Telecom Regulatory Authority of India

Recommendations

on

Inputs for formulation of

National Broadcasting Policy-2024

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CHAPTER I

INTRODUCTION TO THE POLICY

A. Background

1.1 The Ministry of Information and Broadcasting (MIB) vide its letter dated 13th July 2023 , attached as Annexure I, has *inter-alia*, informed that MIB is in the process of formulating a National Broadcasting Policy, hereinafter referred to as 'NBP' and that the consultations with stakeholder ministries have been carried out. MIB further mentioned that the broadcasting policy needs to identify the vision of a functional, vibrant and resilient broadcasting sector which can project India's diverse culture and rich heritage and help India's transition to a digital and empowered economy. MIB vide the aforesaid reference has requested Telecom Regulatory Authority of India (TRAI) to provide its considered inputs under Section 11 of the TRAI Act, 1997 for formulation of the National Broadcasting Policy.

1.2 The NBP aims at stipulating the vision, mission, goals and strategies that could set the tone for a planned development and growth of the broadcasting sector in the country in the era of new and emerging technologies.

1.3 Accordingly, as the first step, the Authority has floated a pre-consultation paper on 21st September 2023[1], to elicit the issues needed to be considered for the formulation of 'National Broadcasting Policy'. Written comments on the pre-consultation paper were invited from the stakeholders by 10th October 2023, which, on the request of the stakeholders, was further extended up to 7th November 2023. TRAI received 28 comments from various associations, companies, service providers, individuals and consumer advocacy groups.

[1] https://trai.gov.in/sites/default/files/CP_21092023.pdf

1.4 Further, to seek inputs for formulation of the NBP, TRAI also conducted meetings with the various stakeholders including broadcasters, Direct-to-Home (DTH) operators, Multi System Operators (MSOs), Community Radio Stations (CRS) operators, content providers, producers etc. as well as discussions with eminent experts from government bodies, consulting organizations, industry associations etc., for detailed deliberations on the subject matter. The meetings were held in TRAI headquarters and across several places in eastern, western and southern regions of the country in the months of December 2023 and January 2024, to deliberate upon the region wise issues in details.

1.5 The Authority, after carefully examining various issues emanating from the written submissions of the stakeholders in the pre-consultation paper, discussions and submissions received from various meetings across the country, issued the Consultation Paper (CP) titled as 'Inputs for formulation of National Broadcasting Policy-2024' on 2nd April 2024[2]. The CP identified the focus areas and raised 20 questions that required consideration of the stakeholders and their specific comments. Comments were received from 42 stakeholders. The Open House Discussion (OHD) in online mode was held on 15th May 2024. Certain additional comments were also received post OHD. The comments, OHD submissions and the additional comments have been analysed and considered for the recommendations to the Government.

B. Introduction

1.6 National policies, when well-formulated and effectively implemented, offer a wide range of benefits to the country and its citizens. The broadcasting sector also requires a comprehensive policy to steer the growth of the sector for next 5 to 10 years. It is important to note that the effectiveness of national policies depends not only on their formulation but also on their implementation, enforcement, and adaptability to changing circumstances. Industry and academia

[2] https://trai.gov.in/sites/default/files/CP_02042024.pdf

participation, transparency and accountability in the policy-making process are crucial for ensuring that policies truly benefit the nation and its people.

1.7 In general terminology, broadcasting may be understood as the dissemination/transmission of information in the form of audio, video or both to a wider audience via any distribution medium. Traditionally, broadcasting encompassed television and radio services. With technological advancement and development of device ecosystem, the definition and the scope of broadcasting has become broader and more diversified.

1.8 The MIB reference specifies the definition of broadcasting. As per the International Telecommunication Union (ITU) definition[3], *'Broadcasting (Service)' is radiocommunication in which transmissions are intended for direct reception by the general public; these may include sound transmissions, television transmissions and other types of transmission.*

1.9 TRAI Regulations and Tariff Order[4] has defined '*Broadcasting services' as dissemination of any form of communication like signs, signals, writing, pictures, images and sounds of all kinds by transmission of electro-magnetic waves through space or through cables intended to be received by the general public either directly or indirectly and all its grammatical variations and cognate expressions shall be construed accordingly.*

1.10 The proposed draft Broadcasting Services (Regulation) Bill, 2023[5] has defined *'Broadcasting' as one-to-many transmission of audio, visual or audio-visual programmes using a broadcasting network, intended to be received or made available for viewing, by the general public or by subscribers of the broadcasting network, as the case may be, and the expression "broadcasting services" shall be construed accordingly.* Since

[3] https://www.itu.int/dms_pubrec/itu-r/rec/v/R-REC-V.662-2-199304-S!!PDF-E.pdf

[4] https://www.trai.gov.in/sites/default/files/Tariff_Order_English_3%20March_2017.pdf

[5] https://prsindia.org/files/parliamentry-announcement/2023-12-09/Draft_Broadcasting_Services_(Regulation)_Bill,_2023.pdf

the draft Broadcasting Bill is already considering the definition of broadcasting, therefore, this policy recommendation has not provided any specific definition for broadcasting.

1.11 The broadcasting sector in India is growing rapidly. Content has become the principal and central product for the consumption of the viewers. From TV and radio being the prime source of content delivery mediums, new broadcast and distribution technologies like over-the-top (OTT) broadcasting services have revolutionized the content delivery mechanism. Other factors like economic development, enhanced content consumption and investments have also led to the growth of the sector.

1.12 India is heading towards becoming an economic superpower globally and therefore, it becomes important to analyse and scrutinise the growth of this sector also. The broadcasting industry is a capital and technology intensive industry and requires a constant infusion of funds for quality content creation, inducting talent, introducing new technologies and encouraging innovation. Unlike other sectors, it demands lot of creativity and innovation. Main role of broadcasting involves informing, educating and entertaining the population through content production and dissemination with ease of access to the consumers. As a first step, the requirement of any policy is to define the objectives to be achieved and the corresponding targets to accomplish the desired goals in the defined framework to be achieved in a particular timeframe. Several policies have been issued by the Government in the past for the growth and benefits of different sectors.

1.13 In the CP, TRAI has broadly identified ten focus areas that are envisaged to be addressed through this policy framework. Specific goals along with strategic measures are to be defined to fulfil the targets in a specified time. It is pertinent to mention that one of the main purposes of the policy is to achieve broader objectives such as attracting investments, fostering innovations, developing skills with employment generation, promoting Indian content and strengthening public service broadcasting.

C. Structure of the document

1.14 Based on the written comments received, inputs provided by the stakeholders during the OHD and its own analysis, the Authority has finalized these recommendations. The recommendations have been spread over five chapters. Chapter I provides the Introduction and Background along with framing the Preamble, Vision, Mission and the Goals thereunder identified for the inputs for the National Broadcasting Policy.

1.15 Chapter II focuses on the initial mission, its goals and the corresponding strategies aimed at propelling the growth of the broadcasting sector. Chapter III delves into creation and promotion of Indian Content through various mediums, both locally and globally through the second mission, alongwith its goals and strategies. Chapter IV outlines the strategies designed to safeguard the interests of content creators and leverage broadcasting services to achieve socio-environmental objectives and aid in disaster relief efforts. The strategies are formulated considering the stakeholders' comments, comprehensive analysis of the issue and views of the Authority. Chapter V summarises the recommendations i.e. the inputs to MIB for formulation of National Broadcasting Policy-2024.

D. Preamble, Vision, Mission and Goals

1.16 To create a structured policy document, the NBP should outline the Preamble, Vision, Mission and Goals. Additionally, strategies for achieving each goal should be identified. In light of this, the National Broadcasting Policy needs to fulfil achievable goals by addressing identifiable gaps and limitations through a set of strategies aimed at providing a comprehensive roadmap for the broadcasting sector for next 10 years with special focus on next 05 years. Accordingly, the CP raised the following question to seek stakeholders' comments:

Q1. Stakeholders are requested to provide their inputs in framing the Preamble, Vision, Mission and Broad Objectives for the formulation of the National Broadcasting Policy (NBP).

Comments of the Stakeholders

1.17 Various stakeholders have provided their comments in response to Q1 of the CP to frame the Preamble, Vision, Mission and Broad Objectives for the formulation of the NBP. The submissions received from the stakeholders are important in shaping the foundational aspects of the policy, so as to align it with the diverse needs and aspirations of those involved in the broadcasting sector as well as the consumers at the large.

1.18 The stakeholders provided the following comments for framing the Preamble:

i. Policy should seek to propel the broadcasting sector as a catalyst for IP creation, connectivity for the Indian diaspora, generator of employment opportunities, positively influencing tourism and related industries and recognize the importance of soft power it gives to India's standing across the world.
ii. Underscore the paramount role of broadcasting in the dissemination of entertainment and information and aim to nurture a public broadcaster.
iii. Swift evolution of broadcasting technologies and the pivotal role of digital platforms in the media landscape.
iv. Establish India as a leading center for content, technology and modes of distribution in global market.
v. Improving media access, reading literacy, Indian language learning and promoting inclusivity at national scale.

1.19 In shaping the Vision, the stakeholders proposed a range of Vision statements for articulating the objectives and aspirations of the policy, providing a clear direction and purpose for its implementation, which are outlined as below:

i. Globally competitive and locally driven broadcasting sector that meets consumer demands, attract investments, creation of quality content, maximize opportunities to monetize IP created in India, build resilient infrastructure and seek to grow the segment's social and

economic contribution and set new global benchmark in terms of both distribution technology and quality content.

ii. Encourage more participation of regional content and enable its global reach.

iii. Promote India as a broadcasting and uplinking hub by creating a friendly regulatory environment.

iv. Creating a dynamic, inclusive and responsible broadcasting ecosystem serving the diverse needs and aspirations of our nation, fosters democratic values, promotes cultural diversity, and drives socio-economic development. Through innovation, transparency, and collaboration, it can aim to harness the transformative power of broadcasting to inform, educate, entertain, and empower citizens.

v. To create an inclusive, transparent, technology-neutral, and responsible broadcasting ecosystem that promotes level playing field amongst all operators and ensures access to unbiased, diverse, and high-quality content, positioning the country as an unmatched, globally recognized relevant broadcasting hub.

vi. Creation of an ecosystem of digital radio broadcasting services.

1.20 So far as the Mission is concerned, stakeholders submitted their varied mission statements encapsulating the fundamental purpose, scope and core values guiding the policy's primary functions in addressing the issues it aims to resolve, which are as follows:

i. Provide a roadmap to bolster public sector efforts and support private sector initiatives to generate high-quality high-demand content for local and global audiences and undertake state-of-the-art infrastructural upgrades and expansion for enhanced consumer quality of experience.

ii. Create a stable and equitable environment conducive to the orderly growth of all stakeholders and facilitate ease of business operations.

iii. Position India as a Global Hub for content production, export Indian content to the world and as a Manufacturing Hub for broadcast technologies.

iv. Develop technical capabilities in emerging technology areas like Animation and VFX.
v. Empower consumers with choices, control and access to a wide range of content and services through various devices.

1.21 As commented by the stakeholders, the Broad Objectives to guide the actions and decisions associated with the policy for fulfilling its intended purpose encompass the following:

i. Content Development and Protection.
ii. Attracting investment.
iii. Strengthening Public Service Broadcasting.
iv. Embracing Technological Advancements and Sustainable Practices.
v. Alignment with global best practices and standards in broadcasting.
vi. Promoting Fair Competition and Protecting Consumer Interests.
vii. Fostering Innovation and encouraging R&D.

Analysis of the issue and views of the Authority

1.22 A policy framework for the broadcasting sector necessitates realizing full potential, especially, in generation of employment opportunities, socio-economic development, promoting Indian heritage, culture, tourism and thus increasing overall contribution to GDP. It should deal with all the aspects related to content creation, content integration, distribution that resonates with diverse audiences' preferences both nationally and internationally. The policy should emphasize developing the different institutional mechanisms by Central and State Governments involving the participation of different stakeholders for growth of the sector.

1.23 Additionally, the policy should place significant focus on expanding and strengthening the public service broadcasting and lay down the roadmap for making India a global content and uplinking hub. Also, since the boundaries between traditional and digital media are getting blurred, the Authority is of the view that the policy should consider and acknowledge the importance of the sector's potential to contribute to the economy

through content creation and dissemination utilizing emerging technologies.

1.24 Further, developing the latest generation of broadcasting equipment in India has also become imperative. The Authority believes that the policy should aim to create an ecosystem which would reduce the reliance on import of foreign equipment/infrastructure for the broadcasting sector. Therefore, the sector needs to emphasize on research and development (R&D) activities for manufacturing, adopting and exporting indigenous broadcast equipment through Government support. This would require enabling strategies for establishing standards for local manufacturing, nurturing talent pool, laying down ecosystem for startup culture, support to the Small and Medium Enterprises (SMEs) and fostering partnerships between industry and academia.

1.25 The Authority also recognises that focus should be on fostering the growth of television, radio, OTT broadcasting services as well as content production for films, music, animation, visual effects, gaming and post-production activities. Strategies should be structured in a manner that fosters growth-oriented rules and regulatory environment, which in turn enhances employment opportunities, attracts foreign investors, and promotes Indian content on the global stage.

1.26 The rapidly evolving sector, characterized by emerging technologies such as augmented reality (AR), virtual reality (VR) and mixed reality (MR), artificial intelligence (AI); convergence of devices, roll-out of faster 5G services, and lowering of data tariff, brings in opportunities for growth in the broadcasting sector. However, such opportunities also present certain threats and challenges. Therefore, the Authority feels it is imperative to address the concerns regarding piracy, content-security issues, copyright infringement, skill gaps, limited research and development, inadequate infrastructure and investment issues.

1.27 Therefore, investments in skill development, training and upskilling programmes to empower students and professionals is the need of the

hour. This would create a workforce that is not only well-equipped to meet current demands but is also prepared for the future evolution of the industry. Furthermore, the policy should intend to establish an effective audience measurement and rating system, and address socio-environmental responsibilities through broadcasting services.

1.28 Summing up, the Authority envisions a flourishing broadcasting sector marked by robust competition, active stakeholder participation, ample employment prospects, indigenous manufacturing initiatives and content promotion, all of which play a pivotal role in contributing to India's GDP growth. A healthy and competitive landscape would also enable consumers access a broad spectrum of services at fair and competitive prices.

1.29 In view of the above, the Authority recommends the following Preamble, Vision, Mission, Goals and Strategies for the formulation of the National Broadcasting Policy:

PREAMBLE

1. **Broadcasting sector plays a critical role in shaping public discourse, fostering cultural exchange and driving socio-economic development. Being a sunrise sector, it possesses huge potential to contribute to the GDP, creating employment opportunities, increasing share in export of services and attracting domestic as well as foreign investment. The sector is highly dynamic, vibrant and transforming, showcasing India's technological expertise and rich cultural diversity. Broadcasting services inform, educate and entertain the masses, empower the consumers and inspire the nation in its journey of progress and prosperity.**

2. **Service sector, which is the largest sector in India, accounts for 54.86% of India's total GDP as per the statistics released by Ministry of Statistics and Programme Implementation. Broadcasting sector has the potential to contribute significantly to the service sector, however, exact contribution of the broadcasting sector alone to the**

GDP is not readily available in the public domain. Combined contribution from trade, hotels, transport, communication and broadcasting sectors constitutes 17.57% of the GDP for the year 2023-2024.

3. **Broadcasting sector is the cultural ambassador of the country and has given a unique identity to India. The advent of the digital revolution has been transformative with digitized streaming services and has dramatically transformed content production, distribution and consumption.**

4. **The objective of this document is to lay down a consistent policy and principles framework, that will enable creation of a vibrant marketplace for content production and distribution, fostering creativity and elevating India's soft power globally. With innovative talent pool, skilled workforce and powerhouse of creative minds, there is an untapped potential for the broadcasting industry to proliferate and build a robust ecosystem to deliver high-quality content that serves the diverse needs of our society.**

5. **India's television broadcasting landscape has large number of service providers, comprising of 330 broadcasters, 859 registered MSOs, 1 HITS operator and 4 pay DTH operators. Besides, there is a free-to-air DTH service named 'DD Free Dish' owned and operated by the public service broadcaster of the country viz. 'Prasar Bharati'. Further, a few IPTV service providers are also providing television services to the consumers. Such a varied number of distribution technologies and players has led to competition in the market and offered wider choices and affordability to the consumers.**

6. **On the radio front, while All India Radio (AIR) is the radio vertical of the country's public service broadcaster, i.e., 'Prasar Bharati', there are 388 private FM radio stations operating in India. Further, recognizing the unique needs of specific sections of the society, the Government permits establishment of Community Radio Stations**

(CRS). The CRS provides developmental, agricultural, health, educational, environmental, social welfare, community development and cultural programs, meeting the special interests and needs of the local communities. At present, there are 479 CRS operational in different parts of the country.

