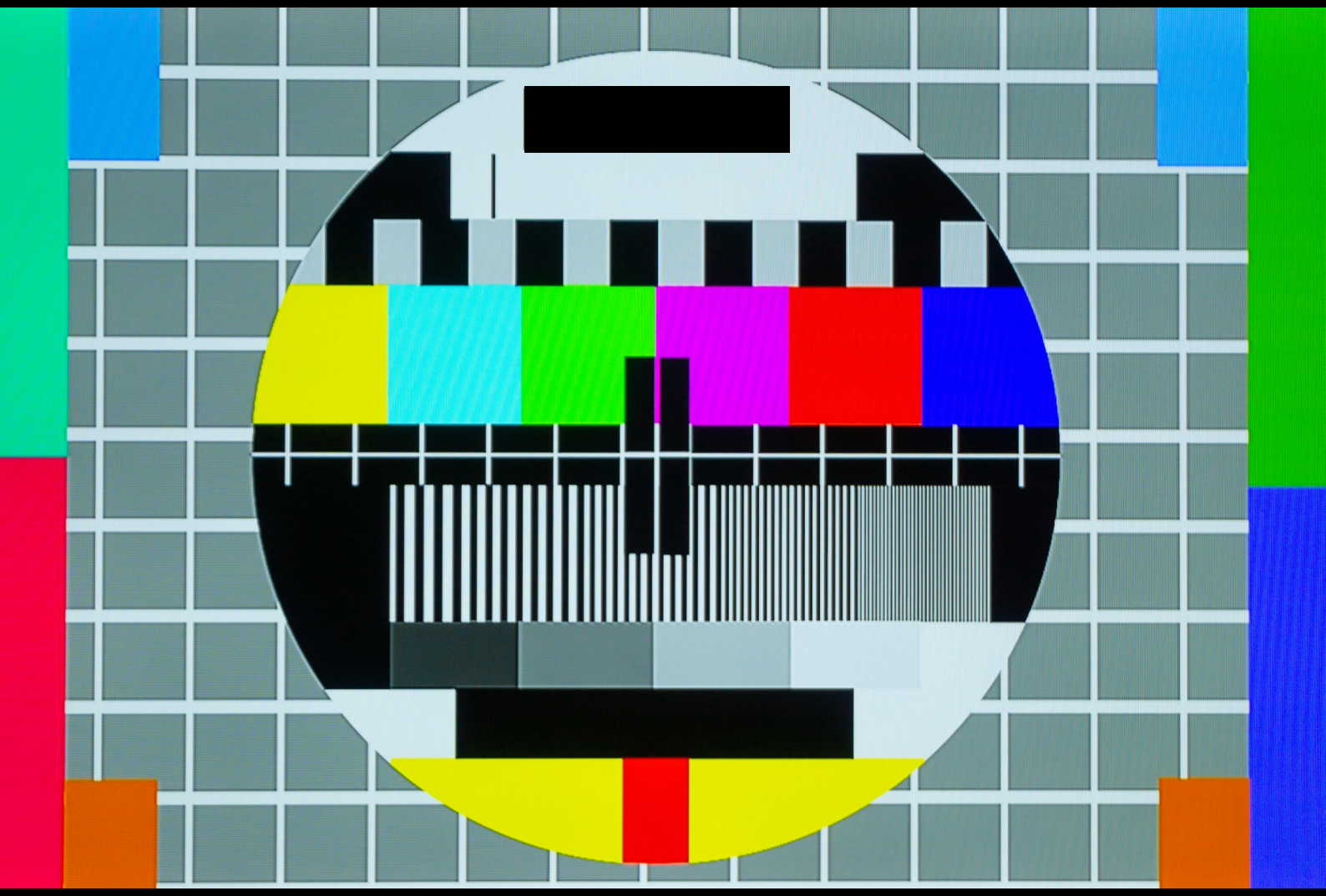
INDIAN TV BROADCASTING AT A CROSSROADS

An Assessment of Regulatory Outcomes and the Way Forward



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LIST OF ABBREVIATIONS

ABBREVIATION	FULL FORM
CAS	CONDITIONAL ACCESS SYSTEM
CTN ACT	CABLE TV NETWORKS ACT, 1995
DAS	DIGITAL ADDRESSABLE SYSTEM
DPO	DISTRIBUTION PLATFORM OPERATOR
DTH	DIRECT TO HOME OPERATOR
GST	GOODS AND SERVICES TAX
IPTV	INTERNET PROTOCOL TELEVISION
MIB	MINISTRY OF INFORMATION AND BROADCASTING
MSO	MULTI SYSTEM OPERATOR
NCF	NETWORK CAPACITY FEE
NRF	NEW REGULATORY FRAMEWORK
NTP	NATIONAL TELECOM POLICY
OECD	ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT
STB	SET TOP BOX
TDSAT	TELECOMMUNICATIONS DISPUTE AND SETTLEMENTS APPELLATE TRIBUNAL
TRAI	TELECOM REGULATORY AUTHORITY OF INDIA
QOS	QUALITY OF SERVICE

EXECUTIVE SUMMARY

This report examines the impact of regulation on India's TV sector. The central government classified broadcasting as a telecommunications service in 2004, even though legislators, parliamentary bodies and Justice B.P. Jeevan Reddy recognised the inadequacy of telecommunications laws to address the broadcasting sector. The Telecom Regulatory Authority of India (TRAI) has served as the interim regulator ever since. It regulates three aspects: tariffs, quality of services (QoS) provided to consumers and interconnection between broadcasters and distributors.

In 2004, the TV industry was unorganised and informal. Consumers had little influence over prices, or the QoS they received. Regulation aimed to provide greater choice to consumers, engender transparency in business practices, and make TV services more affordable. In these 16 years, the sector has shifted from analog to digital broadcasting and uses sophisticated technology to manage subscriptions and encrypt channels. However, this technological improvement has not helped improve sectoral outcomes to the extent envisaged. Cable consumers still find it difficult to choose channels, opaque business practices persist and the cost of TV subscriptions for consumers increase after every regulatory amendment.

These problems exist because price regulation has distorted incentives to invest in quality upgradation. Restrictions on the pricing and bundling of TV channels limits the amount of subscription revenue that broadcasters can earn, which increased their dependence on advertising revenue. As a result, formulaic and sensationalised content dominates Indian TV channels. Fewer restrictions on subscription revenue will allow broadcasters to invest in producing niche, innovative content.

Similarly, distributors (such as Cable and Direct to Home (DTH) operators) receive a fixed monthly payment from consumers every month and have no incentive to invest in improving the quality of their services. This is a more serious problem in the Cable TV industry, where most businesses function as monopolies in their localities and it is not feasible for consumers to pressurise them to provide better services.

The lack of institutional specialisation acts as an impediment in regulatory design and the consequent approach to regulation is prescriptive rather than enabling. Content is central to the TV sector, but there is no requirement for copyright expertise in appointments to TRAI or the Telecommunications Dispute and Settlements Appellate Tribunal (TDSAT). In addition, there is no provision to harmonize copyright laws with broadcasting laws in India. This lack of expertise has led to ineffective price regulation, whereas the price of TV content is unregulated in other democracies.

Moreover, TV sector regulation has focused on prescribing market outcomes instead of guiding the market towards these outcomes. For example, instead of enhancing competition among last mile cable service providers, the regulator has prescribed standards for the QoS that they should provide. However, it struggles to enforce these standards.

To rectify these issues, we recommend a three-step reform process. First, a policy document, which outlines objectives and a roadmap, should be prepared to guide policy makers, and guarantee regulatory certainty to stakeholders. Effective implementation of this policy requires structural reforms in the form of legislative and procedural changes. For this, we propose that the Cable Television Networks (CTN) Act, 1995 framework be updated or a new, enabling legislation for the TV broadcasting sector is introduced. Procedurally, we propose a robust audit mechanism outside of TRAI, which helps to enforce interconnection and QoS regulations in the interest of Indian consumers.

CHAPTER 1: INTRODUCTION

Improving ease of doing business in India is central to economic policy since 2014. It is recognised as one of the most important factors to attract investment and modernise the economy. Administrative reforms which encourage transparency, efficiency, and digitisation, have been implemented across the country. "A deliberate effort is being made to cut red tape and end burdensome overregulation for promoting entrepreneurship and private investment", according to the NITI Aayog's Strategy for New India[1]. The government has reiterated its conviction to use this reform strategy to battle the economic slowdown (or contraction), following the COVID-19 pandemic. Sectoral regulation is a key element of ease of doing business reform. The government regulates various sectors of the economy to ensure that markets achieve socially desirable outcomes and all stakeholders are treated fairly.

Over time, many regulatory frameworks have been ineffective and/or counterproductive to sectoral development. The Economic Survey 2019-20 highlights around 10 sectors where regulatory interventions have undermined markets[2]. It also recognises regulatory distortions as one of the key causes of India's poor performance on the Economic Freedom Index. **In 2019, India ranked 120 among 180 countries and was classified among "Mostly Unfree" economies[3]. Many distortionary regulations in India are "anachronistic" and need to be repealed immediately, according to the Economic Survey.** The government has already started implementing some of its recommendations, including changes to the Essential Commodities Act and the Electricity Act.

The TV broadcasting sector presents another example of overregulation. The Cable Television Network Act, 1995 was the first instrument to regulate this sector. Regulations were premised on a Supreme Court judgement which recognised that spectrum is a public resource. Since 2004, the TRAI has regulated the sector on an interim basis. Table 1 summarises the key aims of extant sectoral regulations.

India is perhaps the only country in the world where broadcasting is regulated to achieve economic objectives in addition to the efficient allocation of spectrum. Most democracies restrict regulation to the bare minimum, required to (i) engender competition among content distributors (carriage services such as cable operators, DTH operators); and (ii) to prevent discriminatory business practices in the commercial relationships between content creators and distributors[4]. Economic restrictions on content creators are unique to India[5].

