY IN INDIA (Oxford University Press, 2001).

¹⁹ Until it was revived and reinvented by Sax, the doctrine held that some resources, particularly lands beneath navigable waters or washed by the tides, are either inherently the property of the public at large, or are at least subject to a kind of inherent easement for certain public purposes. See Carol M. Rose, Joseph Sax and the Idea of the Public Trust, YALE LAW SCHOOL FACULTY SCHOLARSHIP SERIES, http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=2804&context=fss_papers.

²⁰ *M.C. Mehta v. Kamal Nath*, 1997 (1) SCC 388.

²¹ *DIWAN*, supra note 18. See also *M.I. Builders Pvt. Ltd. v. Radhey Shyam Sahu*, AIR 1999 SC 2468.

²² *Reliance Natural Resources Ltd. v. Reliance Industries Ltd.*, (2010) 7 SCC 1.

first, that people should be granted equitable access to natural resources and be adequately compensated and second, that procedure vis-à-vis private parties should be just. The equitable access, according to the Court, the method that would necessarily result in protection of national/public interest, is that of a “duly publicized auction conducted fairly and impartially”.

The following paragraph from the judgment illustrates its solution regarding spectrum distribution that maximizes public interest:

“When it comes to alienation of scarce natural resources like spectrum, it is the burden of the State to ensure that a non-discriminatory method is adopted for distribution and alienation, which would necessarily result in protection of national/public interest. In our view, a duly publicized auction conducted fairly and impartially is perhaps the best method for discharging this burden and the methods like first-come-first-served when used for alienation of natural resources/public property are likely to be misused by unscrupulous people who are only interested in garnering maximum financial benefit and have no respect for constitutional ethos and values. In other words, while transferring or alienating the natural resources, the State is duty bound to adopt the method of auction by giving wide publicity so that all eligible persons can participate in the process.”

The Court thus pushes for spectrum auctions in the public interest – but are they really the best option? This question becomes particularly relevant when we frame the question of public interest as one that might allow for the greatest level of access.

Spectrum auctions might raise money for the national exchequer, but they also inevitably result in companies bearing the burden of massively priced spectrum. The burden for the same is most easily shifted to the consumers. The regime also functions as a barrier to entry for those mid-level companies which might have the most innovative ideas about spectrum usage.²³ Stuart Buck argues that the auction “solution” as governments put it masks an underlying problem –

²³ Stuart Buck, Replacing Spectrum Auctions with a Spectrum Commons, 2 STAN. TECH. L. REV. 2 (2002).

that spectrum is misconceived in the first instance as a form of property that necessarily requires individualized allocation.²⁴

Where does a solution lie then?

IV. Towards a Spectrum Commons?

For a long time, the fundamental question of spectrum management has centered around the best usage of a finite and fixed resource. Spectrum was believed to be a limited physical resource that must be regulated to a very high degree in order to ensure that interference between signals doesn't occur. Thus, frequencies are assigned specific uses and overseen closely by national regulators and an international system of governance.²⁵

In academic circles, the first shift from this approach comes with Ronald Coase's critiques in the 1960s, premised on the notion that scarcity was in fact the normal condition of all economic goods, and that markets, not regulation, were the preferred mode of allocating scarce resources.²⁶ The introduction of spectrum auctions was a major step in starting to realize the spectrum-as-property-rights model. In the US in particular, attachment to spectrum auctions developed so quickly that storms of protest arose when the government decided not to auction, but to give away, the spectrum for digital television broadcasts.²⁷ And yet, as noted above, the auction "solution" comes with its own set of problems, particularly if we are contemplating greater access as our standard of public interest.

This is where we come to the radically different approach which came about with the positioning of spectrum as commons: one that regards bandwidth as a common resource that all equipments

²⁴Id.

²⁵Supra note 1.

²⁶ Yochai Benkler, *Some Economics of Wireless Communications*, in *RETHINKING RIGHTS AND REGULATIONS: INSTITUTIONAL RESPONSES TO NEW COMMUNICATIONS TECHNOLOGIES*, (Cranor and Wilman eds., MIT Press, 2003).