7. **Besides television and radio broadcasting, the digital media i.e. Over-the-top (OTT) broadcasting services have emerged as one of the dominant media for content production, dissemination and consumption through the Internet. New streaming services and upcoming technologies like 3D videos, 360-degree live video, animation, visual effects, virtual reality, augmented reality and mixed reality; artificial intelligence etc. have changed the way content is created and consumed. Content creation and dissemination through films, music and content creation for online gaming have also witnessed huge growth and hold immense potential to generate employment opportunities, promote Indian culture and contribute to the growth of the Indian economy. The policy envisages a holistic and harmonized environment providing freedom to innovate, adopt and harness the emerging technologies.**

8. **The objective of the policy is to facilitate the growth of the sector with quick adoption of the emerging technologies for providing an immersive and enriching experience to the consumers in a cost-effective manner, while safeguarding the interest of the stakeholders involved in the broadcasting sphere. Achieving these goals necessitates collaboration among the key stakeholders viz. the Central and State Governments, local governments and agencies, television and radio broadcasters, OTT service providers, content creators, distributors, equipment manufacturers, academia, research institutes, industry including startups and Small and Medium Enterprises (SMEs).**

9. **Acknowledging the industry's enormous potential, the policy aims to create a robust framework that will not only aim to enhance the sector's economic contribution but also establish India as a global leader in the broadcasting sector. The Government of India has bolstered the sector's growth by liberalizing Foreign Direct Investment (FDI) limits to attract foreign investors.**

10. **Several other initiatives have been taken by the Ministry of Information and Broadcasting (MIB) for the progress of the sector in the recent past. These initiatives include consolidating the policy guidelines for uplinking and downlinking of satellite television channels which has eased out the compliance requirements from the permission holders and enabled ease of doing business; revamping of the BroadcastSeva portal which facilitates the online application process, making it more efficient for stakeholders to request for required permissions. MIB has also constituted an Animation, Visual Effects, Gaming and Comics (AVGC) Promotion Task Force in April 2022 to promote the AVGC sector in the country. The Task Force emphasizes on 'Create in India' campaign with exclusive focus on content creation 'In India, For India & For World'.**

11. **In synchrony with the growth of the broadcasting industry, there is an imminent requirement to lay down a long-term policy which emphasizes establishing a robust and consistent regulatory framework to ensure fair competition, consumer protection and content integrity. This policy also aims to overcome the challenges posed due to technological advancements, security issues, particularly in content distribution, by implementing measures to combat piracy, unauthorized distribution and ensuring copyright protection.**

12. **India's rich culture and heritage are valuable assets that can be promoted and amplified by enhancing the broadcasting ecosystem. Diversified with varied art forms, ancient literature and folklores,**

India holds global attention, contributing significantly to the country's soft power. Realizing the country's rich heritage and linguistic diversity, the Government has undertaken several initiatives to promote India's cultural wealth worldwide. Further, the growth of India's broadcasting sector will enable it to act as a connecting bridge between the country's culture and its dissemination to a wider global audience. Moreover, broadcasting plays a pivotal role in improving media access, reading literacy, learning Indian languages and promoting inclusivity at national scale through measures such as adding Same Language Subtitles (SLS)/ Captions (SLC), Audio Description (AD), Indian Sign Language (ISL) or any other accessibility features to the content at the source.

13. **The indispensable role of broadcasting in shaping *inter-alia* public discourse, fostering national unity and promoting democratic values establishes the framework for the policy. Grounded on the principles of universality, diversity, accuracy, fairness, quality, responsibility, accountability and freedom, the policy aims to ensure a vibrant, inclusive and responsible broadcasting landscape that serves the welfare of Indian citizens, preserves Indian cultural heritage and advances the democratic ideals.**

14. **One of the key ideas behind the policy is to unleash the scope and reach of the broadcasting sector for it to become a torch bearer of 'Create in India' and 'Brand India' programmes of the Government. The policy endeavours to establish a long-term vision for India's broadcasting industry, utilizing emerging technologies for positioning the country as a globally recognized Content Hub. It is suggested that the policy be called 'National Broadcasting Policy-2024'.**

VISION

To foster a competitive, affordable and ubiquitous ecosystem for sustained growth of the broadcasting sector, catering to the diverse needs of consumers that facilitates quality content creation, promotes democratic values and cultural diversity, enables inclusivity and literacy, attracts investments, safeguards intellectual property, develops resilient indigenous infrastructure, adopts emerging technologies, generates employment and drives socio-economic development through innovation and collaboration for strengthening India's soft image and positioning 'Brand India' globally.

MISSION

In pursuit of establishing India a global leader in the broadcasting sector, this policy intends to target broad roadmap for 10 years with special focus on the next 5 years. The National Broadcasting Policy-2024, envisages to achieve the following:

A. Propelling Growth

- **Establishing a robust broadcasting ecosystem by enabling growth-oriented policies and regulations through data-driven governance.**
- **Supporting creation of a resilient, adaptive and tech-agile infrastructure fostering R&D, technology innovation and indigenous manufacturing.**
- **Facilitating level-playing field and healthy competition; promoting ease of doing business and stimulating economic growth by enabling the reach of broadcasting services to all, positioning India as an 'Uplinking Hub' for television channels, attracting investments, generating employment opportunities and promoting skill development.**

B. Promoting Content

- **Supporting quality content production and distribution for television, radio and OTT broadcasting services, encouraging proliferation of Indian content, both locally and globally, by harnessing the power of emerging broadcasting technologies and making India a 'Global Content Hub'.**
- **Establishing India as a preferred destination for content creation.**
- **Enabling quality content production in public service broadcasting to inform, educate and entertain the masses.**
- **Promoting and facilitating the growth of Indian content through films, animation, visual effects, gaming, music and state-of-the-art post-production infrastructure.**

C. Protecting Interests

- **Combating piracy and safeguarding the rights of content creators and intellectual property holders through copyright protection.**
- **Fulfilling social responsibilities by ensuring awareness and enabling provisions for disseminating information to all strata of the society; and environmental responsibilities through green broadcasting practices and disaster preparedness.**

GOALS AND STRATEGIES

A. Propelling Growth: Establishing a robust broadcasting ecosystem

Goals

a. **Measure sector's performance based on various key economic parameters to enable data-driven policy decisions**
b. **Enable reach and access of television broadcasting services to uncovered households**
c. **Enable radio coverage in uncovered areas**
d. **Promote R&D and secure IPR in broadcasting sector**

e. **Promote manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment**
f. **Employment generation, bolstered up through training and upskilling for providing New Age Skills to the workforce**
g. **Encourage innovation-led startups and empower Small and Medium Enterprises**
h. **Foster conducive policies and regulatory practices for economic growth**
i. **Make India an 'Uplinking Hub' of television channels**
j. **Leverage digital terrestrial broadcasting as a complimentary broadcasting technology**
k. **Establish effective audience measurement and rating system**

B. Promoting Content: Encouraging Indian content outreach at global stage

Goals

a. **Establish India as a hub for content creation**
b. **Strengthen Public Service Broadcasting**
c. **Facilitate content proliferation through Digital Radio Broadcasting**
d. **Support growth and proliferation of Indian Content through OTT broadcasting services**
e. **Support Indian Content production through films, animation, visual effects, gaming and music**

C. Protecting Interests: Safeguarding rights of content creator and leveraging broadcasting services for protecting socio-environmental interests of the society

Goals

a. **Enforce content security through copyright protection**
b. **Address social and environmental responsibilities**
c. **Recognize the role of broadcaster during disasters**

CHAPTER II

PROPELLING GROWTH OF THE BROADCASTING SECTOR

2.1 Broadcasting has served as a key medium for the Government to disseminate information to the population and serving as a mirror to the society. As per an industry estimate, television, radio and the other segments of the media and entertainment sector generated revenue[6] of ₹2.32 trillion in 2023, which is projected to increase to ₹3.1 trillion by 2026. However, the rapidly growing broadcasting industry is facing certain challenges, including the data gaps, low level of research and development, limited trained and skilled manpower, etc. This chapter aims to develop strategies to address the sector's limitations and to propel growth of the sector.

2.2 The first mission as mentioned in Chapter I is Propelling Growth: Establishing a robust broadcasting ecosystem. The goals of this mission are outlined below. The strategies formulated to achieve each goal, based on the consultation, are discussed individually.

i. Measure sector's performance based on various key economic parameters to enable data-driven policy decisions
ii. Enable reach and access of television broadcasting services to uncovered households
iii. Enable radio coverage in uncovered areas
iv. Promote R&D and secure IPR in broadcasting sector
v. Promote manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment
vi. Employment generation, bolstered up through training and upskilling for providing New Age Skills to the workforce
vii. Encourage innovation-led startups and empower Small and Medium Enterprises

[6] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

viii. Foster conducive policies and regulatory practices for economic growth

ix. Make India as 'Uplinking Hub' of television channels

x. Leverage digital terrestrial broadcasting as a complimentary broadcasting technology

xi. Establish effective audience measurement and rating system

I. Goal: Measure sector's performance based on various key economic parameters to enable data-driven policy decisions

2.3 The industry has experienced growth fuelled by digital revolution and emergence of new technologies. However, there is an untapped potential for the industry to significantly contribute to India's GDP. As per estimate by industry bodies, the share of media and entertainment sector in the GDP of India is about 0.9%[7], whereas it is 3-4% as seen in developed nations like the USA, UK and Japan. Relying more on industry estimates underscores the necessity for timely, reliable and comprehensive data which is crucial for data driven governance.

2.4 Concerning the broadcasting sector's contribution to the economy, the Authority raised the following question to seek the stakeholders' comments.

Q2. There exist data gaps in ascertaining contribution towards economy, revenue generation, employment generation, subscription figures etc. in the broadcasting sector which relies heavily on industry studies to carry out research and estimates. What should be the parameters, targets and institutional framework for measurement? Provide your comments with detailed justification. Also provide the indicative metrics used for calculating the targeted figures, if possible.

Comments of the Stakeholders

2.5 Several stakeholders are of the view that addressing data gaps requires establishment of robust parameters, targets and an institutional

[7] https://mib.gov.in/sites/default/files/Statistical%20Handbook.pdf

framework for measurement. The stakeholders have proposed the following framework:

a. Measurement parameters with indicative metrics like economic contribution in terms of GDP, GVA and employment multiplier effect, revenue generation through incomes from advertising, subscriptions and overall industry revenue, direct and indirect employment generation across connected industries and skill development institutions and subscription figures through market share, Average Revenue Per User (ARPU), churn rates and subscriber count.

b. Achieving targets like increasing GDP contribution and revenue growth of individual segments, projecting to cover 300 million households with accessibility to television services, creation of direct and indirect jobs and increasing subscription penetration rates.

c. Establishing institutional framework through National Statistical Agencies for implementation of standardized techniques, creation of framework for data collection, data aggregation and analysis, involving industry associations for carrying out survey on regular basis, involving research institutions for conducting sector specific studies, forecasting industry growth and assessing policy interventions, and light touch regulatory framework by the regulatory bodies for providing opportunity to every player for fair competition.

2.6 One of the stakeholders also stated that incentives could be provided to encourage participation and compliance with data reporting requirements. This could include tax incentives, recognition for industry leaders in data transparency and accountability etc. Further, addressing data gaps in the broadcasting sector requires a concerted effort from all stakeholders. The stakeholder further mentioned that the exercise of data gathering and analysis must not become a compliance burden defeating the intent of Ease of Doing Business. Rather, it should facilitate better decision making for sustainable growth for all stakeholders. The stakeholders pressed on the requirement of an online portal with

centralized databases for data aggregation, analysis and dissemination, with access to the Government and the service providers.

Analysis of the issue and views of the Authority

2.7 The Authority, after reviewing the stakeholders' comments, noted the lack of availability of coordinated data within the sector. It has been observed that there are no established standard mechanisms for record-keeping of parameters that could help assess the sector's economic growth.

2.8 The broadcasting sector relies heavily on various industry reports to estimate and predict parameters such as revenue generation, contribution to the GDP, employment creation and workforce numbers. Moreover, these reports often present varied projections and estimations, complicating informed decision-making. Therefore, it is essential to have reliable and comprehensive evidence-based data to achieve accurate and authentic results.

2.9 Underscoring the importance for a data-driven governance, there is a need for establishing an institutional framework by the Government to measure the various relevant parameters of the broadcasting sector. From an economic perspective, the broadcasting sector may be recognized as a fast-growing industry contributing to GDP, creating employment opportunities, increasing its share in export of services and attracting domestic as well as foreign investment. The typical way to estimate an industry's contribution to the national economy is to measure the value added.

2.10 Since GDP is the sum of the value added of all the industries in a country, the value added of an industry indicates the contribution of that industry within the whole economy. Broadcasting sector is a part of the service sector. However, the exact share of GDP by the broadcasting sector is not available.

2.11 The Authority is of the view that there is a requirement to establish a mechanism that would comprehensively analyse the overall economic

contribution of the broadcasting sector which consists of both direct and indirect economic contribution. The parameters that quantify the direct contribution of the broadcasting sector include economic contribution through gross value added (GVA) and employment multiplier effect, employment generation which include direct employment generation as well as job creation through indirect employment in connected industries, revenue generation from advertising and subscription, and market penetration based on subscription metrics like market share, Average Revenue Per User (ARPU), subscriber attrition rates and subscriber count.

2.12 It has been noted that there is an indirect economic contribution too, represented by the economic activities that broadcasting sector brings to other industries which provide goods and services to broadcasting industry. The ancillary sectors like telecommunication, manufacturing, transportation, etc. provides essential goods and services to the broadcasting sector.

2.13 To assess and monitor this data effectively, a committee comprising of representatives from National Statistical Office (NSO) under the Ministry of Statistics and Programme Implementation, TRAI and actively involved industry associations and research institutions may be constituted. These bodies need to work in a collaborative manner to carry out various activities in the following manner:

i. National Statistical Office for implementation of standardized techniques, creation of data collection frameworks.
ii. Industry Associations for carrying out surveys on regular basis, collection of data from stakeholders and assist with data analysis.
iii. Research Institutions for conducting sector specific studies, forecasting industry growth and assessing policy interventions.

2.14 Furthermore, the Authority is of the opinion that MIB should also develop an online portal with centralized databases for data collection, aggregation, analysis and publishing using standardized methodologies. Reporting formats should be designed to ensure consistency and

comparability of data for the use of stakeholders and the Government. Such a system would make it easier for the Government to evaluate the overall contribution of the sector towards the economy and other metrices discussed above. Moreover, this would facilitate informed decision-making by the policymakers, industry stakeholders, and researchers, thereby, promoting sectoral growth and supporting general economic development.

2.15 In view of the above, the Authority recommends the following strategies to be adopted in the National Broadcasting Policy for measuring the sector's economic performance:

A1. Measuring of economic parameters for a data driven governance

a. **Establishing an institutional framework to measure the contribution of broadcasting sector towards the economy of India. The parameters are to be measured in terms of gross output and value addition for direct economic contributions such as revenue generation, employment generation, subscription figures etc., as well as other indirect economic contributions.**

b. **Carrying out measurements in collaboration with the National Statistical Office (NSO) under Ministry of Statistics and Programme Implementation, industry associations, academic institutions and TRAI.**

c. **Developing online portals with centralized databases for data collection, aggregation, analysis and publishing using standardized methodologies and reporting formats in order to ensure consistency and comparability of data for all the stakeholders and the Government.**

2.16 The consultation paper additionally identified areas which could help in increasing the share of the sector in the nation's GDP. These encompass mainly provisioning of affordable television services to 'TV Dark' homes, augmenting R&D capabilities and promoting indigenous manufacturing

of broadcasting equipment, employment generation with emphasis on skill development and promotion of innovation led start-ups and SMEs.

2.17 In this regard, the Authority has raised the following question for seeking the comments of the stakeholders:

Q3. Please suggest the strategies to be adopted by the Government and industry for propelling the growth of broadcasting sector w.r.t. the following:

i. Provisioning of affordable television services in 'TV Dark' households;
ii. Augmenting R&D capabilities and promoting indigenous manufacturing of broadcasting equipment;
iii. Employment generation with emphasis on skill development;
iv. Promotion of innovation led Start-ups and SMEs;
v. Any other related area/ strategy

Please elaborate with detailed reasoning.

II. Goal: Enable reach and access of television broadcasting services to uncovered households

2.18 It is estimated that total television screens (including linear and bi-directional) are expected to touch 202 million by 2026 from 182 million in 2023. As per a report, India had 302.4[8] million households in 2021. Therefore, there exists potential of provisioning televisions to more than 100 million homes in the country.

Comments of the Stakeholders for question Q3(i)

2.19 In response to Q3(i) of the CP, stakeholders submitted diverse options for enabling 'TV Dark' households with affordable television services. Few stakeholders opined that providing incentives such as tax breaks or subsidies to the cable TV operators can play a pivotal role in reaching the last mile for extending services to 'TV Dark' households. Another view presented was reduction of import duty on optical fibre equipment which could eventually expand the optical fiber based cable TV infrastructure

[8] https://www.globaldata.com/data-insights/macroeconomic/number-of-households-in-india-2096149/#:~:text=302.4-

for television services and reduce cost of deploying networks in the remote/underserved regions. The stakeholders also advocated that lowering cost of satellite TV channel price would reduce subscription cost that would make television services affordable in 'TV Dark' homes.

2.20 Another stakeholder suggested that the government can subsidize the cost of Set Top Boxes (STBs) in rural and underserved areas to make them affordable and collaborate with private broadcasters and service providers to deploy cost-effective solutions tailored to the needs of 'TV dark' households, leveraging existing infrastructure and expertise. Another stakeholder submitted that since many of the DPOs are also providing fixed line broadband services, license fee on fixed line telecommunication services be waived off to incentivize the penetration of both TV services as well as Internet services.