Table 1: Objectives of Regulation

ECONOMIC OBJECTIVES	SOCIAL OBJECTIVES
Efficient allocation of spectrum	Universal and non-discriminatory access to broadcasting services
Enhance consumer welfare (choice, QoS)	Free, diverse, and plural media that caters to both niche and mainstream choices
Transparent business practices	Preserve the right to freedom of speech and expression

1 NITI Aayog (2018), Strategy for New India @ 75.

2 Ministry of Finance (2020). Economic Survey 2019-20. See Chapter 4.

3 The Heritage Foundation (2020). Index of Economic Freedom 2020.

4 ICRIER (2019), An Analysis of Competition and Regulatory Intervention in India's TV Distribution and Broadcasting Services

5 There are restrictions on the pricing and bundling of TV content.

Regulatory transparency in broadcasting is the worst in India among 11 developing countries, according to the OECD Services Trade Restrictiveness Index[6]. These restrictions are exceptional even in the Indian context, where only markets for utilities or essential commodities are regulated[7]. This report documents how economic regulations have made TV subscriptions expensive and cumbersome for viewers.

Economic regulation of the TV market is unconventional and dissonant with the sector's needs. **Technological improvements in the 21st century have transformed the broadcasting ecosystem. For instance, the transition from analog to digital broadcasting has precipitated fundamental changes in business models.** Digital transmission enabled the industry to carry 10-24 TV programmes on each radio frequency channel while its analog counterpart limited 1 TV programme per radio frequency channel. Additionally, the sector now competes with fast growing digital media platforms. Therefore, there needs to be regulation which enables the TV broadcasting sector to invest in quality upgradation and innovation, to offer world-class services.

In 2019, over 197 million Indian households had TV connections[8]. Despite high penetration, the market is not yet saturated as there are approximately 262 million total households in India[9]. TV is the largest segment of the creative industries and plays a pivotal role in empowering citizens with information, education and entertainment. The sector earned revenues worth Rs 78,700 crore in 2019 – the largest share among media and entertainment counterparts such as radio, print, films and digital platforms[10]. In fact, the TV broadcasting sector is closely linked with these sectors, and investors in broadcasting can leverage its synergies with them.

Cultural, linguistic, and spatial heterogeneity makes India a ripe market for continuous innovation in TV content. As the medium with the highest reach among all media platforms, TV also attracts the maximum share of advertising revenue. In 2019, 37% of all advertising expenditure in India was on TV[11], demonstrating its value proposition for investors, marketers and consumers. The sector is preparing itself for a digital world with more interactivity, and better quality of experience and content. In addition, the sector's success directly benefits the government as license fees for the sector is revenue-linked[12]. In 2019-20, broadcasting constituted 76.8% of receipts for the Ministry of Information and Broadcasting (MIB). Of these, receipts from DTH operators constituted 67.7% on average over four years from FY 2017- FY 2020[13].

INDUSTRY LANDSCAPE

There are three primary market participants in the TV sector -- broadcasters (responsible for content), distributors (responsible for carriage of the content to consumers) and consumers. Broadcasters produce content directly or acquire it from other producers at market rates. They earn revenue from advertisers and subscribers to pay for these acquisitions. Distribution Platform Operators (DPOs) include Cable TV operators and DTH operators who transmit signals obtained from broadcasters to consumers. They are also responsible for revenue collection from consumers. Lastly, consumers pay for access to TV networks, outside of the free networks (DD Freedish and DD Terrestrial) run by the public service broadcaster.

As on December 31, 2019, the MIB has permitted 918 TV channels. 1,613 Multi System Operators (MSOs) have registered with the I&B Ministry, of which 13 MSOs have a subscriber base of more than 10 lakhs. 4 DTH providers cater to 69.98 million households in India[14].

6 OECD, Services Trade Restrictiveness Index

7 Regulated utilities include sectors such as telecommunications, electricity, and roadways. Others including railways and water are regulated through government ownership. Regulated essentials include pharmaceuticals and agriculture.

8 BARC, What India Watched 2019

9 National Statistical Office (2019). Key Indicators of Household Social Consumption on Education in India, 2017-18.

10 FICCI-EY (2020). The era of Consumer A.R.T. Media and Entertainment Sector Report 2019.

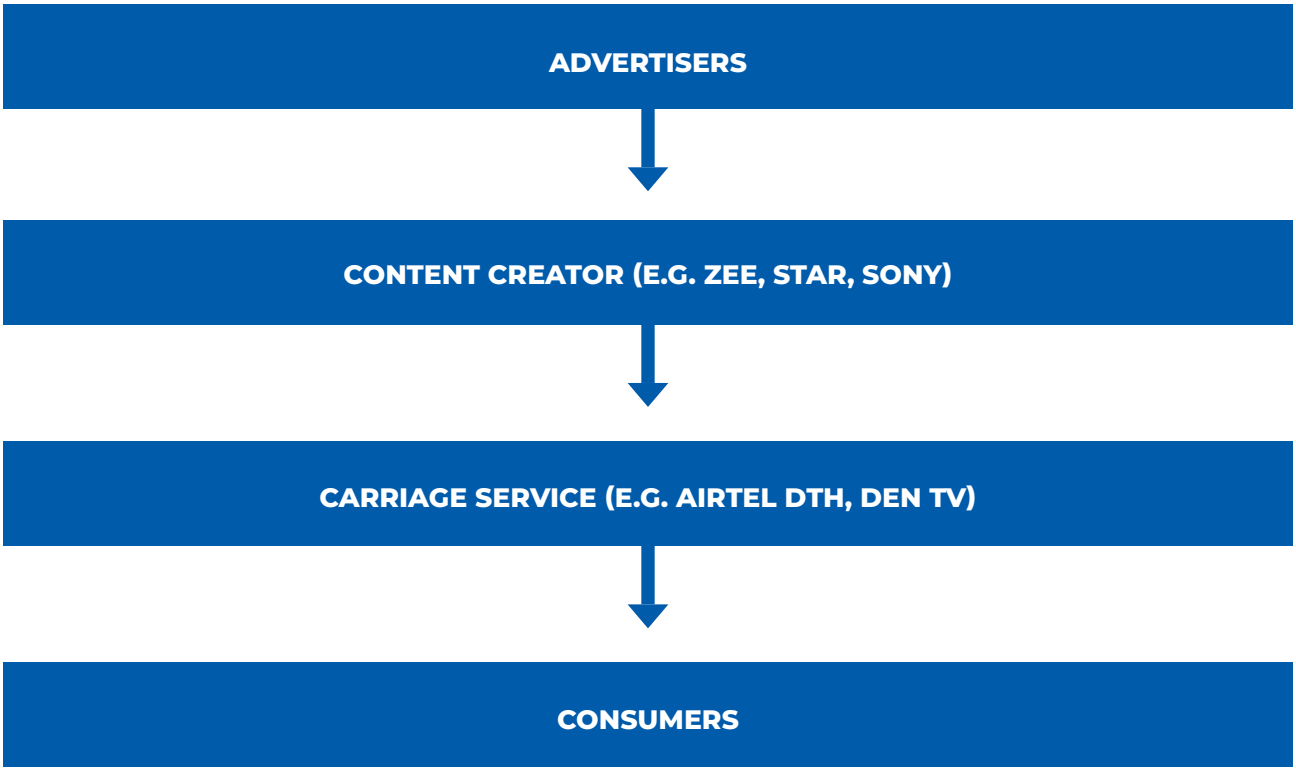
11 Pitch Madison (2020), Advertising in India

12 TRAI (2014), Recommendations on Issues related to New DTH Licenses

13 Ministry of Information and Broadcasting (2020), Accounts at a Glance 2019-20.

14 TRAI (2019), Performance Indicator Report October-December 2019.

Figure 1: TV Value Chain



Unfortunately, the latest set of economic regulations, implemented on March 1 2019[15], reduced the number of TV subscribers by 26 million[16]. Businesses had to rejig operations in order to meet new compliance requirements, when they should've focused on improving quality of consumer experience and content. The compliance burdens impacted subscription and advertising revenues, and multiple channels closed down subsequently[17]. This was compounded by the COVID-19 pandemic. A survey report shows that revenues have declined for 84% of cable operators[18]. **If substantive regulatory changes are implemented in the TV sector, they will help engender efficiencies to reduce operational costs. Reforms will also augur well for future investment, which can then propel growth in allied sectors.**

15 Businesses started migrating to the new regulatory regime in December 2018, and the deadline for this compliance was March 2019.

16 FICCI-EY 2020.

17 The Print, Not just AXN & Dilli Aaj Tak, 40 more channels could shut down, TV industry fear

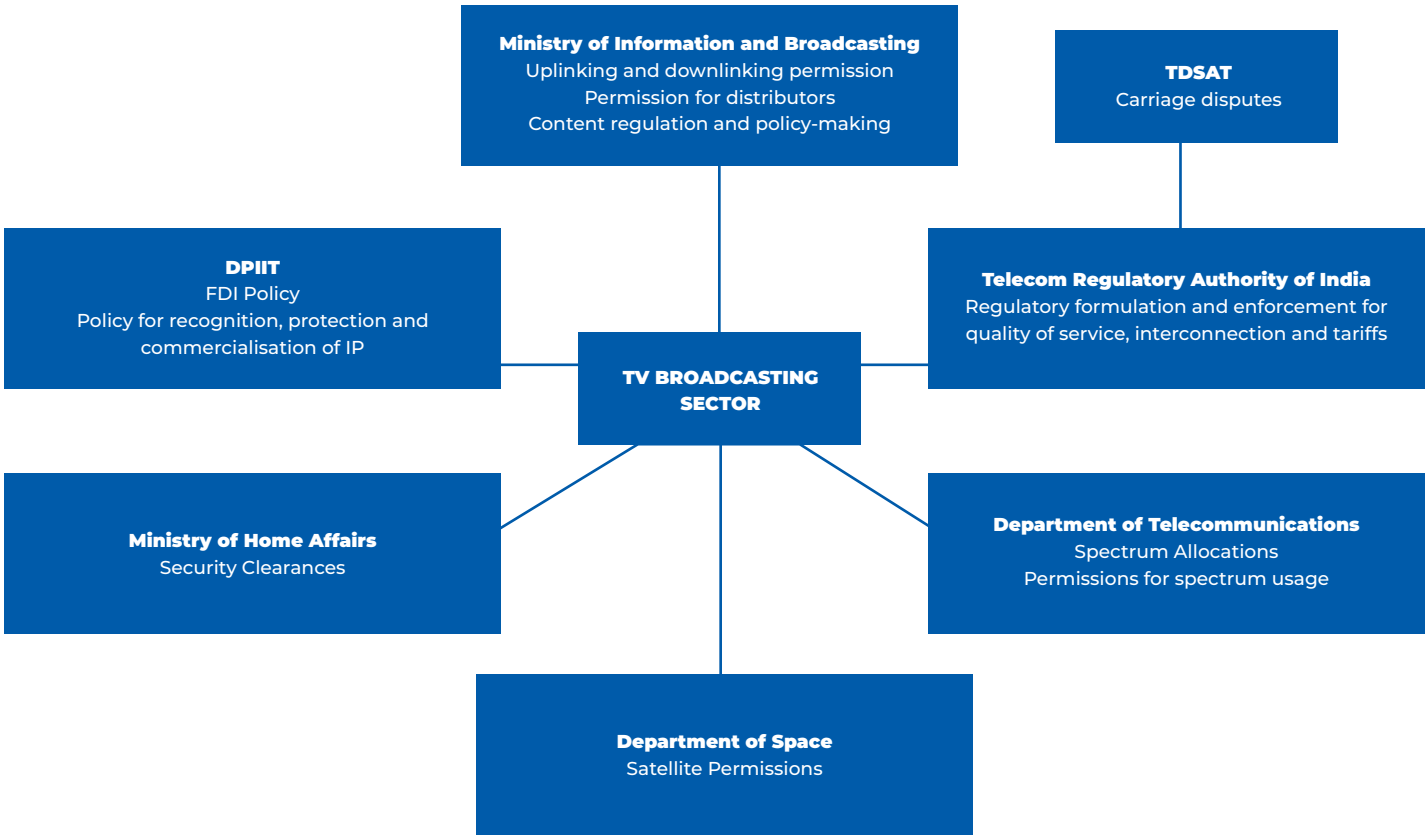
18 INTIN, May 2020, Cable TV Fitness Check