²⁷ Buck, supra note 23. See Lawrence Lessig, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* (Vintage Books, New York, 2002).

can call on, subject to sharing protocols, rather than as a controlled resource that is always under the control of someone, be it a property owner, a government agency, or both.²⁸

With technology changes, approaches to managing the spectrum should change too. To assure broad and egalitarian access to wireless communication, policy makers/users should begin to consider flexible forms of spectrum regulation that will enable the spectrum to be used by everyone to their fullest potential in terms of economic, social and cultural development.²⁹

Current spectrum policy often resorts to hiding behind increasingly obsolete sciences and outdated metaphors. Innovations such as spread spectrum, information theory and most significantly, the internet have served to demonstrate the viability of open standards and decentralization.³⁰ We're increasingly moving towards a system increasingly described as "The Stupid Network" – one with nothing but blank transport in the middle, and intelligent user-controlled endpoints, whose design is guided by plenty, not scarcity, where transport is guided by the needs of the data, not the design assumptions of the network.³¹

As observed above, spectrum management in India features government regulation that entails identifying and fencing off specific frequency bands for the exclusive use of designated persons or entities. Others are forbidden from using these frequencies.³² While the Supreme Court appears to have acknowledged the disputed nature of scarcity – "it is true that with advances in technology, the argument of limited number of frequencies has become weak"³³ - the idea that spectrum is a scarce commodity that must be closely monitored remains the underlying philosophical basis for the spectrum management framework in India.

That being the case, it is important to be clear from what base demands can be made. The commons don't have to be an all or nothing approach – neither is that particularly feasible with present technology. The concern remains that open-access alternatives will increase the cost of

²⁸ Id.

²⁹ Supra note 2.

³⁰ David Weinberger, Why Open Spectrum Matters: The End of the Broadcast Nation, available at http://www.greaterdemocracy.org/framing_openspectrum.html.

³¹ David Isenberg, Rise of the Stupid Network, available at <http://www.hyperorg.com/misc/stupidnet.html>.

³² Supra note 5.

³³ Supra note 14.

assembling the substantial long-term rights to use spectrum for standardized, reliable telecommunication services.³⁴

Selective deregulation of spectrum on the other hand is an important policy initiative that could very feasibly be considered today. The government has notably delicensed the 2.4 Ghz and 5.1 Ghz bands for wireless use in the past,³⁵ with the latest deregulation expected in the case of the 433 Mhz for transmission of information related to utility services.³⁶ If our guiding principle is in fact the goal of equitable access, is it possible that the answer lies in greater deregulation?

The broad market adoption of unlicensed spectrum is documented in Yochai Benkler's study which looked into 8 different wireless markets: mobile broadband; wireless healthcare; smart grid communications; inventory management; access control; mobile payments; fleet management; and secondary markets in spectrum.³⁷ The research showed that unlicensed spectrum applications are dominant in seven out of the eight markets. Findings indicate that 80% of wireless healthcare; 70% percent of smart grid communications; and 40% to 90% of mobile broadband data to smartphones and tablets are operated on unlicensed radio spectrum.³⁸

Liberalization of spectrum usage rights has been on the rise, as documented by a recent Policy Brief of the Centre for Internet and Society.³⁹ Where the United States' Federal Communications Commission has recommended licenses to be as flexible as possible and only restricted on grounds of interference prevention, the United Kingdom's Ofcom has also demonstrated an increasing shift towards a flexible system of spectrum management, with its decision to be neutral in terms of services and technologies in its future spectrum assignments.⁴⁰

³⁴ Timothy J. Brennan, *The Spectrum as Commons: Tomorrow's Vision, Not Today's Prescription*, 41(S2) JOURNAL OF LAW AND ECONOMICS, 791 (October 1998).

³⁵ Khombha Singh, DoT to delicense extra WiMax bandwidth, BUSINESS STANDARD, Dec. 25, 2006, available at <http://www.business-standard.com/india/news/dot-to-delicense-extra-wimax-bandwidth/269110/>.

³⁶ Supra note 17.