2.21 In order to cover the 'TV Dark' households among the marginalized or economically weaker sections of the society, one of the stakeholders opined for a Public Private Partnership (PPP) Scheme related to staggered monthly payment plans to cover the one-time cost of purchasing DD Free Dish STBs, small sized dish antenna and other accessories for availing infrastructure facilities.

2.22 Various stakeholders have suggested that private DTH operators should be empowered to introduce innovative services, akin to DD Free Dish, to increase television penetration in rural and remote areas where Pay TV services might not be as prevalent. Additionally, it has been suggested that broadcasters and DPOs should introduce affordable Free-To-Air (FTA) package options to make television services more accessible to a wider demographic section. Implementing tailored pricing and bundling strategies for rural markets can help narrow the accessibility gap in these regions.

2.23 Another comment mentioned enabling DPOs to devise low-cost offerings, curate content for rural underpenetrated areas, identification and

reactivation of inactive set-top boxes through appropriate incentive schemes.

2.24 Few stakeholders are of the view that reactivation of inactive set-top boxes through incentive schemes can also help expanding television access. Leveraging dormant resources can effectively extend the reach of television services without significant infrastructure investments. Also, developing curated content, specifically tailored for underpenetrated markets, would ensure that the programming aligns with the diverse preferences and requirements of these communities.

2.25 One of the stakeholders has also asserted for alternative technologies for provisioning of television services in 'TV Dark' homes. It suggested that the policy should provide enabling framework in addressing Digital Terrestrial Television to Mobile devices abbreviated as DTT2M, by bringing in a framework that is based on market forces, and beneficial and acceptable to the consumers. Focus should also be on policy framework for substantial public-private investment that could result in a win-win approach for all.

Analysis of the issue and the views of the Authority

2.26 The first step in enabling reach and access of television broadcasting services to uncovered households is to identify the districts and blocks with low-density television penetration so that any initiatives to be taken may be targeted properly. In this regard, the Government has identified the 500[9] aspirational blocks and 112[10] aspirational based on 5 socio-economic themes[11]. The identification of aspirational blocks and

[9] https://abp.championsofchange.gov.in/public-assets/Resources/LIST+OF+ASPIRATIONAL+BLOCKS+_V1.0.pdf

[10] https://www.niti.gov.in/sites/default/files/2022-09/List-of-Aspirational-Districts.pdf

[11] Five socio-economic themes for Aspirational District Programmes: Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure.

Five socio-economic themes for Aspirational Block Programmes: Health & Nutrition, Education, Agriculture & Allied Services, Basic Infrastructure and Social Development.

districts by the Government may also serve the purpose of focusing targeted efforts on these identified areas to foster development.

2.27 The factors that may be attributable for the unconnected TV households in India primarily include lower income levels among households that may not be able to afford television sets along with other ongoing expenses. An incentive scheme enabling the Distribution Platform Operators (DPOs) to provide television sets and consumer premise equipment (CPE) to the consumers will go a long way in addressing the issue of unconnected TV households. Moreover, DPOs may come out with bundled schemes having staggered payment option to provide TV sets and CPEs to the consumers.

2.28 Further, the Central Government and State Governments may collaborate in provisioning television sets to the uncovered households via Direct Benefit Transfer (DBT) scheme. Additionally, since credit ratings of consumers are generally unavailable in rural and far-flung areas, financing TV sets and CPEs in these regions can be facilitated through microfinancing institutions, Self Help Groups (SHGs), cooperative societies, Government schemes and Corporate Social Responsibility (CSR) initiatives. These alternative mechanisms may provide accessible and manageable loans, promoting financial inclusion and enabling households to acquire necessary technology, thereby bridging the digital divide and empowering rural communities.

2.29 Besides the availability of TV sets and CPEs, it is essential that trained individuals or agencies are made available and readily accessible to people in rural and remote areas. These professionals should be able to assist consumers with the operation and basic maintenance of TV sets and CPEs in an affordable manner. The Authority feels that there is a need to skill the local youth in the operation and first line maintenance of TV sets and CPEs. This may be achieved by providing short-term skill-based training or vocational training through Industrial Training Institutes (ITIs).

2.30 The Authority has taken note that optical fibre which has been laid from blocks to gram panchayats throughout the country under BharatNet project of the Government has made significant progress. As per the information available on the website[12] of the Universal Service Obligation Fund (USOF) more than 6.86 lakh kilometres of optical fibre has been laid in rural areas and 2,12,778 gram panchayats have been connected through BharatNet. The Authority feels that this broadband infrastructure may also be leveraged to extend the reach of television services in rural and low-density television areas.

2.31 As affordability is one of the key issues in rural and remote areas, the Authority is of the view that there is a need to devise subsidized schemes by the Public Service Broadcaster for provisioning of 'DD Free Dish' services including television set and consumer premise equipment to the marginalized, tribal and economically weaker sections.

2.32 Furthermore, efforts are needed to ensure a reliable power supply to homes in uncovered areas. Without a stable power supply, the incentive for consumers to purchase TVs and CPEs diminishes significantly. Additionally, electronic items are highly sensitive to power fluctuations and may malfunction or fail completely under unstable voltage or frequency conditions.

2.33 In view of the above, the Authority recommends the following strategies to enable reach and access of television broadcasting services to uncovered households:

A2. Provisioning of affordable television broadcasting services in uncovered households

a. Identifying districts and blocks with low-density television penetration. Creating an incentive scheme to enable Distribution Platform Operators (DPOs) to provide television sets and

[12] https://usof.gov.in accessed on 16th June 2024

Consumer Premise Equipment (CPE) through bundled schemes in such areas.

b. Facilitating financial support to consumers for affording television sets and CPEs through microfinancing, Self Help Groups (SHGs) and staggered payment options.

c. Devising a Skill Development plan for skilling local youth for operation and first line maintenance of TV sets, CPEs and network.

d. Leveraging fixed line broadband infrastructure including that created under BharatNet to extend the reach of television services in rural and low-density television areas.

e. Devising subsidized bundled schemes through the Public Service Broadcaster for provisioning of 'DD Free Dish' services including television set and CPE to the marginalized, tribal and economically weaker sections.

f. Encouraging DPOs to devise low-cost offerings, curate content for rural underpenetrated areas and identification, reactivation and reuse of inactive set-top boxes through appropriate incentive schemes.

III. Goal: Enable radio coverage in uncovered areas

2.34 Radio broadcasting remains a vital tool even in modern communication, offering numerous benefits that make it indispensable in various contexts. In India, terrestrial radio broadcasting is carried out in Medium Wave (MW) (526-1606 kHz), Short Wave (SW) (6-22 MHz) and FM or VHF band II (88-108 MHz). With its extensive reach, radio can connect with audiences across vast geographic areas, including remote and rural regions where other forms of media may not penetrate. Its affordability and low setup costs make it an accessible medium for both broadcasters and listeners, providing a platform for information dissemination, education, and entertainment.

2.35 Radio's portability allows it to be easily accessed on the go, making it a reliable source of real-time updates and emergency information. Additionally, radio's ability to transcend literacy barriers ensures that even the most marginalized communities can stay informed and engaged. Overall, radio broadcasting plays a crucial role in fostering mass communication, promoting cultural diversity, and supporting socio-economic development.

2.36 In this regard, the Authority has raised the following question for seeking the stakeholders' comments on the radio broadcasting:

Q12. What measures and strategies should be included in the National Broadcasting Policy to encourage expansion and ensure orderly growth and sustainability of FM Radio Stations and Community Radio Stations in the various cities of country including hilly and border areas? In what ways the policy can facilitate the integration of digital radio technologies into the existing FM radio infrastructure to improve audio quality, functionality and spectrum efficiency?

Comments of the stakeholders

2.37 In response to Q12, one of the stakeholders has specifically provided strategies emphasizing on transitioning to digital radio broadcasting which are as below:

i. Formulating policy for seamless transition from analog to digital and facilitating introduction of enhanced auxiliary services.

ii. Establishing interference protection criteria to ensure compatibility of radio stations (analog and digital) during and after transition period.

iii. Establishing a transition plan providing appropriate protection for analog radio for an interim period and transition to all-digital environment, with legal certainty for all parties involved, objective conditions for process follow-up to evaluate the development, requirements, conditions and obligations.

iv. Adopting a digital radio broadcast transmission standard that will ensure that all digital radio broadcast receivers in India are compatible with all digital radio broadcast transmitters and will enable the continuation of a ubiquitous and free radio service in India.

v. Digital signal must have minimal impact on co-existing and adjacent analog and digital stations, minimal impact on the host analog station.

vi. Digital radio broadcast system should be able to accommodate future upgrades and features.

vii. Digital radio services should be in multiple languages to cater to the linguistic diversity of India.

viii. Availability of digital receivers and transmitters at commercially reasonable prices. In line with the vision of Atmanirbhar Bharat, MIB should launch the PLI schemes for digital receivers to catalyse the growth of the digital receiver base in India.

Analysis of the issue and the views of the Authority

2.38 Radio serves as an essential medium of information dissemination to the masses along with education and entertainment. Compared to television or Internet services, radio infrastructure is more affordable. It requires minimal investment and can reach a wide audience with relatively low operational costs.

2.39 For the expansion of FM radio services in India, the Government introduced a policy during the 9th five year plan (1997-2002) that allowed private sector to establish FM radio stations in India. The first phase of FM radio broadcasting (phase-I) was initiated by the MIB in 1999. During this phase, private agencies were offered a total of 108 channels in 40 cities.

2.40 Further, on 13th July 2005, the Government announced the policy for phase-II of FM radio broadcasting. This resulted in the offering of 337 channels across 91 cities.

2.41 Furthermore, to expand the reach of FM radio broadcasting, the Government initiated phase III with the aim of establishing private FM radio channels in all cities with a population exceeding 1 lakh. The Government issued the policy guidelines for phase-III of FM radio broadcasting on 25th July 2011.

2.42 As on quarter ending December 2023[13], there are 388 operational private FM Radio channels spanning across 113 cities. There remains significant potential for expanding FM radio stations in smaller cities including hilly and border areas. Such areas often fall under the information dark regions due to non-availability of media coverage and communication infrastructure. Identifying such cities and establishing FM radio stations therein ensures that these areas gain access to vital information, entertainment, and educational content. This necessitates the establishment of necessary infrastructure in these areas, including towers and transmitters.

2.43 Presently in the case of radio, cities where Prasar Bharati infrastructure is available, co-location is made on the existing facilities of Prasar Bharati on prescribed terms and conditions. If suitable infrastructure of Prasar Bharati is not available, a consortium is formed for co-location of all transmitters identified for that city.

2.44 The Authority is of the view that there is need to explore the possibility where FM broadcasters can appropriately utilize the existing infrastructure of other service providers, both public and private, including telecommunication service providers and infrastructure providers.

2.45 The existing FM radio infrastructure largely relies on analog broadcasting technologies. However, digital radio technologies offer numerous advantages over analog systems, including improved audio quality, enhanced functionality, and greater efficiency. Data transmitted in digital transmissions are less susceptible to interference and distortion

[13] https://trai.gov.in/sites/default/files/QPIR_23042024_0.pdf

than analog signals. Furthermore, digital radio technologies offer increased spectrum efficiency, allowing broadcasters to transmit more channels and services within the same bandwidth thus addressing the issue of limited bandwidth.

2.46 Recognizing the benefits and potential of digital radio broadcasting technologies, TRAI in its Recommendations on 'Issues related to Digital Radio Broadcasting in India' dated 1st February 2018[14] recommended the following to facilitate the adoption of digital radio broadcasting:

' 4.1 There is a definite need to facilitate digital radio broadcasting in India to effectively utilize spectrum in VHF-II band for Radio broadcasting, to provide diverse content and other value-added services to radio listeners.

4.2 The Government should notify the policy framework for Digital Radio Broadcasting in India in time bound manner with a clear roadmap for rollout of digital radio broadcasting services. It will encourage all stakeholders to work collectively for developing the ecosystem for digital radio broadcasting.'

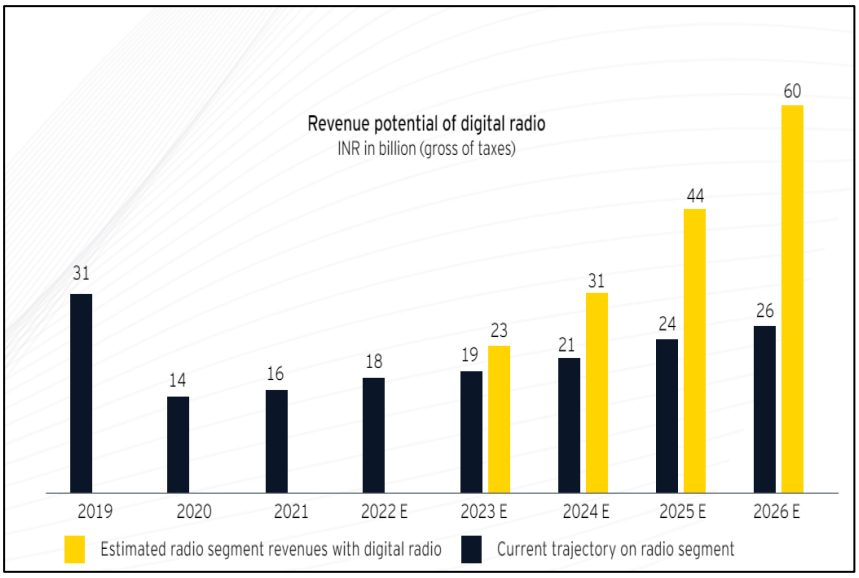
2.47 In this regard, one of the industry report[15] in 2022 predicted that with the adoption of digital radio, estimated revenue of radio segment with digital radio is expected to reach INR 60 billion by 2026. The **Figure 2.1** below depicts estimated revenue of radio segments over the years.

2.48 It may be noted that implementation of digital radio technology requires radio station operators and device manufacturers to invest in infrastructure which includes transmitters and studio equipment on the broadcaster side and the receivers and chipsets on the consumer device side. To maintain the continuity of services and to sustain revenue streams, radio broadcasters may need to broadcast both analogue and digital signals simultaneously till adequate reach is achieved in respect of digital radio.

[14] https://www.trai.gov.in/sites/default/files/Recommendation_Digital_Radio_01022018.pdf

[15] https://icea.org.in/blog/wp-content/uploads/2022/08/ICEA-Digital-Radio-Report_Final.pdf

Figure 2.1: Revenue estimates of digital radio [Source: EY report 2022]



2.49 The Authority feels that Government needs to prepare a digital radio policy that defines the approach to be adopted for the transition, the roadmap to be followed and the timelines for the transition, keeping in mind the issues faced by various stakeholders.

2.50 In order to provide financial support to radio stations, the Authority in 2023 recommended de-linking the license fee from Non-Refundable One Time Entry Fee (NOTEF). TRAI in its Recommendations on 'Issues related to FM Radio Broadcasting' dated 05th September 2023[16] recommended the following:

> *'The Authority recommends that the annual license fee of a FM radio channel should be de-linked from Non-Refundable One Time Entry Fee (NOTEF). The license fee should be calculated as 4% of the Gross Revenue (GR) of the FM radio channel during the respective financial year. GST should be excluded from Gross Revenue (GR).'*

2.51 In view of above, the Authority believes that given the timeframe required for the digital radio ecosystem to gain momentum, radio broadcasters may require government support to invest in transitioning to digital

[16] https://www.trai.gov.in/sites/default/files/Recommendation_05092023.pdf

radio. It is necessary for the Government to reassess the annual fees of radio broadcasters to facilitate their expansion and enable them to invest in adopting digital radio technology.

2.52 Additionally, TRAI in its recommendations dated 21st September 2023[17] on 'Low Power Small Range FM Radio Broadcasting' has recommended to allow low power small range FM services to serve geographical area with a maximum range of 500-meter radius to seamlessly envelop extensive open spaces, provide reliable coverage for drive-in theatres, and adequately serve the seating areas of stadiums, commercial and residential complexes, expo areas etc.

2.53 The Authority is of the view that low power small range FM radio broadcasting should be expanded and encouraged in areas such as stadiums, open-air theatres, residential/commercial complexes, convention centres, expo areas, etc.

2.54 In this background, the Authority recommends the following strategies to broaden the reach and coverage of FM radio and facilitate its transition from analog to digital radio broadcasting.

A3. Provisioning of radio coverage in uncovered areas

a. **Establishing a comprehensive mapping system for identification of uncovered areas and expanding FM radio services by sharing infrastructure with other service providers including telecommunications service providers.**

b. **Facilitating a smooth transition from analog FM to digital radio broadcasting comprehensively encompassing resource allocation, infrastructure upgrades, phased transition plan, partnerships with technology providers, specialized training for industry professionals and supportive policies for radio broadcasters.**

[17] https://www.trai.gov.in/sites/default/files/Recommendations_21092023.pdf

c. Reviewing the annual license fee structure of FM radio services for promoting the expansion of radio services.

d. Encouraging expansion of low power small range FM radio services in areas such as stadiums, open-air theatres, residential/ commercial complexes, convention centres, expo areas, etc.

IV. Goal: Promote R&D and secure IPR in broadcasting sector

2.55 The Consultation Paper highlighted the need to focus on the R&D activities for manufacturing of broadcasting equipment in India. Further, strategies and policies need to be designed and implemented for developing state-of-the-art R&D capabilities, technology development, standardization and manufacturing ecosystem of the various broadcasting equipment and software development in India.