CHAPTER 2: TV REGULATION IN INDIA

Regulation of the TV broadcasting sector derives its provenance from a Supreme Court judgement from 1995. The Supreme Court held[19] that airwaves/frequencies are public property[20]. Since private satellite broadcasting makes use of airwaves for commercial gains, it would be regulated like any other public property. The Central Government was directed to establish an independent public authority for this. The use of spectrum and satellites for broadcasting is regulated through licensing spectrum and taxing its use, all over the world. Such regulation is premised on the mainstream legal-economic construct that private gains earned from use of public resources should be redistributed to maximise societal welfare.

In India, the Department of Space, Department of Telecommunications (Wireless Planning and Coordination Wing and the Network Operation & Control Centre), and the MIB collectively govern the use of spectrum and satellites for broadcasting. The Ministry of Home Affairs also maintains oversight. The MIB regulates content aired on TV through the CTN Act, 1995. Additionally, the TRAI governs business modalities such as pricing and agreements between broadcasters and distributors. **Together, these 'economic regulations' constitute one of the world's most prescriptive regulatory frameworks for the TV sector[21].**

Figure 2: Agencies regulating TV Broadcasting in India



19 Secretary, Ministry of Information and Broadcasting v. Cricket Association of Bengal [1995 (2) SCC (161)]

20 Ibid. at para 24.

21 OECD, Services Trade Restrictiveness Index

CHRONOLOGY OF TV REGULATION

The TV broadcasting sector was kept under government control until 1990. The government derived the legitimacy to do so from the Indian Telegraph Act, 1885, as well as the Indian Wireless Telegraphy Act, 1933. The advent of cross-border satellite television disrupted Doordarshan's monopoly over TV broadcasting, as audiences could now view foreign content in India[22]. This created an opportunity to transmit privately owned TV channels to consumers through wired connections for a fee[23]. In 1993, the Rajasthan district administration directed local cable operators to cease their functioning as they were operating without licenses. When challenged, the Rajasthan High Court held that cables were telegraph lines and would require licenses under the Telegraph Act and the Wireless Telegraphy Act. However, the Court ruled that the district administration had no jurisdiction and set aside the order, while maintaining that a licensing regime is necessary[24]. Consequently, the central government decided to provide formal legal recognition to private cable TV through the CTN (Regulation) Ordinance, 1994. In March 1995, the Ordinance was turned into the CTN Act, 1995. It intended to make cable operators accountable, by regularising them through mandatory registration. Other distribution technologies such as DTH, HITS and Internet Protocol Television (IPTV) continue to be regulated under the Telegraph and Wireless Telegraphy Act.

On the regulatory front, Justice B.P. Jeevan Reddy highlighted the inadequacy of the Telegraph Act, 1885 to govern broadcasts over radio and TV, in his separate opinion in the airwaves judgement[25] Subsequently, several legislative efforts were made to establish an appropriate regulatory regime. A Group was formed under the Chairmanship of the Finance Minister to implement the National Telecom Policy (NTP) in 1999[26]. The Group divided into three sub-groups to look at specific aspects - (i) Sub-Group I - make recommendations to strengthen TRAI through amendments; (ii) Sub-Group II - identify issues in the telecom sector and Internet Service Provider policy, and suggest measures for rapid adoption of e-commerce; (iii) Sub-Group III - suggest a comprehensive reboot of the Telegraph Act factoring convergence of telecom, computers, television and electronics.

Sub-group -I initially noted that the additional responsibility on TRAI to regulate broadcasting would be cumbersome. It attributed this to the existence of many market participants in broadcasting and the differential nature of disputes. However, given that infrastructural convergence is a reality, it suggested that the TRAI Act should be amended to extend the regulator's powers to broadcasting services as well[27].

ATTEMPTS TO REGULATE BROADCASTING SEPARATELY

The Broadcasting Services Regulation Bill, 2007 is the only legislation considered for sectoral governance reform, after TRAI's mandate was expanded in 2004. Among other things, the bill sought to establish an independent Broadcasting Regulatory Authority of India and a Public Services Broadcasting Obligations Fund. Prior to this, the government had introduced the Broadcasting Bill in 1997 and the Communications Convergence Bill in 2001 with the objective of creating a distinct legal framework for broadcasting. The Communications Convergence Bill was the outcome of the report by the 1999 Sub-group on Convergence (the Nariman Committee).

22 Usha Manchanda, Invasion From The Skies: The Impact of Foreign Television on India, (1998).

23 David Ward, Television and Public Policy: Change and Continuity in an Era of Global Liberalization, 2009.

24 Shiv Cable TV System v. State of Rajasthan, AIR 1993 Raj. 1997

25 Supra note 12 at para 82.

26 PMO notification dated 13 December 1999.

27 The Final Draft Report of the Sub-Group on Convergence dated June 11, 2000; pg 4.

Sub-Group III highlighted the imperative to differentiate between carriage of TV broadcasts and TV content creation, and suggested two options[28]. Either the Broadcasting Bill, 1997 should address content concerns in broadcasting and the Telegraph Act should be amended to cover carriage; or the Broadcasting Bill should comprehensively cover both carriage and content aspects of the sector.

Despite these observations, the central government reclassified broadcasting and cable services as telecommunication services and entrusted their regulation (both content and carriage) to the TRAI in 2004[29]. TRAI was made the interim regulator to provide immediate solution to problems of arbitrary rate hikes by cable operators and to reduce disputes in the sector[30].

In July 2002, Member of Parliament N. Janardhana Reddy, told the Lok Sabha, that cable operators were charging an "exorbitant monthly rent of INR 360 since May 2002"[31]. Consequently, TRAI was entrusted with additional powers for economic regulations in 2004. This included the powers to recommend/suggest (i) the terms and conditions for provision of 'addressable systems'; and (ii) regulate the duration of advertisements. The 2004 notification also vested the power to specify norms and periodicity for revision of pay TV channel rates in the TRAI[32].

28 Ibid; pg. 6-8.

29 Notification No.39 dated 09.01.2004 issued from file No.13-1/2004-Restg. by the Central government.

30 Lok Sabha starred question no. 345; answered on 5th February 2004 by Dr. Kirit Somaiya; See also Consumer Coordination Council v. Union of India, Delhi High Court Order in CWP 8993-4/2003 dated December 26 2003.

31 Lok Sabha unstarred question no. 1661; answered on 25th July 2002 by Smt. Sushma Swaraj.

32 Supra note 22.

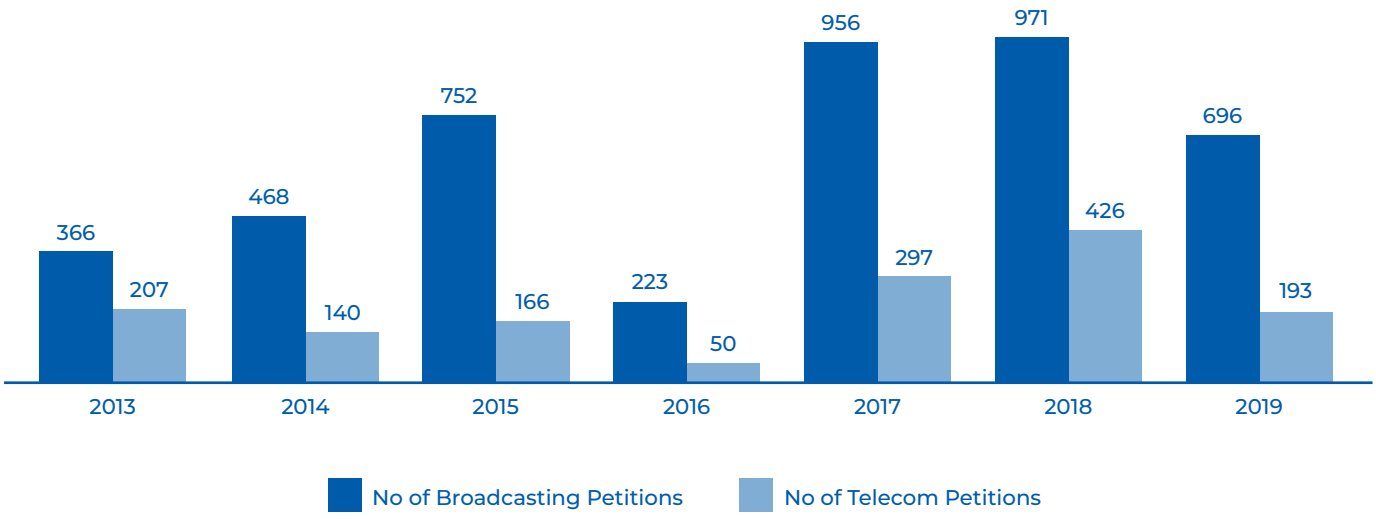
CHAPTER 3: MAJOR REGULATORY INTERVENTIONS AND THEIR IMPACT

When TRAI assumed charge, it inherited a sector with informal businesses which wielded power over consumers and were frequently involved in disputes with each other. The deployment of technological systems, which allowed transparency and accountability, was deemed to be the solution to these problems. Between 2004 and 2017, TRAI oversaw the deployment of these systems, known as the Conditional Access System (CAS) and the Digital Addressable System (DAS). During this period, TRAI also regulated prices, interconnection and QoS in the sector.