³⁷ Yochai Benkler, *Open Wireless vs. Licensed Spectrum: Evidence from Market Adoption*. BERKMAN CENTER FOR INTERNET AND SOCIETY, available at <http://cyber.law.harvard.edu/node/7211>.

³⁸ Id.

³⁹ Satyen Gupta, Sunil Abraham and Yelena Gyulkhandanyan, *Unlicensed Spectrum - Policy Brief for Government of India NTP '11*, available at <http://cis-india.org/telecom/unlicensed-spectrum-policy-brief/unlicensed-spectrum-policy-brief-for-government-of-india-ntp-11>.

⁴⁰ Id.

The Draft National Telecom Policy 2011 states that it is needed to identify additional frequency bands periodically, for exempting them from licensing requirements for operation of low power devices for public utility services.⁴¹ It further calls for ensuring adequate availability of spectrum and its allocation in a transparent manner through market related processes and to enact a separate Spectrum Act which inter-alia deals with all issues connected with wireless spectrum) licences and their terms and conditions.⁴²

The future of spectrum management in the country is tied in with the Draft Spectrum Bill. The legislation is a response to the 2G spectrum scandal, and has been prepared by a committee chaired by Justice Shivraj Patil⁴³, who also examined the allocations from 2001 to 2009 and submitted a report to the government on official lapses in spectrum allocation. While ostensibly a move towards public interest based legislation in relation to a 'scarce' national resource, the modality for determining how spectrum is allocated is not considerably different from existing structures and will rely on market based pricing for spectrum. The Bill in its present iteration allows for the setting up of a Spectrum Management Commission and also for spectrum sharing, trading or transfer and places a limit of maximum amount of spectrum allocation for each interested party. It delinks the license to use a portion of spectrum via any technology, from the license to provide a service via such spectrum or the license to possess wireless equipment.

The Bill further allows for reforming of spectrum and places strictures on ineffective utilization. It acknowledges that though spectrum is a scarce resource; new developments in technology (switch over from digital to analog in transmitting and receiving devices) allow for sharing of narrow bands of spectrum as well. Spectrum sharing too will be regulated by the Bill. The Spectrum Management Commission will allocate and re-allocate spectrum, issue time bound and area bound licenses for its use, and also will ensure that no one corporate entity has monopoly over spectrum use. The Bill also refers to any wireless equipment, not differentiating between those that can be used at very low frequencies for wireless networks for domestic or personal use. It is evident that by squeezing the pipe, the state may get inadvertent control over speech,

⁴¹ Supra note 17.

⁴² Supra note 17.

⁴³ Sandeep Joshi, National Spectrum Act, available at <http://www.thehindu.com/news/national/article1688310.ece>.

media and information flows, and hence the need to look at allocation of spectrum as not only an economic or commercial concern, but one that relates to rights of free speech and right to information.

V. Conclusion

The traditional argument around using the framework of property rights to manage spectrum has rested on the pillars that the government needs to create rights to use a particular commodity, and that those rights may then be sold to the highest bidder. But, if it turns out that it is unnecessary in the first place to create that right, and if the sale of that right turns out to be anti-competitive, then it may well be that open spectrum is the way out. The most important issue here is back to that question of necessity: would de-licensing wide swaths of spectrum result in chaotic interference? Or would it tap into the unrealized potential of the market in communication and herald innovation?

It is essential that we pursue the answers to these questions if we are to truly locate the public interest and move towards the highest and most equitable level of access to communication possible. If the answers for now at least tell us that partial deregulation is the answer, then that is the route that needs to be forged down.

In jurisdictions such as the United States and the United Kingdom where open spectrum management has begun to be put into practice, there tends to be both an interest by the regulator and by the government to engage with new technologies and new regulatory frameworks. At the same time, civil society plays a vital role in assuring progress is made and that it is done in the public interest. Open spectrum management is an opportunity to demystify both technology and regulation, to experiment with locally controlled forms of ownership and decision-making and to create communication systems that directly meet local needs and capacities.⁴⁴ It is important that the government move down this route of greater deregulation for the public interest to truly reign paramount and not merely become an empty vessel – the future of free expression is at stake.

⁴⁴Supra note 2.