Comments of the Stakeholders for Question 3(ii)

2.56 In response to Q3(ii) of the CP, some of the stakeholders have opined for the grant of 'Infrastructure Status' to the broadcasting sector. Further, it has been suggested to engage with research institutions and establish Centre of Entrepreneurship (CoE) and technology incubators along with enablement of sandbox testing in the areas of emerging broadcast technologies.

2.57 One of the stakeholders advocated that doing R&D needs a lot of funding and it cannot be left alone for the Government or public service broadcaster to fund R&D. Rather, it is implied to institutionalize various elements of R&D by creating a large pool of non-lapsable funds sourced from various stakeholders.

2.58 One of the stakeholders has commented that there exists a significant market for STBs/CAS and other related equipment, but due to lack of awareness, many SMEs are not able to enter into this market. Additionally, implementing procurement policies that prioritize sourcing

from startups and SMEs within the broadcasting sector would incentivize research and development efforts.

2.59 The Government should give preferential treatment to domestic products and services with domestically owned IPR while procuring equipment for government agencies, for which availability of IPR in a fair, reasonable and non-discriminatory (FRAND) manner must be ensured.

Analysis of the issue and views of the Authority

2.60 A strong and robust R&D ecosystem enables local value addition and reduces dependence on foreign components/products. TRAI in its recommendations on 'Promoting Local Manufacturing in the Television Broadcasting Sector' dated 31st March 2023[18] mentioned that in the telecom sector, Telecom Centres of Excellence were established by DoT via PPP model to realize the goals of National Digital Communication Policy-2018, to promote innovation in telecom sector via scientific research and development, to create new services and application, to generate IPR and develop manufacturing capabilities amongst others. It creates a platform for academia, industry and research institutes for capacity building and development of a balanced telecom ecosystem.

2.61 With the advancements of technologies, there is a need for continuous upgradation in the R&D centres. The Authority believes that enhancing the capabilities of existing R&D institutions such as Centre for Development of Telematics (C-DOT), Broadcasting Engineering Consultants India Limited (BECIL) and such other organizations would empower them to engage in activities such as manufacturing broadcasting equipment, conducting research on emerging technologies and promoting exports. Enhancing the capabilities and resources in these centres would promote innovation, create jobs and accelerate technological advancements in the broadcasting industry.

[18] https://www.trai.gov.in/sites/default/files/Recommendations_31032023.pdf

2.62 It has been noted that to promote 'AatmaNirbhar Bharat' in Media and Broadcasting sector, a Centre of Excellence for Media and Broadcasting Technologies[19] was established at IIT Kanpur in 2021 as a result of a Memorandum of Understanding (MoU) between Prasar Bharati and IIT Kanpur to facilitate research regarding developing indigenous technology ecosystem for Direct to Mobile Broadcasting with emerging 5G standards, Artificial Intelligence and advanced algorithms for audio-visual media.

2.63 Given that the media and broadcasting industry is continually expanding, there are opportunities to develop capabilities for local manufacturing. Therefore, the Authority supports the establishment of Centre of Excellence within academic and research institutions or industry associations dedicated to research and development in the broadcasting sector.

2.64 It is important that R&D initiatives are supported with the requisite funding and monetary requirement. Different ministries/departments earmark specific funds for technology development and growth of the sector. There is a need to create a 'Technology Development Fund' for the Broadcasting Sector. This fund can be, *inter-alia*, used for doing research and promoting development of products suitable for broadcasting sector in India. TRAI in its recommendations dated 31st March 2023, had recommended the following:

> *'MIB should create 'Technology development Fund' to promote R&D and development of local products/ technologies for Broadcasting Sector.'*

2.65 TRAI recommendations also emphasized the 'Transfer of Technology' policy with a go-to-market strategy. It underscored DRDO's guidelines for 'Transfer of Technology' which intend to disseminate DRDO developed technologies through a framework that ensures seamless transfer of technology to industries. The Authority feels that the transfer of technology from R&D institutions to various stakeholders in the

[19] https://www.iitk.ac.in/new/collaborate-on-nextgen-broadcasting-technology

broadcasting and distribution sectors, engaged in equipment manufacturing and design, will facilitate bulk production for the industry. Such efforts would enhance the sector's growth and capabilities, leading to the attainment of complete self-reliance. The Authority is of the view that Government should formulate guidelines for 'Transfer of Technology' for the products developed through domestic R&D units for different stakeholders in manufacturing and distribution value chain.

2.66 The Authority is also of the view that a 'Standing Empowered Committee' be formed to monitor R&D activities, ensures standardization and promote indigenization as discussed below:

i. Monitoring R&D Activities: Regularly assessing ongoing R&D projects, identifying gaps, and facilitating collaboration among stakeholders. By tracking progress, the committee can ensure that the R&D efforts are aligned with the industry priorities.

ii. Standardization: The committee would oversee the development and adoption of technical standards. This includes content formats, transmission protocols, and equipment specifications. Standardization enhances compatibility, reduces costs, and promotes innovation.

iii. Indigenization: Encouraging broadcasters, manufacturers, and technology providers to invest in indigenous solutions. The committee could facilitate partnerships between academia, research institutions, and industry players to accelerate indigenization efforts.

2.67 The Authority has taken a note that cloud-based storage enables location-independent access, allowing broadcasters to manage and transmit programmes from anywhere, thus streamlining operations and reducing dependency on physical infrastructure. This shift can lead to cost savings, improved disaster recovery capabilities, and scalability, as broadcasters can easily adjust storage capacities based on demand. Additionally, cloud-based systems often come with advanced security

features, ensuring the protection of valuable content. Therefore, the Authority believes that cloud-based storage of content should be encouraged to enable location-free access and transmission of programmes for broadcasting.

2.68 The ITU's report on 'Understanding patents, competition & standardization in an interconnected world' released in 2014[20] identified audio-visual technologies like *Audio/video systems, coding and compression, broadcasting, home systems, home entertainment* as Standard Essential Patents (SEPs).

2.69 SEPs[21] are patents essential to implement a specific industry standard. Patents which are essential to a standard and have been adopted by a Standard Setting Organization (SSO) are known as SEPs. The prospect of licensing SEPs plays a vital role in a company's incentive to invest in standardization activities. However, the exclusive rights conferred by patents on inventors may defeat the objective of making standards available to all for public use. To address this problem, most SSO's have defined IPR policies where SSO members must commit to licensing their SEPs on terms and conditions that are FRAND.

2.70 FRAND terms ensure that IP (such as patents) can be accessed by manufacturers without discriminatory pricing or restrictions. By making IPR available under FRAND terms, local manufacturers can innovate and produce broadcasting equipment without undue barriers. Therefore, Authority is of the view that availability of IPR in FRAND terms is required for promoting local manufacturing.

2.71 Furthermore, the Authority suggests that a regulatory sandbox be made available to startups, technology developers, service providers and institutions, enabling them to test new services and equipment in the broadcasting field within a controlled live environment before their launch in the open market, similar to the approach for telecom products.

[20] https://www.itu.int/en/ITU-T/Documents/Manual_Patents_Final_E.pdf

[21] https://singhania.in/admin/blogimages/doc-4670179.pdf

Regulatory bodies in many countries have set up sandbox framework for technology innovation. Sandboxes operate under specific regulatory exemptions, allowances or limited time-bound exceptions.

2.72 In view of the above, the Authority recommends the following strategies to promote the R&D of broadcasting technologies and equipment:

A4. Focusing on research and development of broadcasting technologies and equipment

a. Strengthening research and development in the broadcasting sector through:

i. Strengthening the existing R&D centres in public sector, such as C-DOT, BECIL and other such R&D institutions to support local manufacturing of broadcasting equipment and enable research on emerging technologies.

ii. Creating an environment for experimentation and innovations in the space of broadcasting technology to shift India from being a 'Technology Adopter' to 'Technology Innovator'.

iii. Encouraging cloud-based storage of content to enable location-free access and transmission of programmes for broadcasting.

b. Creating 'Technology Development Fund' for supporting R&D and startups in the field of emerging technologies and development of indigenous products for import substitution and promoting export in broadcasting sector.

c. Establishing 'Centre of Excellence for Broadcasting' at premier technological institutes and industry associations focusing on research, standardization, development and testing of emerging broadcasting technologies and products with collaborative efforts of MIB, BECIL, C-DOT, BIS, academia, startups and concerned industry stakeholders.

d. **Formulating guidelines for 'Transfer of Technology' for the products developed through domestic R&D units for different stakeholders in manufacturing and distribution value chain.**

e. **Formation of a 'Standing Empowered Committee' for monitoring R&D activities, standardization and indigenization in broadcasting sector.**

f. **Facilitating the availability of Intellectual Property Rights (IPR) in Fair, Reasonable and Non-Discriminatory (FRAND) terms required for promoting local manufacturing.**

g. **Creating an enabling framework including Regulatory Sandbox for testing and quick adoption of emerging technologies in live environment. Facilitating demonstration of and experimentation with latest technologies, products, services and applications in broadcasting sector for understanding the opportunities and challenges involved therein.**

V. Goal: Promote manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment

2.73 India is considered to be a market of close to 200 million TV households. However, most of the broadcast equipment are not available in the Indian market and are being imported. Also, Indian firms are not competitive on account of pricing and quality. This makes reliance on other countries for import of STBs, Conditional Access System (CAS) and other broadcasting equipment. Therefore, to reduce this dependency and bolster the broadcasting industry's growth, it is imperative to invest in and develop indigenous manufacturing capabilities for broadcasting equipment.

Comments of the Stakeholders

2.74 In response to Q3(ii) of the CP, all the submitted comments of the stakeholders have supported the manufacturing of broadcasting equipment indigenously. Stakeholders have also suggested to introduce Production Linked Incentives (PLI) schemes for manufacturing of

broadcasting equipment aligning with the goals of National Policy on Electronics.

2.75 Another stakeholder has commented to provide incentives to global manufacturers to set up manufacturing units in India to boost competition which would also create employment opportunities. Also, it is proposed that indigenous R&D capabilities be encouraged to promote design-led manufacturing in India.

2.76 Another stakeholder is of the view that the Government should offer incentives and tax holidays for the manufacturing of indigenous STBs and CAS.

2.77 One of the stakeholders has indicated some challenges in establishing self-reliant manufacturing ecosystems for STBs. This includes shortage of components like chipsets and semiconductors, strained global supply chain leading to continued scarcity of resources, limited number of suppliers of STB chipsets leading to higher costs. It is also mentioned that India's manufacturing ecosystem is still in its nascent stage, which necessitates measures to fortify and enhance its resilience to address these challenges effectively.

2.78 Few of the stakeholders have also provided their comments on indigenization of STBs. One of the stakeholders commented that integrating the STB chipsets into the Make in India initiative would help mitigate India’s dependence on foreign suppliers and foster domestic production capabilities. Another stakeholder opined that all the STBs/CAS manufactured in India should comply with BIS norms, to ensure the delivery of high-quality products and services to consumers. The stakeholder also emphasized the promotion of soft STBs as a preferable alternative to digital STBs. This transition would lower distribution costs and mitigate piracy and cable disconnections.

2.79 One of the stakeholders stated that domestically manufactured STBs may be incentivized by differential duties, levies and rationalizing taxes to make them more competitive and affordable, particularly in rural

areas. It states that private operators must be incentivized to buy domestic broadcast products.

Analysis of the issue and the views of the Authority

2.80 The broadcasting sector is predominantly dependent upon imports for the deployment of equipment in the distribution networks. The share of locally manufactured equipment continues to remain insignificant. This prompts the question of what constraints have hindered the local manufacturing sector from capturing a larger market share. These concerns become even more noteworthy while considering global industry reports. The global broadcast equipment market[22] is expected to reach around USD 6.7 billion by 2028 from USD 5.2 billion in 2023, registering a CAGR of approximately 5.3% from 2023 to 2028.

2.81 From the comments, it can be inferred that there are numerous challenges in the sector related to the adoption of indigenous broadcasting technologies and equipment. For instance, a persistent challenge exists in the supply chain due to the limited number of suppliers for STB chipsets. These chipsets are primarily sourced from mobile chipset suppliers, leading to increased costs. TRAI in its Consultation Paper on 'Promoting Local Manufacturing in the Television Broadcasting Sector' dated 22nd December 2021[23] highlighted that estimated yearly demands of STBs in India is 26 million, most of which are imported. The **Figure 2.2** below indicates the estimated yearly demand of STBs in India. Several factors drive the demand for STBs, including the expansion of television services to uncovered households, upgrade from SD to HD, replacement of boxes that have reached the end of their useful life and the introduction of bundled services through hybrid STBs.

[22] https://www.marketsandmarkets.com/Market-Reports/broadcast-equipment-market-111738599.html

[23] https://trai.gov.in/sites/default/files/CP_22122021.pdf

Figure 2.2: Projected Demand for STBs in India basis Industry inputs

Sl. No.	Factor	Rationale	Estimated Demand (yearly)
1.	Increasing TV penetration	TV penetration is increasing in India, still more than 100 million households are without TV	6 million
2.	New STBs from TV Sales	• As per EY estimates, 14 million TV sets are sold yearly. • At an estimated 20% of TV buyers- as new TV households, it will add to corresponding demand for STBs	3 million
3.	Replacement of Boxes due to wear and tear	• Average life of STB is 6 years as per the industry. • Estimated STBs installed in phase I and phase II of DAS are 40 million. • 50% of them are yet to replace the old STBs, accordingly the figure comes to 20 million.	5 million
4.	Conversion from SD to HD	Out of about 170 million subscribers, there are only 10-12 million HD subscribers at the end of 2018. Consumer preference for HD content is increasing for better quality.	8 million
5.	DD Free Dish Demand	Current base of DD Free Dish subscribers ~40 million. About 10% demand can be estimated for replacement as well as new subscriptions.	4 million
		Total	**26 million**

2.82 The Indian Government places a high priority to electronics manufacturing. Under the flagship initiatives – 'Make in India' and 'Digital India', the Government has put special focus on transforming the country into a global manufacturing hub. The National Policy on Electronics (NPE) 2019, notified on 25th February 2019[24], aims *to position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally*. The key themes in the NPE 2019 include development of a component manufacturing ecosystem, fiscal incentives for the ESDM sector, promoting R&D etc.

[24] https://www.meity.gov.in/writereaddata/files/eGazette_Notification_NPE%202019_dated%2025022019.pdf

2.83 In furtherance of the 'Make in India' initiative of the Government, the Authority is of the view that STBs should be manufactured indigenously and deployed in the network. Domestically manufactured STBs may be incentivised to make them more competitive yet affordable for the Indian population, particularly in rural areas, by the public service broadcaster. Moreover, private operators may be incentivised to buy domestic broadcast products.

2.84 Referring to TRAI's Recommendations on 'Interoperability of Set-Top Box' dated 10th April 2020[25], the Authority recommended that - *'All the Set-Top-Boxes in India must support technical interoperability in principle, i.e. every STB provided to a consumer must be interoperable.'* Interoperability of STBs empowers consumers to switch between different service providers without needing to purchase a new STB, making it easier to choose the best service for their needs. It also helps reducing e-waste. The Authority believes that MIB should encourage public service broadcaster and DPOs to utilize interoperable STBs.

2.85 During an interaction with C-DOT, it was informed that C-DOT has developed the technologies for indigenous products[26] for the broadcasting sector, including SMS, CAS, and STBs for OTT, DTH, and other segments. In this context, the Authority believes that the public service broadcaster, that is, Prasar Bharati may take a lead to procure and deploy the C-DOT products in its network. Additionally, the Government should facilitate the transfer of these indigenous technologies/products developed by C-DOT to Indian vendors. This initiative would promote the indigenization of broadcasting equipment, making India more self-reliant and reducing dependence on imported services.

2.86 Similarly, to develop the ecosystem for digital radio in India, it is essential to create a roadmap that benefits both radio broadcasters and

[25] https://trai.gov.in/sites/default/files/Recommendation_11042020.pdf

[26] https://www.cdot.in/cdotweb/web/product_category.php?lang=en&catId=8

consumers. The vision of 'Digital India' can be realized through a digital radio system that serves as the backbone infrastructure for cost-effective development and adoption of indigenous digital radio systems including the receivers.

2.87 A mature product ecosystem involves collaboration among companies providing low-cost integrated circuit (IC) solutions, as well as those experienced in hardware and software development of components like digital radio receivers. Additionally, manufacturers would need standardized test equipment to support mass production. Broad partnerships across semiconductor industries and original design manufacturers (ODMs) are essential to manufacture indigenous digital radio systems at affordable costs during the adoption phase.

2.88 Further, the Authority is of the view that incentives should also be provided to global manufacturers to set up their manufacturing units in India to boost competition. This would further generate employment opportunities in the Indian broadcasting sector.

2.89 Several schemes and policies have been envisaged under NPE 2019 to boost local manufacturing in the electronics industry. In 2020, the Government announced the launch of three electronics manufacturing schemes to further the objectives of NPE 2019. These are Production Linked Incentive (PLI) Scheme, Scheme for Promotion of manufacturing of Electronic Components and Semiconductors (SPECS) and modified Electronic Manufacturing Clusters (EMC) 2.0.