These regulations sought to enhance choice for consumers, bring greater transparency in the TV broadcasting value chain, reduce disputes among stakeholders and make TV services affordable for consumers. However, regulatory interventions failed to achieve their intended objectives on one hand and led to unintended consequences on the other, as demonstrated in Appendix 1.

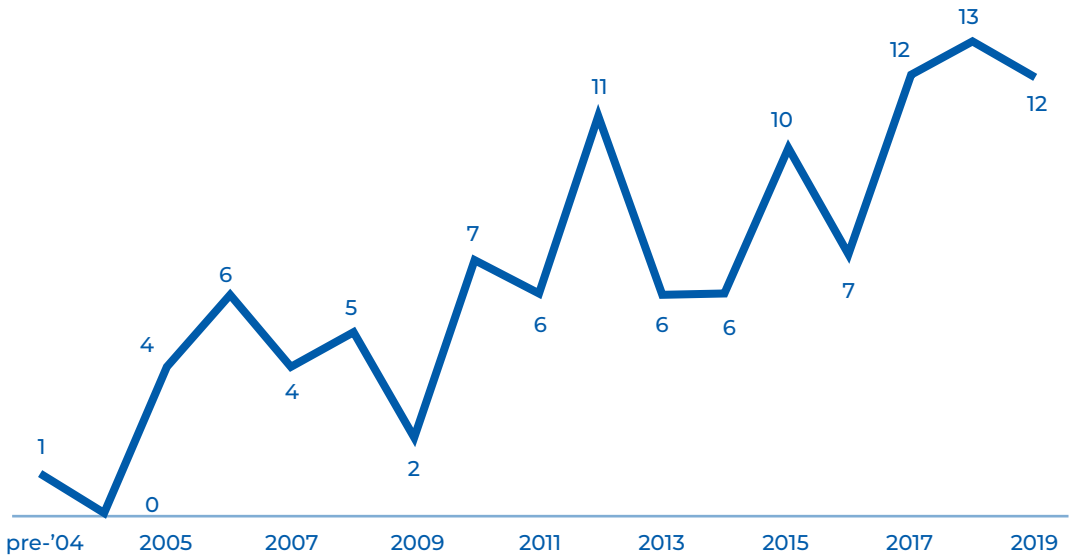
Today, after 16 years of sectoral regulation, TV digitisation is a reality, but the same problems persist. Cable consumers find it difficult to choose channels, TV content is formulaic and prices for TV services increase after every regulatory overhaul. Figure 3 and 4 show that disputes in the broadcasting sector have consistently outnumbered disputes in its telecom counterpart and litigation has increased since 2004. Cases spiked in 2004, 2011 and 2017, which coincides with the introduction of major regulatory interventions. Ineffective regulation thus merits a closer inspection of interventions and their impact.

Figure 3: Petitions Filed at TDSAT



Source: TDSAT

Figure 4: Broadcasting related cases at High Courts and Supreme Court



Source: Manupatra

Prima facie, there is a complex web of regulations, technology, and industry interests which influence sectoral outcomes. However, most of the regulation in this sector pertained to prices. Since 2004, Tariff Orders have been issued and amended 36 times, while only 21 interconnection regulations and 13 QoS regulations have been implemented. In fact, we can trace every problematic outcome in the sector to a common cause: price regulation, which has created a dissonance between business interest and consumer interest. Ideally, regulated prices should motivate businesses to act in a manner that improves consumer welfare or leads to other socially desirable outcomes. However, **price regulation in the TV sector has distorted incentives to invest in quality upgradation for both broadcasters and DPOs.** Figure 5 demonstrates the granularity of current price regulation in the TV sector, and the subsequent paragraphs explain how they distort market outcomes.

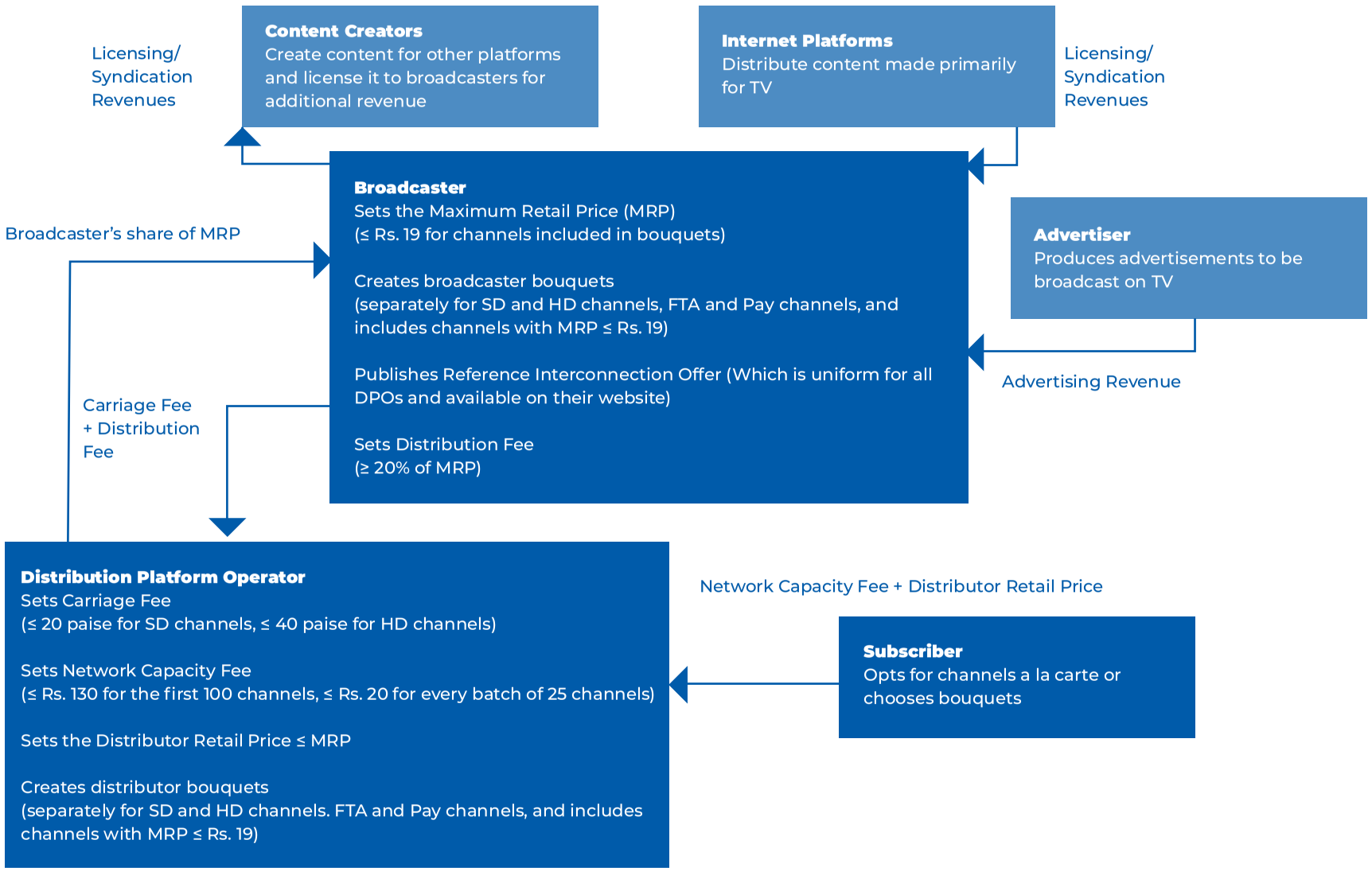


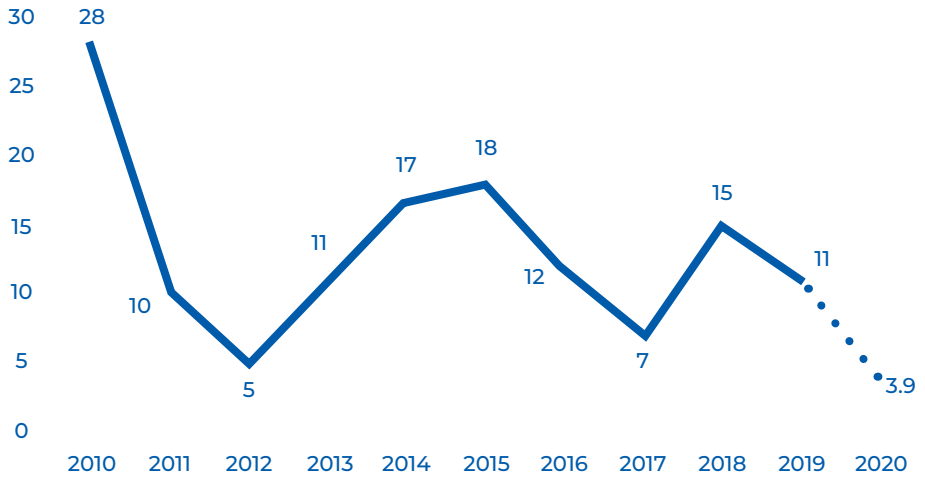
Figure 5: Price Regulation in the TV Sector

BROADCASTERS:

Over the years, channel prices have been regulated in various forms. Currently, there is a price ceiling on channels included in bouquets. **The limits on subscription revenue have increased broadcaster's dependence on advertising revenues. In FY 2019, 68% of broadcaster revenues came from advertising[33].** There is also a cap on the duration of advertisements in a programme[34]. This dependence is undesirable because it forces broadcasters to produce content which attracts the maximum eyeballs, instead of content that audiences are actually interested in. In addition, advertising revenues are volatile and closely correlated with macroeconomic expectations and performance (Figure 7). They do not provide content producers with reliable, consistent returns, and discourage them from investing in risky, niche content. Formulaic soaps and sensationalised news have dominated Indian TV for a long time now[35]. This ad dependence also compels broadcasters to bundle channels such that they can maximise channel subscriptions.

Instead of trying to reduce broadcasters' dependency on advertising revenues, regulation aims to ensure that broadcasters sell channels a la carte rather than as bundles. These restrictions have not had any material impact on the quality of bouquets on offer, as it leaves business compulsions unchanged. The latest amendment to the New Regulatory Framework (NRF)[36] (currently sub-judice) has once again prescribed specific restrictions on prices, summarised in Table 2.

Figure 6: Growth in Advertising Expenditure (%)



Source: Pitch Madison (2020)

33 KPMG (2019),India's Digital Future: Mass of niches.

34 Interim Order passed by the Delhi High Court on December 17, 2013 in cases including 9X Media Private Limited v TRAI [WP(C) 7982/2013] is still operational.

35 BARC (2019), What India Watched. See diagram on composition of fiction programming.

36 NRF refers to the Tariff, Interconnection and QoS regulations notified in March 2017 and implemented in December 2018.

Table 2: Key Changes in the Amendment to the NRF

NRF	AMENDMENTS TO NRF
CHANNEL PRICING AND BUNDLING	
Rs. 19: Price ceiling for including channels in bouquets.	Rs. 12: Price ceiling to include channels in bouquets reduced. Additional restrictions linking individual channel prices to bouquet prices.
No limits on discounting of bouquets.	Discount caps imposed.
No restriction on the number of bouquets offered by broadcasters.	Restricts the number of bouquets offered by broadcasters.
NETWORK CAPACITY FEE	
NCF introduced. Complicated fee structure that led to very high TV bills.	Greater number of channels to be provided for the Network Capacity Fee. Fee structure simplified.
DPOs to charge uniform NCF from all subscribers.	DPOs can charge NCF at different rates for multi TV homes, for different regions, for long term subscriptions.
Distributors were not allowed to offer promotional schemes.	DPO can offer promotional schemes in specific circumstances.

DPOS:

Cable operators, which service over half of the TV market in India, do not have any incentive to upgrade their systems and improve the QoS that they offer. The regulator has allowed them to charge a Network Capacity Fee, a mandatory amount that consumers have to pay to distributors for installing and maintaining infrastructure. This fee is currently set at Rs. 130 (plus 18%GST) per month, for which consumers get 100 channels in exchange. This amount increases if consumers subscribe to more than 100 channels.

Distributors are allowed to charge this fee even if they do not invest in upgrading their infrastructure or the QoS they provide. As a result, infrastructure in the cable industry is not standardised and is sub-par. Two factors compound this complacency:

1. Cable operators function as monopolies in the localities that they service, and can retain market share even if they do not improve the quality of their services. A survey of TV consumers in Patna found that, after the implementation of DAS, approximately 90% of respondents continued with their incumbent service providers. The authors attribute this to the lack of comparable alternatives for consumers[37]. This problem persists. In 2019, TRAI noted that the top 20 MSOs control 65% of the market[38]. In these local monopolies, consumers cannot realistically pressurise cable operators to reduce prices or improve the quality of their services.

2. While TRAI mandated the deployment of digital systems, it did not standardise them. In addition, QoS standards were enforced poorly. TRAI has articulated its incapability to enforce regulations at the last-mile on numerous occasions, particularly

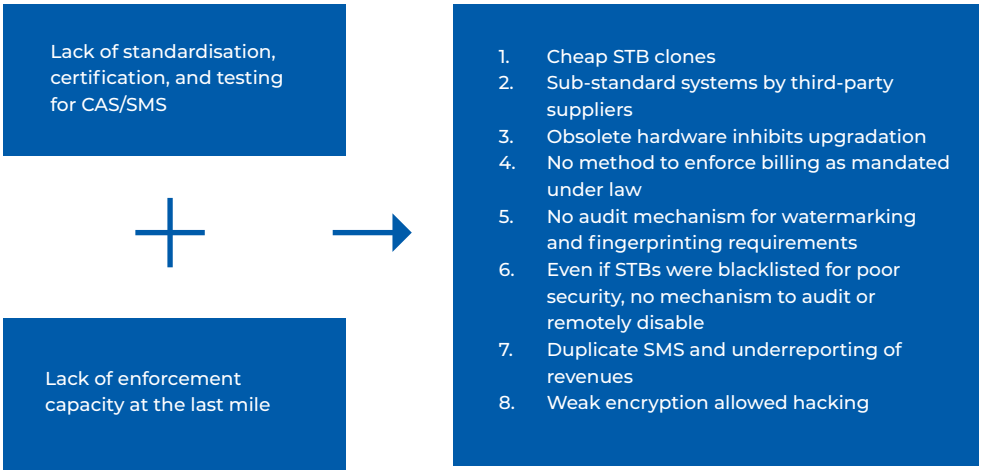
37 Parthasarathi et al., August 20, 2016, Digitalisation of TV Distribution: Affordability and Availability

38 TRAI, White Paper on The Telecommunication (Broadcasting and Cable) Services Benefits of 'New Framework' for Small MSOs, 23 April 2019, available at: https://main.trai.gov.in/sites/default/files/WhitePaper_23042019.pdf

w.r.t. QoS Regulations. In the Explanatory Memorandum for a 2009 QoS Regulation for Non-CAS Areas, TRAI acknowledges that it has initiated the process to delegate some authority to state governments for the purpose of enforcement[39]. However, the Draft Order on 'Delegation of certain powers as provided under section 33 of the Telecom Regulatory Authority of India Act, 1997, to the Authorised Officers as defined in the Cable Television Networks (Regulation) Act, 1995'[40] was never notified. This issue has not been addressed in later regulations on QoS or in the 2011 CTN Act Amendment.

Further, in its latest Consultation Paper on last-mile enforcement, the TRAI notes that certain types of CAS and Subscriber Management Systems (already installed in consumer households) inhibit local cable operators from providing consumer choice and complying with QoS regulations[41]. This also facilitates piracy of broadcasting signals. Figure 7 illustrates how the lack of standardisation and enforcement multiplied harms in the sector.

Figure 7: DAS mandate and legacy concerns



Evidently, it is in the consumer's interest to have better QoS and content, but regulation does not incentivise service providers to do so.

39 TRAI, 24 February 2009, The Standards of Quality of Service (B&CS) (Cable TV - Non-CAS Areas) Regulations, 2009, p. 15.

40 TRAI, 1 December 2008, Annexure C to Consultation Paper on QoS Issues for Cable TV Services in Non-CAS Areas and for DTH Services.

41 TRAI, 22 April 2020, Consultation Paper On Framework for Technical Compliance of Conditional Access System (CAS) and Subscriber Management Systems (SMS) for Broadcasting & Cable Services

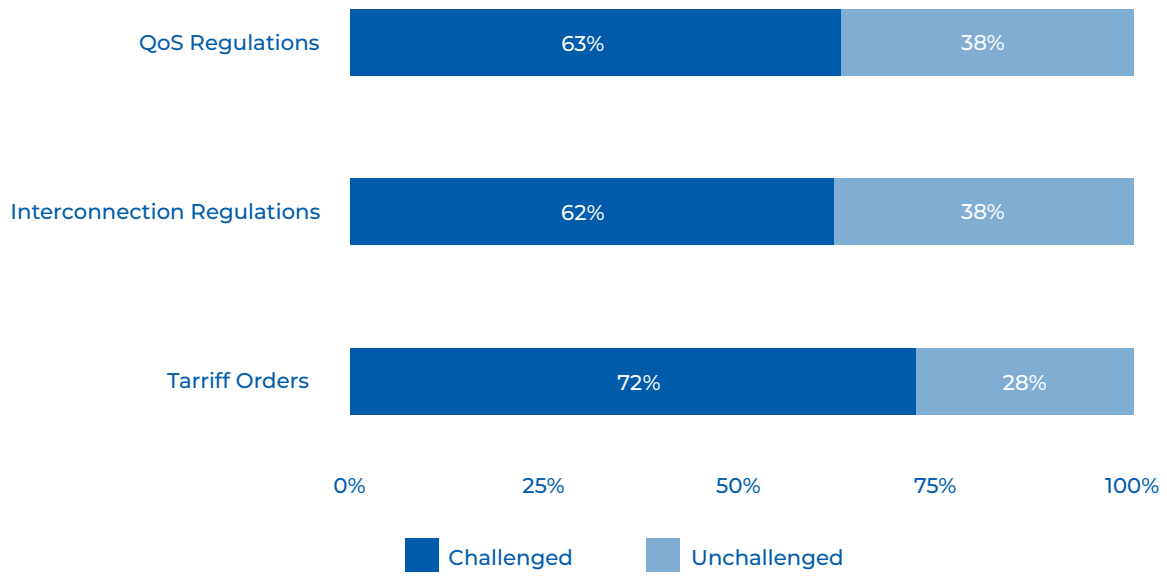
CHAPTER 4: INSTITUTIONAL DESIGN IMPEDES REGULATION

Deficiencies in regulatory design have trapped the TV sector in a vicious cycle of drafting regulations, litigating upon them and amending them[42]. From 2004 to 2020, TRAI issued 77 regulations and amendments. These include 36 Tariff Orders, 21 Interconnection Regulations, 7 Register of Interconnect Agreements Regulations and 13 QoS Regulation. Some regulations were notified but subsequently withdrawn. **Of the 70 Regulations (excluding 7 RIO Regulations), more than 70% of Tariff Orders and 13 out of 21 Interconnection Regulations were challenged in tribunals and courts.**

Clearly, there is scope to improve regulatory design in the TV sector. It is necessary to gather market estimates in order to diagnose sectoral requirements accurately. For instance, regulations can serve consumer interests better if they are based on consumer surveys. Currently, such studies are not undertaken, and consumers find it difficult to participate in the consultation process because they lack technical expertise and language proficiency. The Ministry of Consumer Affairs' study, commissioned in 2003 to gauge consumer attitudes towards CAS, can serve as a model for such surveys[43]. In addition, if regulations are piloted before their implementation, it can help reduce errors in regulatory design and smoothen the application of key provisions.