2.90 It may be noted that the Ministry of Electronics and Information Technology (MeitY) and DoT have rolled out PLI schemes for electronics and telecom equipment respectively. With increasing demand for online digital content, hybrid STBs are now becoming increasingly popular. Moreover, such boxes enable Internet access for viewing digital online content, in addition to performing the function of conventional STB. DoT

in 2022[27] has included such hybrid/Internet STB in the list of products eligible for PLI scheme.

2.91 TRAI in its recommendations has highlighted that schemes like PLI have generated keen interest in entrepreneurs and investors. MIB may also design a suitable PLI scheme on similar lines in respect of broadcasting equipment including STB. The Authority is of the opinion that MIB should incentivize DPOs for procurement and deployment of indigenous broadcasting systems and equipment including CAS, SMS, STBs.

2.92 In view of the above, the Authority recommends the following strategies to promote manufacturing, adoption and deployment of indigenously manufactured broadcasting technologies and equipment.

A5. Promoting manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment

a. **Mandating public service broadcaster to procure and deploy indigenous broadcasting technologies and equipment in certain proportion.**

b. **Incentivizing DPOs for procurement and deployment of indigenous broadcasting systems and equipment including Conditional Access System (CAS), Subscriber Management System (SMS), Set Top Box (STB) through incentive schemes.**

c. **Incentivizing indigenous development and adoption of digital radio systems including receivers.**

d. **Enabling the development of the STB manufacturing ecosystem for adoption of interoperable STBs by public service broadcaster and DPOs to empower consumer choice and reduce e-waste. Procurement by public service broadcaster can act as catalyst for indigenization of STBs and CAS.**

e. **Incentivizing Original Equipment Manufacturers (OEMs) developing core electronics components, through Production**

[27] https://dot.gov.in/sites/default/files/Design%20led%20manufacturing%20under%20Telecom%20PLI.pdf?download=1

Linked Incentives (PLI) schemes, to setup their manufacturing base in India, making India 'Global Manufacturing Hub' targeted for broadcasting sector in consonance with the goals of the National Policy on Electronics 2019.

VI. Goal: Employment generation, bolstered up through training and upskilling for providing New Age Skills to the workforce

2.93 The Consultation Paper identified challenges like quality training, limited institutes of eminence and inadequate employment opportunities in the broadcasting industry. However, the sector possesses huge potential for employment generation. This can be achieved through proper training and skilling programmes and enhancing formal education in the field of broadcasting. Therefore, strategies to improve the prospects for education and training may be devised through the policy.

Comments of the Stakeholders

2.94 Against Q3(iii) of the CP, the stakeholders highlighted the need for skill development in the broadcasting sector. One of the stakeholders submitted that capacity building and skill development need to be pursued through partnerships between the government, industry and academia. Another stakeholder opined that awareness programmes should be integrated into the curriculum at school level and media courses should be introduced at graduation level. The stakeholder further mentioned that with more than 300 broadcasters and focus on GEC, music, movies, there is a constant demand for 24 hours content, which reflects huge employment opportunities. But due to lack of awareness, there is a preference towards alternative career paths resulting in loss of potential talent for this industry.

2.95 Almost all the submissions converged that collaboration with industry stakeholders is required for creation of apprenticeship and internship programmes. There is a requirement for more formal institutes for imparting education in these areas. Few stakeholders commented that there is a need for engaging with relevant skill councils and aim to

harmonize these with international standards and establishing upskilling programmes with reputed educational and vocational institutions and help establish *National Centres for Excellence* in AV technologies and production techniques. Further, public institutes like the SRFTI and FTII may partner with private institutes to set up specialized courses for training professionals working in emerging areas in the TV, distribution, and radio industries.

Analysis of the issue and the views of the Authority

2.96 The Authority, upon reviewing stakeholders' comments, has identified several challenges within the broadcasting industry. These include issues such as the need for improved training quality, limited institutes of eminence, and a shortage of skilled workers all contributing to restricted employment prospects.

2.97 Candidates from media schools often lack technical and practical training necessary to effectively apply theoretical knowledge in real-world scenarios. This deficiency in training leads to a noticeable trend where individuals opt for alternative career paths due to a lack of awareness, thereby depriving the broadcasting sector of valuable potential talent.

2.98 The Authority is of the opinion that enhancing skill development and training within the sector can be achieved through active collaboration among industry, academia and government entities. This collective effort would facilitate the effective implementation of curricula, ultimately leading to the cultivation of a workforce that is well-prepared for employment within the sector. The brief role of the academia, industry and government may be understood as below:

i. Academia: Creation of educational content in collaboration with the industry partners to incorporate courses that focus on meeting the needs and demands of the industry for the broadcasting sector.

ii. Industry: Industry partners in the broadcasting sector may open up internship and training programmes by collaborating with institutions offering media specific courses. This would provide an opportunity for

the students to get exposure with the practical applications parallelly with specific university course.

iii. Government: Support from the Government for creation of a skilled workforce in the sector may be achieved by extending the existing schemes of Ministry of Skill Development and Entrepreneurship (MSDE) like National Apprenticeship Promotion Scheme (NAPS), Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and several other initiatives under Skill India Program to assist individuals in taking up career in the broadcasting industry.

2.99 It should be specified here that National Academy of Broadcasting and Multimedia (NABM)[28] under Prasar Bharati aims to conduct about 120 courses every year and trains around 1,600 engineering personnel. These courses are basically provided as training programs to engineering undergraduates for a specified time duration which mainly caters to the technologies related to television and radio broadcasting at a specified course fee as charged by the Academy.

2.100 The Authority is of the view that Prasar Bharati may take up the initiative to provide internship programs in various aspects of content creation along with providing classroom oriented technical training to engineering undergraduates. By hosting interns, Prasar Bharati can contribute to skill development in broadcasting and media which would also address the issue of skill gap prevalent in the industry.

2.101 Another area that has come to the notice of the Authority is the limited number of institutes in the field of broadcasting and content creation. At present there are only three premier public institutes[29] that offer specialized courses in this field. These institutes are:

i. Film and Television Institute of India (FTII), Pune with an intake capacity of 135 students

[28] https://prasarbharati.gov.in/nabm-pb/#NABM-Home

[29] https://mib.gov.in/sites/default/files/Statistical%20Handbook.pdf

ii. Satyajit Ray Film & Television Institute (SRFTI), Kolkata with an intake capacity of 114 students

iii. Indian Institute of Mass Communication (IIMC) located at Delhi and its 5 branches with an intake capacity of 582 students

2.102 From the above it may be inferred that there exist only 831 seats in these premier institutes that focuses on specialized professional courses in the industry. The number of recognized colleges along with their intake capacity falls short when compared with number of colleges and their intake capacities in various other countries. The Government should consider enhancing the number of such colleges as well as increase the intake capacities in the existing colleges to provide more skilled manpower to the industry. Another way is to introduce broadcasting and media specific colleges in the curriculum in the other institutes of eminence in India.

2.103 It may also be specified here that the National Program on Technology Enhanced Learning (NPTEL) Swayam portal[30] (an initiative of the Ministry of Education) offers variety courses in the field of engineering, management, healthcare, law, etc., where the entire courses are delivered at free of cost. These courses are specifically curated by professors and faculties of eminent colleges and enhance the skillset and professional expertise that aid in getting desirable employment. Public institutes like SRFTI Kolkata, FTII Pune, IIMC Delhi and training institutes like NABM under Prasar Bharati may introduce industry specific courses required in the broadcasting and media disciplines in the Swayam portal.

2.104 Further, degree and short-term courses specific to media technology certified by University Grants Commission (UGC) and accredited by All India Council for Technical Education (AICTE) may be introduced in the curriculum of the existing institutes, colleges and universities. This will address the skill gap among students and provide them with competencies relevant to the industry. This endeavour will not only

[30] https://swayam.gov.in/explorer

respond to the evolving needs of the contemporary workforce but also holds the potential to elevate the quality and relevance of higher education across India.

2.105 The Authority is of the opinion that media technology related short-term skill development courses would go a long way in developing an employment-ready workforce. The National Education Policy (NEP) 2020 brings about a significant change in India's higher education system, emphasizing on learning based on skills and fostering holistic development. It aims to move away from traditional rote learning, instead fostering critical thinking and creativity. NEP 2020 emphasizes interdisciplinary learning, integrating vocational training with mainstream education to create a more versatile and practical curriculum. This approach prepares students not just academically, but also equips them with essential skills for the evolving job market, ensuring a more rounded and employment-ready workforce.

2.106 It is prudent to mention here the importance of the National Skill Development Corporation's (NSDC) Skill Sector Council (SSC) viz. Media and Entertainment Skill Council (MESC) for enhancing and improving the necessary skillset required in the sector. Presently, MESC has 100 approved Qualification Packs (QPs)[31] curated for the overall sector. However, it observed that there are no courses designed for the emerging technologies like Augmented Reality (AR), Virtual Reality (VR), Extended Reality (XR), immersive technology, Artificial Intelligence (AI), computer vision/image processing that are believed to create an impact in the employment scenario of the sector. Therefore, the Authority is of the

[31] Qualification Pack certifies a person for a specific job role. Each Qualification Pack also contains NVEQF* Level, which will theoretically make it possible to drive competency-based training for every Entry Level job role in the Media & Entertainment industry. These packs are marked with a NVEQF level, such as level 1 to 10. The Qualification Packs help in both the creation of curriculum and assessments.

**The National Vocational Education Qualification Framework (NVEQF) would set common principles and guidelines for a nationally recognized qualification system, covering schools, vocational education institutes and institutes of higher education with qualifications ranging from secondary to doctorate level, leading to international recognition of national standards.*

opinion that MIB should facilitate incorporation of formal training and high skill courses through collaborative approach with MESC for the broadcasting sector to come on par with the global industry.

2.107 In this background, the Authority recommends the following for enhancing skill development and creating employment opportunities through the National Broadcasting Policy:

A6. Skill Development and Capacity Building for employment generation

a. **Addressing skill gaps through internship programmes by Prasar Bharati and private sector in various aspects of content creation and distribution technologies to enhance skillset of the workforce to meet industry requirements, by devising appropriate incentive schemes.**

b. **Leveraging various Government schemes of Ministry of Skill Development and Entrepreneurship (MSDE) like NAPS, PMKVY to develop necessary skill sets through mentorship and apprenticeship for creating skilled workforce for the broadcasting sector.**

c. **Introducing degree and short-term courses related to media technology, certified by University Grants Commission (UGC) and accredited by All India Council for Technical Education (AICTE) in the curriculum of the existing colleges, universities and institutions of eminence in India for creating employment-ready workforce as well as upskilling and reskilling of existing workforce as envisaged in National Education Policy 2020.**

d. **Increasing the intake capacities of the existing public institutions like SRFTI Kolkata, FTII Pune, IIMC Delhi and establishing more such specialized institutes in various parts of the country.**

e. **Facilitating incorporation of courses on emerging technologies including immersive technologies like Augmented Reality (AR),**

Virtual Reality (VR) and Mixed Reality (MR), AI, Computer Vision etc. in the Qualification Pack (QPs) of Media and Entertainment Skill Council (MESC) to create a skilled talent pool.

f. Creating educational resources for content creation and broadcasting technologies and making them available in an open and accessible format such as National Programme on Technology Enhanced Learning (NPTEL) Swayam portal to promote self-directed and collaborative learning through interactive audio, video and texts.

VII. Goal: Encourage innovation-led startups and empower Small and Medium Enterprises

2.108 Promoting startup culture may leverage technology and utilize innovative business models to gain a foothold in the market. The broadcasting sector is undergoing transformation, with startups disrupting traditional business models and creating new opportunities for consumers and businesses alike.

Comments of the Stakeholders

2.109 Few stakeholders have submitted their response to Q3(iv) of the CP for promoting startups and SMEs in the broadcasting sector. One of the stakeholders highlighted that the activities like editing and post-production are among the highly lucrative opportunities in today's market. However, due to lack of awareness, many Small and Medium Enterprises (SMEs) are yet to explore these areas. Post-production activities offer substantial work opportunities and attractive consideration for SMEs, without much initial investment. The stakeholder is of the view that awareness programmes may be introduced and Ministry of Micro, Small & Medium Enterprises (MSME) should also start making people aware about these areas and introduce lucrative schemes for SMEs in these areas.

2.110 Further, one of the stakeholders commented that the policy must encourage startups & SMEs for innovation, developing new technologies, products, solutions, processes or even new business models and/or ways of delivering broadcasting services in a new manner. Another stakeholder suggested that promotion of startups and SMEs may be encouraged through incubation programs, seed funding, industry collaboration and streamlined regulatory processes.

Analysis of the issue and the views of the Authority

2.111 As per the MIB's 'Statistical Handbook on Media and Entertainment Sector 2022-2023', there were total 1483[32] startups in the sector, recognized Department for Promotion of Industry and Internal Trade (DPIIT) till March 2023. Ministries like MeitY have implemented various schemes to provide support to startups in the form of mentorship, funding, networking and providing infrastructure for incubators and accelerators. Recently, DoT has also launched a new initiative[33] to assist organizations and startups through the 'Industry 4.0 Baseline Survey among MSMEs' in adopting emerging Industry technologies like 5G and 6G. Presently, there are no such schemes provided by MIB for supporting the growth of the startups in the broadcasting industry.

2.112 The Authority is of the opinion that MIB should also offer similar schemes to support the startups or collaborate with MeitY or Niti Aayog to extend the existing schemes to the broadcasting sector. For instance, Atal Incubation Centre (AIC) is flagship scheme of Atal Innovation Mission of Niti Aayog aims to establish incubators at universities, institutions and corporates to promote innovation and entrepreneurship. AICs supports startups from diverse areas such as health-tech, fintech, edtech, space and drone tech, AR/VR, food processing, tourism among others. AICs

[32] https://mib.gov.in/sites/default/files/Statistical%20Handbook.pdf

[33] https://www.ibef.org/news/dot-launches-initiative-to-support-msmes-and-startups-in-industry-4-0-transformation

provides a maximum grant-in-aid of Rs 10 crore which covers capital and operational expenditure for a maximum period of 5 years.

2.113 Similarly, Software Technology Parks of India (STPI)[34] under MeitY provides startups with the state-of-the-art infrastructure facilities, seed funding for startups, access to worldclass labs for quality development of products along with mentorship programmes. Further, the Government of India established the Credit Guarantee Scheme for startups[35] with a fixed corpus for providing credit guarantees to loans extended to DPIIT recognized startups by Scheduled Commercial Banks, Non-Banking Financial Companies (NBFCs) and Venture Debt Funds (VDFs) under SEBI registered Alternative Investment Funds.

2.114 The Authority is of the view that MIB should start offering similar kinds of support to the startups as discussed above. Startups bring in opportunities like employment opportunities, utilize newer technologies and contribute to the overall GDP. MIB needs to collaborate with industry partners and associations to support the startups through mentorship and offering incubator support either through Government funding or PPP model.

2.115 Broadcasting is a highly technology intensive sector where emerging and immersive technologies are continuously coming up. As discussed earlier, MIB may consider utilizing the 'Technology Development Funds' to support the startups in the sector. Technology Development Fund established by Ministry of Defence and executed by DRDO[36] to promote self-reliance in defence technologies provides support to startups in the following ways:

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[34] https://startup.stpi.in/#:~:text=STPI%20Labs%20Infrastructure&text=Enable%20startups%20develop%20world%2Dclass,Ensure%20near%20zero%20defect%20product

[35] https://www.startupindia.gov.in/content/sih/en/credit-guarantee-scheme-for-startups.html

[36] https://www.investindia.gov.in/technology-development-fund#:~:text=Proposes%20to%20target%20startups%20for,incubators%20associated%20with%20the%20startup.&text=Aims%20to%20provide%20financial%20assistance%20to%20startups%20for%20prototype%20development%20and%20trials

i. Target startups for project requirements with an estimated development cost up to 1 crore, inclusive of funding support of up to 20% to the incubators associated with the start-ups.
ii. Aims to provide financial assistance to start-ups for prototype development and trials.
iii. Option to create partnerships with academia, where the contribution of the academia is 40% of the total project effort.

2.116 In this background, the Authority recommends the following strategies for startups and SMEs:

A7. Encouraging innovation-led startups and empowering Small and Medium Enterprises

a. Establishing an institutional mechanism for enabling the development of startup ecosystem in the broadcasting sector by providing assistance through mentoring, networking, funding, and marketing the technology and product, developed by the startups through Government funding or PPP model.

b. Expanding the network of incubators and accelerators for providing startups with financial resources, technical guidance, infrastructure and networking opportunities.

c. Utilizing 'Technology Development Fund' for supporting startups and SMEs and pilot their deployments.

VIII. Goal: Foster conducive policies and regulatory practices for economic growth

2.117 Broadcasting industry in India have been regulated through various guidelines, rules, regulations and legislations. These were enacted at different times by the Government for the comprehensive growth of the sector. TRAI has been regulating the broadcasting sector by following the principles of transparency, non-discrimination and level-playing field.

2.118 In the last few years, with technological disruptions and digitization, new services have come up and new players are becoming part of the

broadcasting industry. Now, similar content is available on different platforms and different devices. These have changed the consumption patterns of the viewers. Consumers now have other choices of viewing besides the appointment TV for accessing content. With increasing smartphone penetration and data affordability, viewers can catch up on content anywhere and anytime.

2.119 It is understood that enabling light-touch regulatory practices and having a technology neutral approach are instrumental for the growth of the sector. Further, simplifying compliances and encouraging single window clearance would ensure ease of doing business and enhance investments. The Authority has raised the following question to seek the comments of the stakeholders:

Q13. With the continuous advancement of technologies and convergence of the telecom, information technology and broadcasting sectors, what policy and regulatory measures are required, beyond the existing ones, to facilitate the growth of the broadcasting sector with ease of compliance? Elaborate your comments with proper reasoning and justifications to the following issues:

i. To enable healthy and competitive environment amongst the existing and emerging services and ensuring parity among comparable distribution mediums, while being technology neutral.

ii. To allow and encourage infrastructure sharing among the players of broadcasting and that with the telecommunication sector.

iii. Any other suggestion for policy and regulatory framework.

Comments of the Stakeholders

2.120 In response to Q13 of the Consultation Paper, the comments of the stakeholders are summarized in the paras to follow.

2.121 Stakeholders' responses to Q13(i) present divergent views regarding the regulation of OTT services. Some stakeholders argue against the necessity of regulating OTT services, while others advocate for regulatory

measures to ensure parity among different service providers. The views of the stakeholders are as follows:

Stakeholders' views for not regulating OTT services:

i. The regulatory framework for content should be kept distinct and separate from carriage.

ii. OTT being a sunrise sector needs a forward-looking policy approach while TV requires an action plan for resilience. Moreover, the infrastructure pipes for delivery of broadcasting and OTT are distinct and require specialised policy/regulatory oversight. TV is a push-based medium and OTT is a pull-based medium, therefore, transposing legal broadcasting regulations onto OTT would affect EoDB and hinder growth.

iii. There is no requirement for establishing a converged legal, administrative, regulatory, and licensing framework. Rather, focus should be on promoting EoDB in the sector by streamlining the process of seeking permissions. One of the ways to promote EoDB is granting 'Infrastructure Status'.

2.122 Stakeholders' views on parity in regulations

i. There is a need for content parity, regulatory level playing field between DPOs, OTT and Free Dish as cable TV operators are not able to show the content which is shown on the OTT platforms by the same broadcasters, due to selective sharing of content.

ii. Disparity in the regulatory structure and pricing structure of OTT platforms need to be addressed and suitable measures are needed for level playing field. Regulating OTT platforms will promote healthy market competition as it will ensure price parity.

iii. TRAI should ensure that all the platforms delivering similar and/or substitutable services adhere to a common and equitable regulatory framework.

2.123 In response to Q13(ii) of the CP related to infrastructure sharing, one of the stakeholders submitted that a holistic method to infrastructure sharing that extends beyond cable and broadband services is needed.

The potential for cross-industry infrastructure sharing, such as between IPTV and DTH platforms, presents an opportunity to maximise resource utilisation and drive efficiencies across sectors. While another stakeholder suggested the possibilities of IP based deliveries, enabling the use of broadband networks either as public Internet or as VPNs to effect the same type of deliveries, avoiding the use of expensive satellite networks.

2.124 Further, stakeholders also submitted some other views like:

i. NBP must adopt policy of forbearance for all stakeholders irrespective of the medium and allow the market forces to govern the industry, particularly the linear broadcasting industry.
ii. Focus should be on sectoral development, plurality, QoS and accelerating adoption of new technologies while establishing a level playing field.
iii. Broadcasting policy should facilitate innovations, development of an eco-system of convergence of latest technologies like AI and cloud, increase broadband penetration for a digitally enabled India.
iv. Broadcasting content and policy regulation should create incentives to produce novel and innovative content, generate Intellectual Properties that add value to the Indian economy and provide diversity and plurality of opinions.

Analysis and views of the Authority

2.125 The Authority has examined the comments of the stakeholders and asserts that policies and regulations within the broadcasting sector should foster growth and development of the sector. The regulatory practices should allow freedom to innovate, adopt and harness emerging technologies in the broadcasting sector.

2.126 The fundamental principle and objective behind any regulatory framework should be to create a non-discriminatory, level playing field based competitive environment where all the players have equal opportunity to compete and grow irrespective of underlying technology,

thereby, resulting in the sector's overall growth. Broadcasting sector often face challenges as similar content is now available on television, smart screens, and smartphones. A technology-neutral approach ensures healthy competition, preventing any one technology or platform from gaining an unfair advantage over another because of regulatory arbitrage. Further, embracing technology neutrality encourages innovation, ensure fair competition, and provide consumers with a wide range of choices.

2.127 Stakeholders have opined in their comments to grant 'Infrastructure Status' to the broadcasting sector. The Authority is also of the view that the broadcasting sector being technology intensive, industry stakeholders continuously invest in newer technologies. In this regard, TRAI has issued its recommendations on 'Ease of Doing Business in Telecom and Broadcasting Sector' dated 02nd May 2023[37], wherein the Authority recommended the following:

'The Authority recommends that given the importance of Cable Services sector in expanding television services as-well-as Broadband services, the Government may consider and grant 'Infrastructure Status' to 'Broadcasting and Cable Services Sector'.

2.128 Granting 'Infrastructure Status' to the broadcasting sector would benefit the stakeholders in the following manner:

i. Tax benefits under Section 80-IA (tax holiday) and Section 72A (carry forward of losses) of the Income Tax Act, 1961 will help classify the broadcasting sector as a priority sector by the Reserve Bank of India.
ii. Enable the broadcasting industry to raise finance from Non-Banking Financial Companies, Insurance Companies, Pension Funds and India Infrastructure Financing Company Limited (IIFCL).
iii. Avail easier loans/credit facilities on a long-term basis at reasonable rates.

[37] https://trai.gov.in/sites/default/files/Recommendations_02052023.pdf

iv. Help in setting up production facilities for broadcasters as various state governments offer concessions and incentives for setting up infrastructure industries.

v. Assist in reducing the cost of service of the broadcasting industry allowing it to compete with emerging technologies, apart from enhancing the adaptability of new technologies, especially in the global digital world.

vi. Enhance savings in terms of foreign exchange as it would encourage entrepreneurs to set up businesses in the country for the production of equipment/services that are being imported at present.

2.129 Further, TRAI in its recommendations highlighted the fact that an end-to-end single window portal is of utmost importance for ease of doing business. Therefore, all the ministries and departments involved in granting permissions to the service providers of the broadcasting services should be integrated in the online single window system. The Authority has noted that to encourage ease of doing business in the broadcasting sector, MIB had launched the 'BroadcastSeva' portal to make the permission/approval processes online and also revamped the portal. However, the inter-ministerial permission process may also be made fully online for making the processes 100% digitized, as an ongoing process.

2.130 The Authority, therefore, is of the opinion that MIB should digitize the process of granting permissions, approvals and clearances under a single window system to create an enabling environment for attracting long-term foreign and domestic investment for the growth of sector.

2.131 DoT has launched a portal for centralized Right of Way (RoW) approvals to streamline the process of RoW Applications and permissions across the country. This portal enables Telecom Services Providers (TSPs), Infrastructure Providers (IPs), Internet Services Providers (ISPs) etc. to apply for RoW approvals for laying Optical Fiber Cables (OFC) and erecting Telecom infrastructures like Towers etc. and submit their applications to various agencies of State/ UT Governments and local

bodies. However, there are no provision for MSOs and LCOs to take RoW approvals from this portal. TRAI in its 'Ease of Doing Business in Telecom and Broadcasting Sector' recommendations had also recommended that DoT should enable RoW approvals for cable industry in consultation with MIB. However, provisions have not been enabled yet.

2.132 Regarding infrastructure sharing, the Authority is of the view that in the age of Information Communications Technologies (ICT), where the services are configured in the cloud, infrastructure sharing among multiple service providers may ultimately lead to an ecosystem, wherein the network operator could focus on efficient operations and maintenance of distribution networks and associated systems to ensure maximum uptime and optimal utilization of available distribution network capacities.

2.133 Infrastructure sharing would help in enhanced availability of distribution network capacities. As sharing implies joint use of resources by multiple users, this would result in a reduction in Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) for the service providers, thereby, bringing down the price of broadcasting services to subscribers. In addition, it may lower the entry barriers for new service providers. Lowering entry barriers could propel competition in the market and give more choices to consumers due to the presence of multiple operators.

2.134 Based on TRAI's recommendations dated 29th March 2017[38] on 'Sharing of Infrastructure in Television Broadcasting Distribution Sector', MIB has amended the following guidelines, through which infrastructure sharing has been allowed:

i. Sharing of infrastructure by HITS operator between HITS operators and MSOs have been allowed through MIB Order dated 6th November 2020[39] amending the 'HITS Guidelines for Broadcasting Service in India dated 26.11.2009'.

[38] https://trai.gov.in/sites/default/files/Recommendation_broadcasting_29_03_2017.pdf

[39] https://mib.gov.in/sites/default/files/Amendment%20in%20HITS%20guidelines%20.pdf

ii. Sharing of infrastructure by DTH operator has been allowed vide MIB Order dated 30th December 2020[40] amending the 'Guidelines for obtaining License for providing DTH Broadcasting Services in India dated 15.03.2001 and as amended'.

iii. Sharing of infrastructure by MSO with another MSO has been allowed vide MIB Order dated 29th December 2021[41] through the subject 'Guidelines for sharing of infrastructure by Multi System Operators'.

2.135 Keeping in view of the notable advantages, the Authority is of the view the infrastructure sharing should be further explored amongst the players of the broadcasting sector. Further, the possibilities of infrastructure sharing among radio broadcasting and telecommunication need to be explored and effectively implemented. For instance, sharing telecom towers allows multiple service providers to use the same infrastructure, reducing the need for redundant towers.

2.136 In this background, the Authority recommends the following strategies to ensure growth-oriented policy and regulatory framework in the National Broadcasting Policy:

A8. Simplifying and digitizing permission process and adoption of growth-oriented rules and regulatory practices

a. Processing grant of 'Infrastructure Status' to the broadcasting sector for raising capital for investment in newer technologies.

b. Simplifying rules for promoting business flexibility, healthy competition and orderly growth of the sector.

c. Encouraging ease of doing business in the broadcasting sector by digitizing process of granting permissions, approvals and clearances under a single window system to create an enabling environment for attracting long-term foreign and domestic investment for the growth of sector.

[40] https://mib.gov.in/sites/default/files/Amendment%20in%20Guidelines%20for%20obtaining%20license%20for%20providing%20DTH%20Broadcasting%20Services%20in%20India.pdf

[41] https://mib.gov.in/sites/default/files/Guidelines%20for%20sharing%20of%20infrastructure.pdf

d. **Streamlining Right of Way (RoW) processes and standardizing RoW charges across all states for laying cables and erecting towers by utilizing a single window clearance and centralized payment system.**

e. **Enabling infrastructure sharing of broadcasting equipment and transport streams among the service providers of the broadcasting and cable television sector and also leveraging the infrastructure of telecom service providers for provision of broadcasting services.**

IX. Goal: Create India as 'Uplinking Hub' of television channels

2.137 In 2022, MIB has consolidated the uplinking/downlinking guidelines of satellite TV channels. The revised guidelines eased out the restrictions on uplinking with an aim to make India a hub for television channel uplinking.

2.138 The Authority raised the following question to seek stakeholders' comments intended to make India an 'Uplinking Hub' for television channels.

Q5. Suggest the measures to promote the uplinking of television channels owned by foreign companies from India, which is now permitted by the Government to make India an 'Uplinking Hub'.

Comments of the stakeholders

2.139 In response to Q5 relating to make India an 'Uplinking Hub', the submissions made by the stakeholders are summarised below:

a. Simplifying and streamlining the regulatory approval process for uplinking television channels owned by foreign companies by providing clear guidelines and criteria for obtaining uplinking permissions, ensuring transparency and ease of compliance.

b. Establishing a single window clearance mechanism for licensing and regulatory approvals, facilitating expedited processing of applications and reducing administrative burden for foreign broadcasters seeking to uplink channels from India.

c. Offering attractive investment incentives, such as tax breaks, subsidies, or other financial incentives, to foreign companies willing to uplink their television channels from India to encourage greater investment and participation in the Indian media market.
d. Encouraging collaboration between foreign media companies and local Indian partners and negotiating bilateral agreements with other countries to promote cross-border broadcasting activities and regulatory cooperation.
e. Investing in training and capacity building programmes to enhance the skills and capabilities to meet the technical and operational requirements of foreign media companies, while also fostering the growth of indigenous expertise.
f. Creating a conducive investment environment by liberalizing FDI and allowing greater participation from foreign companies in uplinking operations.

2.140 One of the stakeholders has further mentioned that implementing robust security measures and encryption standards is required to safeguard the integrity and confidentiality of the uplinked content, mitigating the risks of unauthorized access, piracy, and content infringement. Further, it is suggested to specify the duration of uplinking licenses and renewal procedures, providing clarity and certainty to foreign broadcasters regarding the validity period of their licenses and the process for extension or renewal.

2.141 Another submission mentioned that NBP should facilitate ease of doing business by simplifying the processes of filing applications and requisite documentation for seeking grants of approvals/permissions, processing of the applications and documentation in a time-bound manner. Adoption of a light touch model, for regulating pricing and use of ad inventory to facilitate the initiative of making India a hub for uplinking purposes. Incentives such as liberal limits/caps on FDI for uplinking and uploading/streaming of news and current affairs for uplinking from India need to be considered.

2.142 One of the stakeholders has advocated to revamp the uplinking and downlinking policy through the following measures:

a. Department of Space should provide a list of approved C-Band, Ku-Band and Ka-Band Satellites as a onetime exercise. Also, if a broadcaster selects a satellite from the approved list, it should automatically be considered approved.
b. Broadcasters should be free to choose the teleports without the need for a NOC of their previous teleport.
c. Channel should be considered as permitted once the requisite fees are paid. There should not be a requirement of multiple stages of evaluation of net-worth, time of launch or tariff etc.
d. Requirement of specifying the language of the channel should be done away with as most channels broadcast in multiple languages. Provisions to change channel logos, language and other attributes as such as audio format be made without intimation or permission.
e. Parameters like Forward Error Correction, modulation format, bandwidth per channel measure should be left to the discretion of the broadcasters, which is presently administered by WPC/NOCC.

Analysis of the issue and views of the Authority

2.143 MIB has revised policy guidelines for uplinking and downlinking of television channels in 2022[42] to ease out restrictions of uplinking with an aim to make India a hub for uplinking of satellite TV from the country. The clause 33(2) of the guidelines is stated below:

'33. Television channels for viewing only in foreign Countries —

…

(2) A channel owned by a foreign company/ entity may be allowed to uplink its content for being downlinked and viewed outside India by using the facility of a permitted teleport operator by way of an online application

[42] https://mib.gov.in/sites/default/files/Guidelines%20for%20Uplinking%20and%20Downhinking%20of%20Satellite%20Television%20Channels%20in%20India%2C%202022.pdf

on Broadcast Seva furnished on its behalf by the concerned teleport operator.

Provided that permission for use of such facility shall be granted only after clearance from Ministry of Home Affairs, Ministry of External Affairs and Department of Space.'

2.144 This move is intended to help broadcasters of other countries specifically the neighbouring countries like Nepal, Bangladesh, Bhutan, and Sri Lanka to uplink channels from India.

2.145 After examining the comments of the stakeholders, the Authority is of the opinion that to make India an 'Uplinking Hub', satellites should have footprints that covers a broader geographical area. A competitive environment should be fostered for both Indian and foreign broadcasters to uplink television channels from India. Notably, as on quarter ending December 2023, out of 920 permitted satellite television channels, 10[43] satellite television channels are uplinked from India.

2.146 A broader footprint ensures that signals can be transmitted across a larger area. Leveraging extensive satellite coverage, Indian teleports may efficiently serve broadcasters targeting diverse audiences worldwide. Satellite is an important infrastructure for uplinking/downlinking requirements. The Authority is of the view that Indian satellites should be utilized extensively for uplinking of both Indian and international channels. For instance, GSAT-30[44] satellite provides Indian mainland and islands coverage in Ku-band and extended coverage in C-band covering Gulf countries, a large number of Asian countries and Australia.

2.147 The Authority is of the view that to ensure feasibility and convenience of the broadcasters, the Department of Space (DOS) should provide a list of approved C-Band, Ku-Band and Ka-Band satellites as a onetime exercise. TRAI in its recommendations on 'Ease of Doing Business in

[43] https://trai.gov.in/sites/default/files/QPIR_23042024_0.pdf

[44] https://www.isro.gov.in/GSAT_30.html#:~:text=The%20satellite%20provides%20Indian%20mainland,of%20Asian%20countries%20and%20Australia.

Telecom and Broadcasting Sector' dated 02nd May 2023[45] recommended the following:

' The Authority recommends that DOS should publish a list of the following on the portal:

a. Indian satellites details and the capacity availability.

b. Approved foreign satellites/ satellite systems, their orbital locations, transponders and frequency availability and their other technical and security parameters.'

2.148 Further, the afore-mentioned recommendation noted that obtaining approval for uplinking of television channels from India takes nearly 2-3 months, whereas other countries grant approval in a much shorter timeframe. The Authority is of the view that MIB in collaboration with other ministries and departments, should work to expedite the approval and permission process, enabling Indian as well as foreign broadcasters to uplink their television channels from India. The Authority is also of the view that to make India an 'Uplinking Hub', MIB should implement a comprehensive single-window system, streamlining the entire process from application for permission to final approval.