After identifying the key areas to be addressed, choosing the correct regulatory instruments to respond to them is critical to make meaningful progress towards sectoral goals. **However, a lack of institutional specialisation impedes these efforts and the resultant approach to regulation is prescriptive rather than facilitatory.**

Figure 8: Disputed TRAI Regulations



Source: Author's Compilation

42 Vidhi Centre for Legal Policy, 'The TDSAT Revisited', June 2016.

43 CUTS International, Survey Results on Cable TV in India, 2003, available at: http://cuts-international.org/ConsumerFriendlyCableTVSystem-SurveyResults.htm

LACK OF INSTITUTIONAL SPECIALISATION

Economic principles embedded in copyright law, which balance incentives for production and distribution (consumer access), govern content creation. However, TRAI does not address copyright issues directly or indirectly[44], unlike most broadcasting regulators around the world. The United Kingdom's Office of Communications[45], United States' Federal Communications Commission[46], Singapore's Infocomm Media Development Authority[47] and Canada's Radio-television and Telecommunications Commission[48] acknowledge the central role of copyright.

There is no requirement for copyright expertise in appointments to TRAI or the TDSAT. The TDSAT was set up as an independent adjudicatory body following an amendment to the TRAI Act in 2000[49]. In addition, **there is no provision to harmonize copyright laws with broadcasting laws in India.** The Madras High Court noted this dissonance in 2010 and stated concerns similar to those that the 1999 Sub-group on Convergence had raised[50]. To reiterate, Sub-Group III had noted that it is paramount to differentiate between carriage of TV broadcasts (service provision) and content creation[51].

This lack of expertise has engendered an apathy towards the economics of copyright in price regulation. For instance, there is a stark contrast in TRAI's approach to set prices in the TV broadcasting and the telecom markets. In the former, it fixes the price ceiling for interconnection fees that telecom operators charge each other. It uses an elaborate methodology based on the cost of operating telecom networks to do so. In TV broadcasting, TRAI determines the maximum price that can be charged for TV channels. It also sets multiple price ceilings for payments exchanged between broadcasters and distributors. However, it does not have a detailed method to fix any of these. For example, in the 2017 tariff order, the regulator set Rs. 19 as the price ceiling to include channels in a bouquet. To arrive at this figure, it used the price ceiling it had set earlier and indexed it to inflation[52]. The Supreme Court had struck down another provision in the same Tariff Order. In its judgement, the court stated that the 15% cap on discounts was arbitrary and TRAI should revisit this decision[53].

It is difficult to regulate the prices for content because of the unique features of IP-centric markets[54]. The regulator has acknowledged these difficulties in the Explanatory Memorandum to the NRF. The memo states that there is a lot of variation in the cost of producing different **TV shows and the programmes on a particular channel change frequently.** Price regulation is, therefore, rare in copyright-centric industries. TV channel prices are generally not regulated in other democratic countries. India and China are the only countries where TV channel prices are regulated, according to an analysis of 10 countries[55]. The prices of other media and entertainment

44 Koan Advisory, 'Promoting the Creative Economy: India's USD 100 billion imperative', July 2017.

45 Ofcom's 'Code on Sports and Other Listed and Designated Events' follows the fair, reasonable and non-discriminatory approach to giving or revoking consent to exclusive broadcast sports and other listed events.

46 As part of its modernization drive, the FCC implemented the Satellite Television Extension and Localism Act Reauthorization (STELAR) Act of 2014. Among other things, the FCC liberalized norms on mandatory carriage and compulsory licensing of transmitted content to promote market-based outcomes. See Tom Wheeler (FCC Chairman), 'Upgrading Media Rules to Better Serve Consumers in Today's Video Marketplace', April 12, 2015.

47 The IMDA has a dedicated vertical for 'Media' which supports innovative content creation and enhances the industry's capabilities. The Media Manpower Plan is one such example.

48 The CRTC is in the process of making signal piracy as a specific offence under the Broadcasting Act. See 3.6.4, Final Report on 'Canada's communications future: Time to act', Broadcasting and Telecommunications Legislative Review Panel, January 2020.

49 Section 14, Telecom Regulatory Authority of India (Amendment) Act, 2000.

50 Jak Communications Pvt. Ltd v. Sun TV Network Limited Madras HC, (2010-2-LW936).

51 Supra note 27.

52 This, in turn, was derived from price ceilings prescribed in 2003.

53 Star India Private Limited vs Department of Industry Policy and Promotion, [CA Nos.7326-7327 of 2018]

54 In other markets, regulators strive to set prices equal to the cost of producing an additional unit of a good or service. However, producing innovations requires a large amount of investment upfront, but there is hardly any cost for replicating the innovation. For example, it is very costly to produce a film, but copying it to multiple CDs is very cheap. Producers would have no incentive to make films if they were only able to recover the costs of replicating the film onto CDs. Hence, regulators cannot set the price of an innovation equal to the cost of producing an additional unit of it.

55 ICRIER (2019), An Analysis of Competition and Regulatory Intervention in India's TV Distribution and Broadcasting Services

services in India are also not regulated, except in two other instances[56]. These exceptions have also led to perverse outcomes in the respective markets[57].

Similarly, despite continuous disputes, there is no explanation for the lack of broadcasting specialisation within TDSAT either. **When TDSAT's mandate was expanded to include broadcasting matters, the qualifications to become a Member of the TDSAT were not amended.** Section 14C of the TRAI Act, 1997 requires Members to be experts in the field of technology, telecommunication, industry, commerce or administration. The absence of broadcasting as an area of expertise impairs TDSAT's capability to resolve disputes. Recently, the Supreme Court took notice of the vacancies in the TDSAT and directed the Central government to expedite the appointment process[58]. TDSAT only has a Chairperson and no judicial or technical member.

PRESCRIPTIVE REGULATION INSTEAD OF ENABLING APPROACH

Regulatory interventions in the TV sector have tried to prescribe market outcomes instead of guiding the market towards them. For example, it has prescribed TV channel prices instead of addressing broadcaster's dependence on ad revenues. Similarly, rather than foster competition among cable operators, the regulator has prescribed detailed QoS standards, which are not effectively enforced.

Capacity constraints inhibit LCOs from complying with regulations and improving consumer experience. The primary roadblocks they faced during the transition to new regimes are the lack of required infrastructure and capital inputs. TRAI sought to plug this gap in capital input, by introducing a carriage fee. However, distributors faced no pressure from the market to improve their services, due to last-mile monopolies. Fostering competition and addressing capacity constraints among last mile businesses could have led to better outcomes in the TV market. If cable operators competed with each other, they would be more accountable to both: consumers and broadcasters. This would also have reduced the burden on regulation to ensure that QoS standards were met.

DTH operators can provide an aspirational model for their counterparts in cable services, because they deliver better QoS – even though the same regulations apply to both carriage services. DTH operators have deployed software that helps customers choose channels online with ease. The industry uses digital payments methods extensively, which has engendered transparency and ensured business continuity during the coronavirus pandemic.

Economic regulation will compound regulatory complexity unless persistent non-compliance challenges are addressed at the last mile of cable TV distribution. **The need of the hour is a combination of holistic and targeted reforms which focus on capacity building and enforcement. This will help small cable operators deploy the latest technology to foster efficiency in their operations, engender transparency in the sector and enhance consumer choice.** The following measures can help enhance competition in the sector:

1. **STB Interoperability:** Set top box interoperability can reduce consumers' costs to switch service providers, as they would not have to pay for set top boxes. To achieve this, TRAI has recommended that the MIB and Bureau of Indian Standards prescribe new standards for STBs.
2. **Last-mile infrastructure sharing:** Cable operators should be incentivised to share last mile infrastructure as it will reduce fixed costs associated with setting up cable networks and can also expand access to broadband[59].In 2004, the International Telecommunications Union noted that countries with the extensive broadband penetration achieved this because of (i) competition from a healthy cable

56 First,the rate of royalty that radio stations pay to music producers is fixed. Second, the court may prescribe the rate of royalty that dissemination platforms pay to music producers if they are unable to negotiate a price.

57 IMI-Deloitte (2019), Economic Impact of the Recorded Music Industry.

58 Bar and Bench, Supreme Court extends the tenure of TDSAT Chairman by three months, asks Centre to expedite appointment process for TDSAT members, Shruti Mahajan, April 7, 2020.

59 Financial Express, Dr. V. Sridhar, Realising India's broadband dream

TV industry (Canada) or (ii) strict unbundling requirements that enabled easy access to new market entrants (Japan and South Korea)[60].

3. **Broadband infrastructure on cable:** The use of cable infrastructure for broadband transmission can help unlock efficiencies derived from economies of scope and encourage more businesses to invest in cable infrastructure. The 'Dig Once Policy', adopted in some states in the United States, recommends the installation of empty conduits during construction projects. Future providers can install fibre or cable by threading it through existing conduit[61].
4. **Grant of infrastructure status:** Granting infrastructure status to the cable TV industry can incentivise investments. Cable TV networks fulfill the criteria set out by the Rangarajan Committee for granting infrastructure status[62].

60 International Telecommunications Union, Trends in Telecommunication Reform 2004/05: Licensing in the era of convergence, December 2004.

61 H.R.1625 - Consolidated Appropriations Act, 2018, Public Law No: 115-141, available at: https://www.congress.gov/bill/115th-congress/house-bill/1625/text#toc-HFDDD6E27DBB144C4A4B0FDB7962684E2; This legislation directs states to explore potential 'Dig Once Policies'. States such as North Carolina have implemented these policies.