2.149 Promoting indigenous manufacturing and developing robust uplinking infrastructure may prove to be crucial for making India technologically self-reliant in uplinking operations. The Government should enable development of state-of-art uplinking infrastructure and competitive environment to encourage TV channels operators to use Indian teleport uplinking facilities. This would further help in boosting research and development in advanced manufacturing techniques to improve efficiency and quality.

2.150 It is essential that there is an efficient, trained and skilled workforce for uplinking television channels. Uplinking involves processes like signal transmission and encoding. Training and capacity building programmes

[45] https://trai.gov.in/sites/default/files/Recommendations_02052023.pdf

equip professionals with the necessary technical skills to operate uplinking facilities effectively.

2.151 In this background, the Authority recommends the following strategies for positioning India as an 'Uplinking Hub' through the National Broadcasting Policy:

A9. Making India 'Uplinking Hub' by facilitating television channels to uplink using Indian uplinking facilities

a. **Enabling development of state-of-the-art robust uplinking infrastructure and competitive environment to encourage Indian and foreign television channels to uplink from India.**
b. **Establishing a single window clearance mechanism for licensing approvals, expediting processing of applications and reducing administrative burden for uplinking of foreign broadcasters' channels from India.**
c. **Encouraging collaboration between foreign companies and Indian partners through bilateral agreements to promote cross-border broadcasting activities and cooperation.**

X. Goal: Leverage digital terrestrial broadcasting as a complimentary broadcasting technology

2.152 Television broadcasting in India commenced on September 15, 1959, with experimental transmission of terrestrial TV signals. Initially, it was exclusively terrestrial TV broadcasting under the jurisdiction of Doordarshan and primarily conducted in analog transmission mode. According to available information, analog TV transmitters served approximately 88% of the Indian population. Subsequently, analog terrestrial TV broadcasting was phased out globally due to poor reception quality, inefficient spectrum utilization, limited spectrum capacity, and the obsolescence of analog technologies. In India, the national broadcaster, Doordarshan, phased out the last set of obsolete analog terrestrial TV transmitters by March 2022.

2.153 The Authority raised the following question on terrestrial broadcasting for stakeholders' comments.

Q15. What policy and regulatory provisions would be required in the policy to enable and facilitate growth of digital terrestrial broadcasting in India. Stakeholders are requested to provide strategies for spectrum utilization, standards for terrestrial broadcasting, support required from the Government, timelines for implementation, changes to be brought in the current ecosystem and the international best practices. Please provide your comments with detailed justification and proper reasoning.

Comments of the Stakeholders

2.154 In response to Q15 regarding facilitation of digital terrestrial broadcasting, there are divergent views from various groups of stakeholders. While some stakeholders advocated the promotion of digital terrestrial television (DTT) broadcasting, others opposed its implementation due to concerns related to spectrum allocation.

2.155 Comments of the stakeholders in the favour of DTT is provided are:

i. DTT gives way to a home-grown technology referred to as Direct-to-Mobile (D2M). It has cited various benefits like enabling smartphone users to watch live channels and other content without Internet and buffering, helps in providing expanded reach to broadcasters, content owners and advertisers, would boost the semiconductor industry thereby would increase GDP contribution, would enable efficient use of spectrum and most importantly it is immensely useful at times of disasters and emergency.

ii. With the proliferation of digital distribution platforms and devices, DTT helps in reaching larger audiences and providing better viewing experience. There should be phased implementation of DTT providing a clear date for different regions/states for analog switch off.

iii. DTT platforms should be built on robust technology that allows encryption and tracking viewership patterns. For spectrum utilization Multi Frequency Networks (MFNs) may be deployed.

iv. DTT should be opened for private players too, which is currently under the exclusive domain of Prasar Bharati, as also recommended by TRAI. From the consumer's perspective, private entry into DTT would mean more channels besides Prasar Bharati owned DD channels.

2.156 Stakeholders' response opposing DTT:

i. Any new broadcasting services should be introduced in accordance with the principles of a level playing field. TSPs have added enormous capacity to mobile networks following the introduction of 5G services.

ii. D2M services directly compete with TSPs and are not intended to relieve network congestion. Instead, they are direct replacements for TSP services. Also, free spectrum allotted by MIB is unfair edge for current service providers.

iii. Cable TV industry providing services within the legal framework, would suffer from the provisioning of D2M services over the free spectrum and avoiding the licensing system.

iv. 526-582 MHz band has considerable potential for providing mobile coverage, particularly in rural/remote areas and within buildings. Spectrum in this range should be assigned exclusively through auctions with same service same rule and avoid creation of regulatory arbitrage against the mobile operators.

v. DTT is declining in most European and other countries and being replaced by IPTV and digital cable.

vi. No reason to revive DTT as there is no seeded market for digital decoders and no requirement of seeding the decoders at government expense as multiple other ways of delivery exist.

2.157 Additionally, two of the stakeholders have a completely different view. According to them spectrum in the range of 526-582 MHz should be reserved for audio usage. One of them has commented that worldwide wireless microphones are manufactured and sold in frequencies of 470 to 694 MHz in UHF band and operate on co-existence basis. The comments mentioned that the needed chunk of spectrum for the use of

wireless microphones and in-ear monitors is narrowing year by year post auction of bands like 700 MHz and above for various IMT application. If this continues below 600 MHz, the audio industry would face even higher challenges.

2.158 Another stakeholder commented that Programme Making and Special Events (PMSE) is an ITU's inclusive term covering radio microphones, in-ear monitors, wireless cameras, talkback systems, etc. Therefore, it is to be ensured that audio PMSE continues to get sufficient spectrum in the 470-703 MHz range to continue to support various events and contribute to the society and economy of India.

Analysis of the issue and views of the Authority

2.159 Terrestrial broadcasting may be understood as the distribution of audio and video content through radio waves, which are transmitted through the air to terrestrial receivers, such as televisions and radios. In the 5G era, terrestrial broadcasting is playing an important role in the distribution of media content, along with the emergence of newer digital technologies.

2.160 With over 300 million households in India, there are over 100 million households which are yet to be covered with television connection. Also, according to industry estimates[46], the number of TV households comprising of linear and bi-directional TVs is expected to reach 206 million homes in 2026, up from 182 million homes in 2023.

2.161 Terrestrial broadcasting including technologies like DTT (Digital Terrestrial Television), or similar technologies may be a cost-effective solution for expanding television coverage, especially in densely populated regions. Therefore, adopting methodologies like DTT can help in reaching the 'TV Dark' homes in the country for content delivery, educational purposes and emergency alerts, thereby, bridging the digital

[46] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

divide in areas of poor television coverage. Hence, satellite and terrestrial broadcasting may coexist and collectively enhance the broadcasting landscape by leveraging their respective strengths and capabilities.

2.162 India could consider establishing its own terrestrial broadcasting standard by leveraging the expertise of premier Indian research institutes like IITs and IISc, industry stakeholders based in India, and collaboration among key players in the telecommunications sector, including government bodies, research institutions, and industry experts. The new standard should prioritize factors such as providing better image quality, more channels, interactive features, better multimedia capabilities, and compatibility with devices. India's terrestrial broadcasting standard should align with international trends, fostering innovation and paving the way for broader acceptance on the global stage. This object is to not only meet the specific requirements of the Indian broadcasting landscape but also position the country as a key player in shaping the future of terrestrial broadcasting technologies worldwide.

2.163 As part of a comprehensive initiative, the Government should actively come forward in ensuring advancement of terrestrial broadcasting technologies through strategic collaborations with leading research institutes. This may involve the allocation of research grants to foster innovation in terrestrial broadcasting, establishment of dedicated incubation centres to support startups, and the facilitation of technology transfer programmes to ensure seamless integration of research advancements into practical applications.

2.164 Further, futuristic use-cases of terrestrial broadcasting like in the areas of 5G broadcast, emergency alerts during disasters, etc. need to be explored. For instance, DTT becomes extremely useful at times of disasters when other sources of communication may become unavailable. Due to its localized nature of services and ability to provide reception on portable and mobile handheld devices, it does not get impacted by weather conditions. It can be used to gather or receive information from the disaster communication networks connected to the

administrative organizations. The information pertaining to disaster prevention and mitigation can then be delivered through DTT broadcasts to the public.

2.165 Broadcasting from remote locations, such as sports events or news coverage, can benefit from features like 5G network slicing. Network slicing allows broadcasters to allocate specific network resources for services like live video streaming, ensuring high-speed uplink and reliable transmission. With smaller crews and reduced reliance on outside broadcasting (OB) vans, 5G enables cost-effective and efficient remote broadcasting[47].

2.166 Subsequently, Direct to Mobile (D2M)[48] is the technology that provides digital TV content broadcast to mobile devices, allowing the broadcast of video and other multimedia content directly to mobile phones without the requirement of an active Internet connection. This can occur through various transmission mediums, including terrestrial (Digital Terrestrial TV to Mobile devices) and satellite (Digital Satellite TV to Mobile devices).

2.167 It may be noted here that there had been comments received from stakeholders in the Consultation Paper for allowing private service providers to offer DTT in parallel with Prasar Bharati. In this regard, TRAI in its Recommendations dated 31st January 2017[49] on 'Issues related to Digital Terrestrial Broadcasting in India' recommended the participation of private players in providing DTT services in the country. Presently, DTT continues to remain under the exclusive domain of Prasar Bharati. The recommendation stated several justifications for opening the scope of DTT to private players.

i. Allowing the private sector in terrestrial TV broadcasting would result in inflow of private capital, speedy transition and overall growth of the terrestrial services.

[47] https://www.ericsson.com/en/blog/2022/10/remote-live-broadcast-capture-an-early-use-case-for-5g-network-slicing

[48] TEC's TECHNICAL REPORT on DIRECT BROADCASTING TO MOBILE DEVICES

[49] https://www.trai.gov.in/sites/default/files/Recommendation_DTT_31Jan2017_2.pdf

ii. Private sector would develop DTT platform as a competitive and viable alternative platform to consumers, as per market demands.

iii. Private participation would lead to innovation in services and new business models for commercial utilization of DTT platform. Content differentiation between terrestrial and other platform may also improve.

iv. The public service broadcasting may get strengthened as private service operators may also provide new socially relevant programming in areas such as education, health, development etc.

v. Private players will be very helpful to develop ecosystem for success of DTT services.

2.168 Further, TRAI on 'Issues related to FM Radio Broadcasting' dated 05th September 2023[50] recommended permitting broadcast of self-curated news by private FM radio broadcasters. The recommendations are reproduced below:

'The Authority recommends that:

i. Private FM Radio Operators should be allowed to broadcast news and current affairs programs, limited to 10 minutes in each clock hour.

ii. The program code of conduct as applicable to All India Radio for news content may also be applied to Private FM Radio channels.'

2.169 One of the issues in the terrestrial broadcasting relates to the spectrum (i.e., 526-582 MHz) allotted to Prasar Bharati for terrestrial broadcasting. During the consultation process, there had been contentions that this spectrum should be continued to be reserved for audio usages (requiring spectrum between 470-698 MHz) owing to its increased applications. TRAI in its Recommendations dated 11th April 2022[51] on 'Auction of Spectrum in frequency bands identified for IMT/5G', recommended the following:

'a) Considering the facts that presently (i) band plan(s) for the frequency range 526-612 MHz is yet to be defined by 3GPP/ITU, (ii)

[50] https://trai.gov.in/sites/default/files/Recommendation_05092023.pdf

[51] https://www.trai.gov.in/sites/default/files/Recommendations_11042022.pdf

development of ecosystem for IMT in 526-612 MHz frequency range will take some time and (iii) MIB is using 526-582 MHz band extensively across the country for TV transmitters; the 526-612 MHz frequency range should not be put to auction in the forthcoming auction.

b) As per the propagation characteristics, lower frequency bands provide wider and deeper coverage, which could be very useful in enhancing terrestrial mobile coverage, particularly for in-building coverage and rural coverage. ITU has already identified this frequency range for IMT services. Therefore, frequency range 526-612 MHz should be reserved for IMT services.

c) DoT should come out with a plan for refarming 526-582 MHz band to be utilized for IMT deployments. To make 526-582 MHz band available for IMT, DoT should work with MIB to prepare a plan for an early migration from Analogue to Digital Transmission, so that the frequency band from 526-582 MHz can be vacated for IMT services. Considering that ITU has identified spectrum in 470-698 MHz as an IMT band in Region 2 & Region 3, DoT may adopt a holistic approach and review the entire frequency range starting from 470 MHz to 582 MHz.

d) In case, complete refarming of 526-582 MHz frequency range for IMT is not feasible, DoT may explore the possibility of this band being used for IMT as well as for broadcasting by MIB on coexistence basis. Refarming of this frequency range for IMT may be performed in a phased manner so that as and when some frequency carriers are vacated, the same can be auctioned for IMT services.'

2.170 Considering the recommendations, it would be further recommended that MIB with DoT should review the allocation of spectrum and come out with a holistic approach for better utilisation of the spectrum.

2.171 In view of above, the Authority recommends the following strategies for leveraging terrestrial broadcasting in the National Broadcasting Policy:

A10. Leveraging and expanding digital terrestrial broadcasting for television and radio

a. **Exploring the use and expansion of digital terrestrial broadcasting to television and mobile devices as a complimentary broadcasting technology to co-exist with cable and satellite broadcasting.**
b. **Notifying the policy framework for digital radio broadcasting in time bound manner with a clear roadmap for rollout.**
c. **Enabling the delivery of digital TV content on mobile devices utilizing digital terrestrial broadcasting technologies such as 5G broadcasting (using features like network slicing) and D2M (Direct-to-Mobile) technology.**
d. **Opening digital terrestrial television and digital radio broadcasting service including news on radio to the private sector to infuse investment required for developing and maintaining infrastructure in a phased manner.**
e. **Leveraging digital terrestrial broadcasting for uninterrupted services during emergencies and natural disasters for public safety through television, radio and mobile and identifying futuristic use cases.**
f. **Ensuring effective utilization of spectrum allocated for terrestrial broadcasting and earmarking globally harmonized spectrum for Programme Making and Special Events (PMSE) covering radio microphones, in-ear monitors, wireless cameras, talkback systems, etc.**

XI. Goal: Establish effective audience measurement and rating system

2.172 The consultation paper emphasizes the necessity for a transparent and credible audience measurement system for both television and radio. Currently, the Broadcast Audience Research Council (BARC) is the sole provider of television ratings in India. Modern technologies such as Big

Data, AI, Wearable meters, and Return Path Data (RPD) may be utilized to provide real-time insights and enable broadcasters and advertisers to adapt strategies swiftly.

2.173 Additionally, there is a significant need for a representative and reliable radio audience measurement system. TRAI's recommendations of 2016 has provided a framework for this purpose. Recognizing the need for a credible and transparent audience measurement system, the Authority raised the following question for stakeholders' comments.

Q16. How the strategies with respect to audience measurement and rating system in National Broadcasting Policy can ensure, address and encourage:

i. *Establishment of a transparent, credible, and technologically equipped television audience measurement system that accurately reflects viewer preferences and behaviour*
ii. *Expansion of the sample size to adequately represent the diverse landscape of television viewership, considering the anticipated growth in TV households*
iii. *Integration of data from non-linear sources from digital media to cover cross-platform content consumption habits*
iv. *Establishing a policy framework for conducting radio audience measurement in India*
v. *Encouraging multiple agencies to ensure healthy competition and enhancing service quality of measurement and methodologies*
vi. *Adoption and utilization of modern technologies*

Comments of the stakeholders

2.174 The brief comments of the stakeholders to Q16 of the CP on audience measurement and rating systems are as follows:

2.175 Comments of the stakeholders on credible and transparent audience measurement system to Q16(i):

i. Adopting measures like anonymization of data, avoiding data smoothening, RPD, transparent outlier policy, structural changes at

BARC, equal participation of all stakeholders, real time data measurement, and audit for rating agencies may be undertaken.

ii. Audience measurement needs to be made robust, transparent, accountable and light touch regulation with simple registration.

iii. Some views were that DPO by virtue of its relationship with customers should be allowed to gather insights and share with interested stakeholders. Regulator/MIB should prescribe a guidance-based approach for DPOs.

iv. Establishing a process for accrediting or empanelling rating agencies for audience measurement. They also stated the need to develop model governance standards/voluntary codes of practices for rating agencies to ensure fairness, neutrality and transparency. Further, they mentioned to prescribe standards for publishing data to ensure it is made available to all value chain stakeholders in a transparent manner and create a mechanism for auditing compliance.

2.176 On Q16(ii), stakeholders have largely supported the need for expansion of sample size for television viewership. One of the stakeholders stated that at least 1 lakh Bar-o-Meters are required especially for news channels. It also stated that large sample size addresses the problem of panel tampering and RPD is effective for larger sample size. Another stakeholder submitted that increasing sample size would refine measurement and rating system although cost will be a hinderance, and innovation and R&D will be required. Some stakeholders suggested that larger sample size aid in getting viewership for niche channel/HD channel and increases variety in audience measurement.

2.177 Stakeholders had divergent views when asked to provide their comments on integrating non-linear data on Q16(iii). One of the stakeholders, who favoured that non-linear data should also be integrated, has stated that government should incentivize innovation and allow hybrid measurement across platforms. Another stakeholder commented that an accurate and unified audience viewership metrics will lead to better

revenue monetization for content across both offline and online platforms.