62 MoSPI, Manual on Infrastructure Statistics.

CHAPTER 5: A ROADMAP FOR REFORM

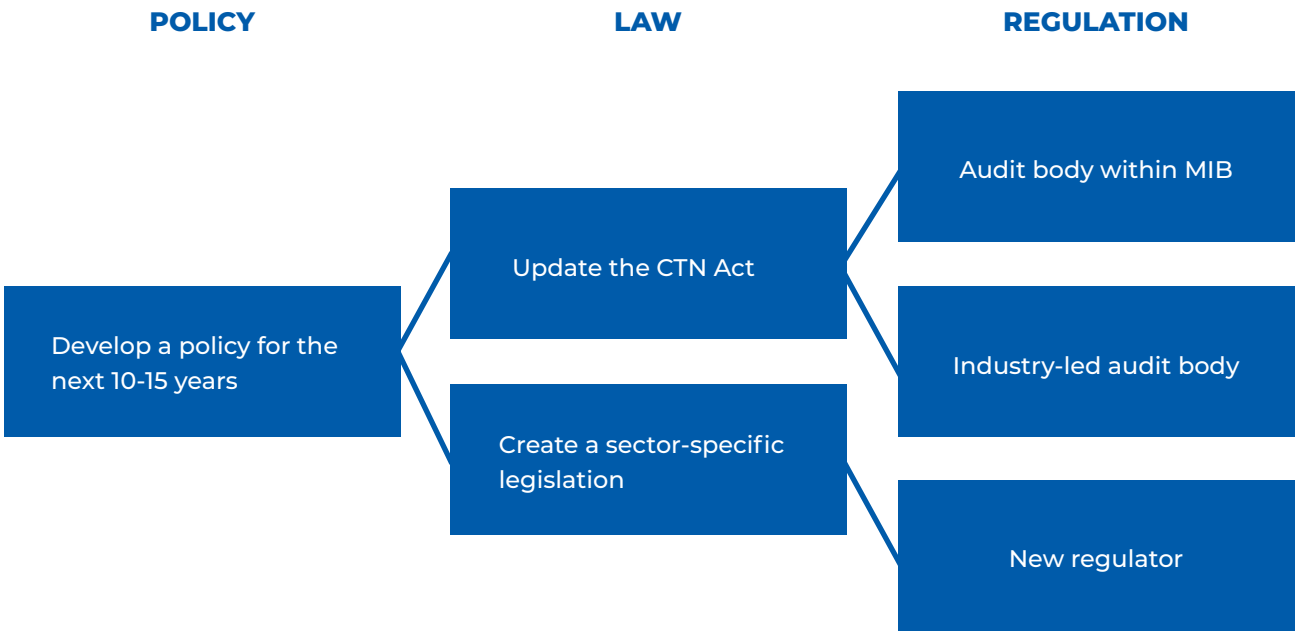
Well-designed regulation should weigh the costs and benefits of interventions. The Economic Survey 2019-20 describes how poorly designed interventions can distort markets and negatively impact consumer and producer welfare:

"In addition to creating deadweight loss, an artificially high price transfers profits from consumers to producers and creates opportunities for rent seeking and an artificially low price leads to transfer of profits from producers to consumers and leads to low incentive to invest further and aggravates the scarcity of the product. As we illustrate in this chapter, the Indian economy is replete with examples where the Government intervenes even if there is no risk of market failure, and in fact, in some instances its intervention has created market failures."

The government has already proposed to deregulate some of the sectors discussed in the Economic Survey, such as agriculture and power. The TV sector is another instance where a modern and agile governance framework could yield betteroutcomes. This sector has evolved significantly since 2004 and access to TV broadcasting is now widespread. It is therefore imperative for policymakers to prioritise improvements in quality of content and QoS. We recommend the following three-tier reform:

Step-1: A policy for the broadcasting sector: Multiple ministries, departments and agencies regulate the TV sector. Each of them pursues their own goals and performs specific duties, necessitating coordination among their actions as well as their objectives. Therefore, a policy can bring cohesion to the efforts of various agencies. It could additionally seek to reorient regulatory approach towards consumer welfare, by outlining a roadmap towards sectoral development. It could accelerate a phased implementation of new and efficient technologies; efforts towards enhancing sectoral hygiene and transparency, and towards levelling the playing field between different infrastructure operators. Above all, it could provide impetus to quality content and QoS. The stability and certainty offered by a unifying policy has

Figure 9: Three-tier reform for the broadcasting sector



generated investments in other sectors like telecom and is sure to do so for broadcasting. Laudably, the MIB began stakeholder consultations on such a Policy in May 2019[63].

Measure: Develop a policy document that details objectives, and a roadmap for the next 10-15 years.

Step - II: A modern legal framework:

Other countries have remodelled their legal frameworks to keep up with consumer and market needs. Appendix 2 provides a snapshot of such efforts. Facilitating sectoral development necessitates a modern governance approach and any attempt at legal reform should solve for:

- **Separation of content and carriage**
  The economics of infrastructure is dissimilar from that of IP or content. Even the 1999 Sub-Group on Convergence, which mooted the separation of information carriage from content carriage, noted this. India is the only country amongst the signatories of the earliest international conventions on copyright (Berne Convention), which regulates both content and carriage together (See Appendix 3). TRAI is empowered to regulate interconnection agreements, tariff and QoS standards under Rule 9 and the nature and price of channels under Rule 10 of the CTN Rules, which must be reviewed.
- **Multiplicity of regulations**
  The current framework under the extant CTN Act and Rules is limited to cable operators. While a proposed amendment to the Act seeks to include other forms of distribution (DTH, HITS, IPTV), there is no clear roadmap on how these shall be regulated. As a result, regulation of the sector happens under different regimes. To remedy this, licensing and regulation should be brought within a unified, light-touch framework.
- **Referencing of copyright principles**
  Copyright principles are not adequately referenced in the CTN Act. While Section 21 of the law states the application of the Copyright Act is not barred by provisions of the CTN Act, Section 4A and Rule 9 and Rule 10 of the CTN Rules have been implemented in a manner that impinges copyright principles. Broadcast Reproduction Rights and non-voluntary licensing mechanisms are important copyright principles ignored by TRAI in its regulations.
- **Obsolete content standards and practices**
  Content regulation worldwide is shifting towards a statutorily backed self-regulatory regime. Although, MIB has constructively recognised the BCCC by referring complaints to the BCCC, there is no formal legal recognition for the NBSA Code nor the BCCC Code. Such recognition, in the form of statutory backing, is important for enforceability in a court of law and should be provided under Rule 6 (Programme Code) of the CTN Rules.

Terms used in the Programme Code and Advertising Code are vague and capable of different interpretations. For a level playing field, content standards in the broadcasting sector should not be more prescriptive than other mediums. Rule 6 (Programme Code) should be reviewed and liberalized to arrive at medium-agnostic common minimum standards.

One of two alternatives may be considered to reorient the sector's regulation. Either the CTN Act can be amended to clearly differentiate regulation of broadcast distribution from regulation of broadcast content. Or, a new sector-specific legislation can regulate all aspects of the broadcasting sector, repealing the CTN Act. In both cases, the role of TRAI in broadcasting regulation would be restricted. The difference is, if the CTN Act is retained, the Ministry of Information and Broadcasting will regulate quality of content. A sector-specific legislation provides the opportunity to choose whether a Ministry should regulate or a specialised body should do so. The other alternative is to draft a sector-specific law was made in 2007 (Broadcasting Services Regulation Bill, 2007)[64]. Among other things, Chapter III of the 2007 Bill envisaged the creation of a Broadcasting Regulatory Authority of India. Notably, this authority's powers under Section 23 did not contemplate price regulation.

***Measure 1:** Reorient the CTN Act to address quality of content concerns and quality of service concerns differentially.*
***Measure 2:** Replace the CTN Act with a new sector-specific legislation to regulate all aspects of the broadcasting sector.*

63 Economic Times (2019), TV and radio companies want broadcast policy to protect media freedom

64 On August 5, 2007, the Ministry of Information and Broadcasting floated a draft for consultation. available at: https://www.prsindia.org/uploads/media/vikas_doc/docs/1241499927~~Broadcasting_Services_Regulation_Bill_2007.pdf

Step-III- Specialised Audit Mechanism for Consumer Welfare:

If global best practices of separating carriage regulation from content regulation are followed, they can reverse TRAI's missteps[65]. Continual sectoral development calls for an approach that nudges broadcasters to generate better content and prods service providers to improve QoS. In the Indian regulatory landscape, this distinction is not clear in the CTN Act or the TRAI Act as both broadcasting and telecom broadly fall under the definition of 'telegraph'. As stated through the course of this report, the regulatory design of TRAI exposes shortcomings in its ability to (i) enforce at the last-mile and (ii) regulate on copyright issues. In October 2008, TRAI had flagged its incapability to enforce QoS obligations at the last-mile and volunteered to delegate its authority to state governments[66].

The MIB, through a specialised body can play a greater role to enforce and audit QoS related norms, ensure consumer welfare and offset the need for economic regulation. The ministry may create an audit body to monitor implementation of QoS and interconnection regulations at the last-mile. The CIPAM model provides an example for a nodal body to address the concern of inadequate enforcement mechanisms at the last-mile. The Cell for IPR Promotion and Management (CIPAM) was created under the aegis of the DPIIT, following the National IPR Policy. CIPAM was conceived as a vehicle to implement the objectives of the National IPR Policy. A similar body may be created under the aegis of the MIB, to audit carriage regulation.

Alternatively, a co-regulatory or self-regulatory body, formed by industry participants, can maintain requisite oversight. TRAI Interconnection Regulations provide for a technical audit to assess capabilities of addressable systems and a subscription audit to verify monthly reports filed by distributors and broadcasters. An industry coalition within the broadcasting sector can conduct these audits, given TRAI's capacity constraints. TRAI's ongoing empanelment process also suffers from the same capacity constraints as empanelled auditors are accountants and do not have sectoral expertise.

The above two cases are preferable if the CTN Act is retained. If a sector-specific legislation is the adopted approach, a sector-specific regulator could also be institutionalised. Such a regulator should take a holistic approach to the sector, and must necessarily implement audit and enforcement mechanisms at the last mile of distribution, unlike TRAI.

Measure 1: *Create an audit body under the aegis of the MIB to monitor and audit implementation of QoS Regulations at the last mile.*
Measure 2: *Support an industry-led body that maintains a mutual check and balance mechanism between broadcasters and distributors*
Measure 3: *An autonomous body under the new sector-specific legislation shall also monitor and enforce regulations at the last-mile.*

65 This would entail an amendment to Section 4A of the CTN Act and Rule 9 and Rule 10 of the CTN Rules. These should be reoriented with the objective of inserting copyright principles that facilitate non-discriminatory access to IP through licensing mechanisms and enable fair compensation as royalties. The focus on pricing can subsequently be redirected towards customer welfare and QoS.

66 Supra note 39 and 40.

67 Cable Television Networks (Regulation) Amendment Act, 2002.

68 A basic service pack is a basic bundle of channels made available to consumers for a minimum fee.

APPENDIX 1: REGULATORY INTERVENTIONS AND UNINTENDED CONSEQUENCES

REGULATIONS	OBJECTIVES	CONSEQUENCES	REASONS
CONDITIONAL ACCESS SYSTEM			
In 2002, the MIB[67]: 1. mandated that pay TV channels shall only be transmitted through an addressable system 2. mandated channels to be included in the basic service tier[68] 3. empowered the government to stipulate a cap on the amount that a cable operator may charge a subscriber[69].	1. Cable operators will deploy CAS to encrypt pay channels and transmit them to subscribers. Subscribers will pay to decrypt and view specific channels. 2. Consumers would be able to choose which channels they want to watch and pay only for those. They will have to invest in a Set Top Box (STB).	Piecemeal implementation with multiple delays[70].	Cable operators played a key role in implementing the scheme but they did not have the resources necessary to do so. Low consumer awareness about their rights and the financial impact of the transition.
		STBs were expensive and not interoperable. Distributors charged exorbitant installation fees. Consumers did not have the option to pay for STBs in instalments and could not return them if they changed their residence.	Lack of minimum standards for CAS, STB installation and activation charges.
		LCOs and MSOs could not arrive at revenue-sharing agreements[71].	Lack of coordination among broadcasters, MSOs, independent LCOs, and the Government of India. No specialised oversight of the sector was instituted[72].

Consumers have the option to substitute channels within this basic service tier.

69 Explanations to Section 4A of the CTN Amendment Act, 2002.

70 Hindustan Times (2006), CAS Returns TV remote to viewers

71 Distribution Platform Operators or DPOs include Cable TV operators, Direct to Home (DTH) operators, HITS operators, and IPTV operators. Cable operators operate at two different levels: Multi System Operators and Local Cable Operators. Multi system operators receive signals from broadcasters and transmit them to subscribers either directly or through local cable operators. A local cable operator transmits signals directly to multiple consumers.

72 The Ministry of Information and Broadcasting, Frequently Asked Questions

73 See Telecommunication (Broadcasting and Cable) Services (Third) (CAS Areas) Tariff Order, 2006.

74 In Kirit Somaiya v. The Chief Secretary, Govt. of Maharashtra, Bom HC (W.P. 611 of 2003), it was claimed that only 447,081 out of 20 lakh connections were reported in

REGULATIONS	OBJECTIVES	CONSEQUENCES	REASONS
		Consumers were paying more for fewer channels.	Broadcasters did not declare a la carte prices of channels. Consumers had no recourse if services were disrupted, hikes in bills and arbitrary charges for STB installation by cable operators.
2004 onwards, TRAI: 1. Prescribed ceiling prices to be charged for TV services at the retail and at the wholesale level[73]. 2. Linked the bouquet prices to a la carte prices at the wholesale level. 3. Prescribed the tariff for providing STBs and a basic bundle of free channels to consumers. 4. Set QoS standards. These included specifications like the format of the consent form for migrating to CAS.	1. Subscribers should have the option of viewing the free to air channels at an affordable price without making any other payment for STB, etc. 2. Subscribers who wish to see the pay channels should be able to get an STB on reasonable terms and also have an option to exit the service if they do not find it satisfactory. 3. Subscribers who have bought an STB should get the freedom to choose individual pay channels rather than buy a large bouquet of channels that contains channels that he / she does not wish to watch. Further, the tariff applicable to such pay channels should be affordable for the subscriber. 4. Greater transparency and reduction in the scope of disputes amongst industry stakeholders particularly between broadcasters/ distributors and MSOs/ cable operators (COs).	Distributors routinely under-reported the number of subscribers[74].	Operators were charging consumers additionally for STB installation, but this was not reinvested in developing a robust Subscriber Management System.
		High number of disputes at TDSAT. These escalated to the High Court, which necessitated further regulation and amendments. Regulations were mired in disputes and amended many times.	Lack of enforcement capacity within TRAI led to poor implementation of QoS regulations. There was no redressal mechanism for consumer complaints except TDSAT. There was no mechanism or metric to evaluate CAS coverage. Industry disagreement over price ceilings led to multiple amendments and disputes.
		Broadcasters relied on advertising revenues, which compelled them to offer their channels to MSOs on terms that would maximise channel viewership. They produced sensational, formulaic content to attract viewership[75].	In the absence of a robust auditing mechanism, broadcasters could not verify the exact number of subscribers, and their subscription revenues didn't cover production costs.

Mumbai.

75 TRAI, Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017

76 TRAI, Standards of Quality of Service (Digital Addressable Cable TV Systems) Regulations, 2012, notified on 14 May 2012.

77 90% of respondents in Patna stated that the main reason they chose their service providers was that they were the only local option available. Source: Parthasarathi et al., August

REGULATIONS	OBJECTIVES	CONSEQUENCES	REASONS
DIGITAL ADDRESSABLE SYSTEM			
2011 onwards, TRAI: 1. Prescribed standard equipment in a cable television network and allow for inspection of cable network services. 2. QoS Regulations[76] mandated a subscriber management system to store subscriber records and manage consumer preferences. 3. Used a different method to link a la carte channel prices to bouquet price. 4. Prescribed the charges that cable operators would levy for installing and repairing customer premises equipment (CPE).	1. Consumers would be empowered to choose channels using their STBs 2. There would be greater transparency in the TV broadcasting value chain and fewer disputes among stakeholders.	The number of disputes in the TV sector increased. Concerns about DPOs underreporting the number of subscribers persisted.	Last mile cable monopolies[77] and weak enforcement of QoS regulations.
		Most households did not find the basic service tier priced at Rs. 100 useful. Instead, they subscribed to bundles priced between Rs. 210 and Rs. 270[78]. This led to higher TV bills.	Difficulties in setting prices for TV content, as it is not as straightforward as setting prices for utilities such as telecom.
		Uptake of a la carte channels remained low, such channels were expensive relative to bouquets.	Broadcasters were heavily dependent on advertising revenues as subscription revenues were limited by regulation and persistent lack of transparency related to number of subscribers

20, 2016, Digitalisation of TV Distribution: Affordability and Availability

78 Economic and Political Weekly, August 2016, Digitalisation of TV Distribution: Affordability and Availability. Prices excluding taxes.

79 EY, The era of consumer A.R.T., March 2020

REGULATIONS	OBJECTIVES	CONSEQUENCES	REASONS
NEW REGULATORY FRAMEWORK (2017)			
Tariff Regulation, QoS Regulation, Interconnection Regulation	1. ensure consumers pay only for channels they want; 2. ensure availability of diverse and high-quality content; and 3. ensure non-discriminatory and transparent interaction across the value chain	TV bills increased by about 25% on an average to Rs. 225 net of taxes[79]. Most consumers pay more for watching the same number of channels or fewer channels than they did in the old regime[80].	TRAI's data on prices of 286 channels shows that channel prices declined for 78.3% of channels in the new regime[81]. Higher prices probably due to the "Network Capacity Fee" which increased the cost of watching TV per channel.
		No change in content quality. Business viability of small broadcasters threatened. Niche channels shut down[82].	Price ceilings and bundling restrictions limit avenues for recovering content production costs through subscription revenues. Dependence on ad revenues continues.
		Majority of consumers in every state except Delhi chose the 'Best Fit Plan'. Choosing channels overwhelming for cable consumers because software/app not deployed to facilitate this.	Last mile cable monopolies persist. Small cable operators not capable of complying with QoS standards.

80 KPMG, India's Digital Future: Mass of Niches, August 2019

81 TRAI, Consultation Paper on Tariff related issues for Broadcasting and Cable services, August 16 2019

82 Financial Express, 13 July 2020, End of the road for English entertainment channels

APPENDIX 2: MODERNISATION OF LEGAL FRAMEWORKS IN OTHER COUNTRIES

COUNTRY	UPGRADATION MEASURE
Canada	In a 2020 report titled Canada's communication future: Time to act, the Broadcasting and Telecommunications Legislative Review Panel made recommendations to modernize broadcasting regulation. Among other things, the report recommended the reimagination of the CRTC with a renewed focus on research and data when making regulations.
USA	The United States passed the Satellite Television Extension and Localism Act Reauthorization (STELAR) Act in 2014 with the intent to modernize the sector. The FCC has been implementing it. The STELAR Act is renewed/reauthorized every five years with changes.
UK	The European Union completed the Audiovisual Media Services Directive in 2018. It prescribes rules to shape technological developments and seeks to create an even playing field for audio-visual media service providers. The Ofcom in the UK and other national regulators have implemented this.
Malaysia	To facilitate the switch from analogue to digital, the Malaysia Communications and Multimedia Commission published mandatory standards and technical codes such as a mandatory standard for Free to Air transmission of DTT services. The MCMC has also published a Communications and Media Blueprint 2018 - 2025 with a policy outline on how to accelerate innovation.
Singapore	The IMDA has developed a Skill Framework for Media and conducts Talent Assistance Workshops to enhance capabilities of the workforce given changing technology. Separately, the IMDA has a Media Industry Digital Plan which acts as a guide for small enterprises in the Media industry to digitalise businesses, plug skills gaps and participate in industry pilot projects.
Australia	The Australian Communications and Media Authority recently released a report on the future delivery of radio. It outlines how broadcasters will be prioritised in spectrum allocation. Further, the ACMA has also created a new class of spectrum license for area-wide licensing of spectrum. This licensing model is in anticipation of 5G deployment and facilitating simulcasts.

APPENDIX 3: INSTITUTIONAL SETUP FOR BROADCASTING REGULATION IN RELEVANT JURISDICTIONS

Jurisdictions that differentiate between Carriage and Content for Broadcasting	Jurisdictions that differentiate between Telecommunications and Broadcasting	Jurisdictions that do not differentiate between Telecommunications and Broadcasting but cooperate with IP authorities or incorporate IP expertise	Jurisdictions that are reforming their regulatory framework
Czech Republic, Germany, Luxembourg, Norway, Poland	Austria, Belgium, Denmark, France, Netherlands, Sweden, Switzerland, Portugal, Indonesia, Nigeria, Albania, Azerbaijan, China, Romania, Taiwan, Chile, Colombia, Pakistan, South Sudan, Jamaica, New Zealand Singapore, Spain	United States of America, Australia, United Kingdom, Japan, Canada, Hungary, Italy, Argentina, South Africa, Russia, Malaysia, Finland, Hong Kong, Thailand, Vietnam, Uganda	Brazil, Mexico

Source: Author Compilation