2.178 Stakeholders who opposed the integration of non-linear data submitted that methods like Monthly Active Users (MAU), Cost Per Minute (CPM), Cost Per View (CPV) or Cost Per Completed View (CPCV) already exists for OTT platforms and hence there is no requirement to integrate non-linear data separately. Another stakeholder stated that TV audience measurement should not be fused with digital audience measurement.

2.179 Regarding radio audience measurement on Q16(iv), one of the stakeholders submitted the following:

i. Enabling connected devices to utilize broadcast and IP access for real-time, accurate measurement and statistics on radio listening habits.
ii. Allowing for location-based and time-based measurement improves the level of detail and analytics collected to aid in business development and program planning.

2.180 Further, stakeholders when asked about multiple rating agencies on Q16(v) had opposite views. One of the stakeholders supported it and stated that multiple rating agencies foster competition and innovation. It provided example that countries like UK, USA, Malaysia, Australia and Philippines have at least 2 concurrent rating systems. Another stakeholder in support of multiple agencies opined that multiple agencies bring in competition, new technologies, research methodologies and enhance better quality. One of the stakeholders who opposed the idea expressed that multiple agencies may lead to conflict in data due to divergent choices in sample selection and variances in parameters to be measured.

2.181 Regarding adoption of modern technologies on Q16(vi), one of the stakeholders proposed that RPD, AI and Predictive audience may be used for analysis. Another stakeholder commented that apart from RPD, Embedded SIM, Narrowband IoT, QR Code, Android STB may also be used for audience measurement purpose.

Analysis of the issue and views of the Authority

2.182 The Authority is of the view that a transparent, credible and technologically equipped audience measurement system holds immense importance for all stakeholders. Broadcasters benefit from an accurate measurement system that enables them to optimize their programming. For advertisers, granular insights into viewer demographics and preferences allow advertisers to tailor their campaigns more precisely, ensuring higher engagement and improved return on investment (ROI).

2.183 The policy guidelines for Television rating agencies have the following provisions regarding panel size:

'A minimum panel size of 20,000 to be implemented within 6 months of the guidelines coming into force. Thereafter, the panel size shall be increased by 10,000 every year until it reaches the figure of 50,000. The panel of homes has to remain representative of all television households in the country.'

2.184 TRAI in its Recommendations on 'Review of Television Audience Measurement and Rating System in India' dated 28th April 2020 recommended the following:

'The rating agency should be mandated to increase the sample size from the existing 44,000 to 60,000 by the end of 2020, and 1,00,000 by the end of 2022 using the existing technology.'

2.185 However, the current scenario reveals that BARC India is operating with a panel size of only 55,000 households. A smaller panel size inherently limits the scope of data available for analysis. Conversely, a larger panel size not only improves the robustness of the system but also adds substantial weight and value to measurement ratings. Therefore, the Authority is of the view that having a larger panel size has its own benefits for audience measurement. Expanding panel size and embracing advanced technologies is crucial for ensuring a more credible audience measurement.

2.186 Further, the entry of multiple agencies not only introduces competition but also has the potential to enhance the quality of service and reduce costs. Competition acts as a catalyst for innovation, pushing to adopt new technologies, research methodologies, and analytical methods, thereby ensuring a continuous evolution that aligns with the changing dynamics of the media landscape. Moreover, the competitive environment serves as a natural deterrent against any attempt of manipulation in ratings. With multiple agencies competing for accuracy and credibility, any attempt to manipulate ratings becomes more easily detectable. Also, countries like Australia, Malaysia, Singapore, South Korea have 2 agencies for audience measurement.

2.187 To facilitate the establishment of multiple audience measurement agencies, the government should play a proactive role. Offering subsidies and launching schemes could serve as incentives for the formation and sustenance of these agencies, encouraging them to invest in state-of-the-art technologies, proven research methodologies and transparent measurement processes. Government support is crucial in creating an ecosystem where diverse entities can thrive, fostering healthy competition and ultimately enhancing the accuracy and reliability of television audience measurement in India.

2.188 The Authority supports the adoption of Return Path Data (RPD) as a transformative tool in audience measurement. RPD involves the collection of viewership data directly from the devices consuming content. Sourced from set-top-boxes, smart TVs and other connected devices, RPD offers a direct insight into viewer interactions with content, providing a level of granularity that ensures a precise analysis of individual preferences and viewing habits. A key advantage of RPD is its ability to provide real-time insights into viewer behavior, empowering broadcasters and advertisers to promptly adjust their strategies in response to emerging trends, thereby ensuring the continued relevance of content and campaigns. TRAI in its 2020 recommendations recommended the following:

'MIB should amend the DTH License and MSO registration so as to mandate STBs capable of transferring viewership data and adoption of RPD technology. This transfer of data can be done by establishing a return path/connection from STB to the remote servers of the Audience Measurement agency.'

2.189 Apart from television audience measurement, the Authority is of the opinion that there should be a comprehensive methodology for radio audience measurement in India. Continuance with an inadequate radio rating system is likely to hamper the growth of the radio industry as financial decisions are largely influenced by radio ratings. TRAI in its recommendations dated 15th September 2016[52] on 'Issues related to Radio Audience Measurement and ratings in India' had recommended the framework for RAM to be notified by MIB. The recommendations included:

i. Guidelines for rating system to be notified by MIB
ii. Registration is required with MIB for doing the rating work
iii. Guidelines to cover registration, eligibility norms, cross-holding, methodology for conducting rating, complaint redressal, sale & use of ratings, audit, disclosure, reporting requirements and penal provisions
iv. All rating agencies including industry led body are required to comply with the guidelines

2.190 Internationally[53], Radio Audience Measurement (RAM), in one form or another, is carried out in almost every European country, and has long provided the independent and audited data on which radio advertising has been traded. Radio is measured by two primary means: firstly, asking people to actively remember or record their listening behaviour over a period of time (declarative); and secondly, by the use of technology that

[52] https://trai.gov.in/sites/default/files/Recommendations_15_September_2016.pdf
[53] https://www.egta.com/wp-content/uploads/publications/2024_egta_insight_radio_audience_measurement.pdf

passively detects any audio in the vicinity of the individual being measured (electronic/ passive).

2.191 Further, the Portable People Meter (PPM) methodology has proven to be the most widely adopted electronic radio audience measurement technique, and it is currently in use for the trading currency in Canada, Denmark, Iceland, Norway, Sweden, the US and other markets. The French research organization Médiamétrie has developed a similar meter called RateOnAir. The Czech research company has also developed a similar technology, under the name adMeter, which is being used for cross-media planning and assessment of television, radio, online and other media types.

2.192 In furtherance to television and radio, OTT broadcasting service providers have also become significant players in the media landscape, offering diverse content to millions of viewers. However, their viewership data remains largely opaque. The Authority is of the view that a standardized framework should be established to ensure transparency by requiring OTT platforms to disclose relevant metrics such as active users, time spent per user, popular content and others. This transparency would benefit advertisers in making informed decisions. Access to viewership data allows one to understand consumption patterns, identify trends and assess the impact of content. With a disclosure framework, it would be helpful to address inconsistencies in viewership details and promote fair competition.

2.193 In view of the above, the Authority recommends the following for establishing transparent and credible Audience Measurement and rating system for television, radio and OTT broadcasting service.

A11. Transparent and credible audience measurement and rating system for television, radio and OTT broadcasting service

a. Establishing transparent, credible and technologically equipped television audience measurement system that accurately reflects viewer preferences and behaviour by:

i. **Revamping the existing audience measurement system in India**
ii. **Expanding the sample size to represent diverse landscape**
iii. **Encouraging multiple rating agencies to carry out audience measurement for ensuring healthy competition**
iv. **Adopting Return Path Data (RPD) and other latest technologies to enhance the accuracy of data**

b. **Establishing a policy framework for conducting radio audience measurement in India.**
c. **Creating a framework for disclosure of viewership data by OTT broadcasting service providers in a transparent manner for the purpose of audience measurements.**

CHAPTER III

PROMOTING CONTENT IN THE BROADCASTING SECTOR

3.1 The second mission of the policy covers the following goals through the National Broadcasting Policy:

i. Establish India as a hub for content creation
ii. Strengthen Public Service Broadcasting
iii. Facilitate content proliferation through Digital Radio Broadcasting
iv. Support the growth and proliferation of Indian Content through OTT broadcasting services
v. Support Indian Content production through films, animation, visual effects, gaming and music

3.2 This particular mission chalks out the strategies to make India's content available at a global stage. Therefore, this mission and its corresponding strategies focuses to make India a 'Global Content Hub' and reinforce India's public service broadcaster, Prasar Bharati, through quality content production and dissemination. It also discusses the support that can be extended to radio and OTT broadcasting services for facilitating quality content proliferation. Content is also generated through films, online gaming, music and applying techniques like animation and visual effects during production and post-production which also needs attention and support.

I. Goal: Establish India as a hub for content creation

3.3 Given India's rich diversity, promoting Indian content on a global stage is crucial and needs to be addressed through a strategic policy approach. Priorities include adopting modern technologies for high-quality content production and distribution, providing funds to support and train local artists and talents, improving infrastructure and fostering collaboration between the government and industry to establish India as a 'Global Content Hub.' The Authority has raised Q4 on 'Global Content Hub' to seek stakeholders' opinion, which is reproduced below:

Q4. What other policy and regulatory measures should be adopted in the policy for creation and expansion of quality Indian content to make India the 'Global Content Hub'? Further, suggest how to extend support to local talents and content developers in terms of training, infrastructure and incentives. Provide your comments with detailed explanation.

Comments of the Stakeholders

3.4 In response to Q4 regarding strategies to make India a 'Global Content Hub', stakeholders had divergent opinions. While some supported for the promotion of Indian content, few others averred that the policy should not extend its purview to content.

3.5 Few stakeholders, mainly from the distribution side, supported the promotion of local content through platform service (PS) channels. They specified that broadcasters should produce 20% of their content based on Indian culture and history. Similarly, content on PS channels of DPOs should be 50% of local content of the geography, culture and history of their service area. Additionally, it is mentioned that for PS channels, there should not be any reservation on sharing content with PS channels of other DPOs and broadcasters. Also, there is a need for Government collaboration with DPOs for promoting PS channels contents in other countries as well.

3.6 Several stakeholders shared common views on enhancing the content creation ecosystem. Since content creation is more of a creative expression, they emphasized the importance of training programs through skill development workshops, industry mentorship, digital literacy and specialized training. The stakeholders advocated for providing infrastructure support through creation of content hubs equipped with affordable, cutting-edge equipment. Similarly, digital platforms are needed for the artists to showcase and monetize their work and facilitating rental or equipment-sharing arrangements for filmmaking, broadcasting and audio-visual equipment. Additionally, stakeholders also suggested for allocating government funds, offering tax subsidies and providing other incentives to promote regional language

content and to support local and foreign content producers. Establishing content development funds by governments, industry associations, film councils, or private organizations is yet another suggestion to support content creation through public budgets, grants, sponsorships and partnerships.

3.7 Further, stakeholders commented about collaboration and co-production between Indian content creators and international studios to improve the quality and global appeal of Indian content. They suggested to introduce diverse storytelling perspectives and increase exposure on international platforms. Stakeholders are also of the view for the requirement of Government support on both the demand and supply sides. This includes promoting Indian audio-visual content in international markets, participating in film festivals and trade fairs and integrating content promotion in trade agreements.

3.8 Additional measures proposed included setting up content clusters or export zones with fiscal and infrastructural benefits, utilizing tourist spots for content production, and strengthening IPR laws. Extending the provisions of the 73rd Amendment Act to empower local self-governments to support local talent and content developers through skilling, infrastructure, incentives, and promotion campaigns is also suggested.

3.9 Contrarily, many stakeholders have submitted opposite views. Such stakeholders have submitted that NBP should focus solely on carriage related aspects rather than content-driven mandates, arguing against the need for local content quotas on TV and OTT platforms. They are of the view that Indian audience demonstrates a strong preference for local and regional content, which has been met by TV and OTT services through significant production investments. The availability and accessibility of Indian content in the market are well-supported by investment data, suggesting there is no market failure or necessity for mandating local content quotas. Market dynamics and competition drive the innovation in regional content and that quotas could disrupt this natural progression. Technological advancements, such as subtitles and

multilingual audio, make global content accessible to Indian viewers. Instead, the government should foster a conducive environment for content generation and distribution.

3.10 Further, one of the stakeholder's mentioned that India has a diverse culture and a very high level of creativity, but to be on a global scale it requires funds and management which can only come about in a regime of minimum interference. They mentioned that restraints imposed on the industry such as content regulations, tariff regulations, censorship, oversight committees etc. are required to be removed, else the aspiration of creation of world class content with high creativeness will be difficult to attain.

Analysis of the issue and views of the Authority

3.11 Encouraging the development and dissemination of high-quality content highlighting India's varied art, culture, literature, history, and mythology can substantially enhance India's global visibility. By harnessing cutting-edge technologies like VR and AR, coupled with advanced digital production techniques, content creators have the unprecedented opportunities to craft narratives that transcend borders, captivating audiences both in India and across the globe.

3.12 Through VR, viewers can immerse themselves in the sights and sounds of India's rich cultural tapestry, experiencing firsthand the essence of its diverse landscapes and traditions. Augmented reality takes storytelling to the next level by seamlessly blending the virtual world with the real world. These technologies not only enhance storytelling but also offer opportunities for audience engagement like never before. Viewers can actively participate in narratives, making decisions that shape the course of the story or even stepping into the shoes of characters to experience events from their perspectives.

3.13 Moreover, the versatility of digital production techniques enables creators to push the boundaries of imagination, crafting visually stunning worlds and seamless visual effects that captivate viewers' senses.

3.14 By embracing these new age technologies, content creators have the power to transcend cultural barriers and create narratives that resonate with audiences worldwide, fostering a deeper understanding and appreciation for India's rich heritage and contemporary culture. Additionally, it provides a unique competitive edge in the global content market, drawing in audiences with a keen interest in diverse and authentic cultural experiences. Such efforts can contribute to India's soft power, boost tourism and create new economic opportunities in the creative industries.

3.15 To establish India as a global content hub, the Authority believes that collaboration between the Central Government, State Governments and industry partners is essential. This collaborative approach would drive the growth of regional Indian content through funding, infrastructure support such as content incubators and production hubs and education and skill development programs. Moreover, by investing in infrastructure and technology that empowers local filmmakers and production houses, India can elevate the quality of its content to meet international standards. Whether it is state-of-the-art studios equipped with the latest equipment or collaborations with global talent for co-productions, these efforts would help Indian creators push the boundaries of creativity and innovation. By creating an environment that supports and nurtures local talent, India can produce high-quality content that resonates both domestically and internationally.

3.16 Furthermore, the creation of Special Economic Zones (SEZs) dedicated to content creation could provide significant benefits such as tax benefits, simplified regulations, and other economic incentives that can attract investment from both domestic and international media companies. This would lead to the establishment of state-of-the-art content creation facilities in India, fostering innovation, collaboration and position India as an attractive destination for content production. Therefore, the Authority supports the creation of SEZs for establishing content creation hubs.

3.17 The Authority is of the view that that there is a need to upgrade infrastructure and simplify the permission processes for content production at various tourist spots, heritage sites and other popular locations. By making such processes easier, India would be established as a preferred destination for content production. This would also stimulate local economies and flourish tourism. Further, the Government should facilitate co-production agreements with other countries. These agreements would enable collaborative projects, allowing Indian content creators to access international markets and resources. Additionally, enabling foreign producers to produce content in India would bring in investment, create jobs and foster cultural exchange.

3.18 The Authority is also of the view that incorporating dubbing and subtitles in films, television programs, digital content, animated shows, children's entertainment and educational material could significantly enhance the reach and accessibility of Indian content. This would allow citizens within India, Indian diaspora communities worldwide and global audiences gain the ability to access content in the language of their choice.

3.19 In its pursuit of establishing India as a 'Global Content Hub,' the Authority also places significant emphasis on the promotion of local content. For instance, DPOs play a crucial role in promoting local content through platform services channels. They achieve this by incorporating locally produced programming services specific to their platform. Further, the Government may consider creating co-funding schemes in partnership with state governments, local self-governments (Panchayats) and urban local bodies to provide essential financial support to local talent, content developers, and technicians. These schemes could mitigate the financial challenges faced by local content creators, enabling them to produce high-quality content without the burden of excessive costs. By involving multiple levels of government, these schemes could ensure that funding is distributed equitably and reaches the grassroots level. Such financial support could stimulate local economies, create job

opportunities, and nurture a vibrant creative industry within communities.

3.20 In this background, the Authority recommends the following strategies to position India as 'Global Content Hub' along with the promotion of local content.

B1. Establishing India as a 'Global Content Hub'

a. Initiatives for positioning India as a 'Content Hub'

i. **Fostering creation and outreach of quality content exhibiting India's diversified art and culture, literature, history, mythology using new age technologies appealing to both Indian and International audiences.**

ii. **Enabling collaboration between Central Government, State Governments and industry partners to facilitate the growth of regional Indian content through funding, infrastructure support (content incubators and production hubs), education and skill development. Enabling creation of Special Economic Zones (SEZs) for establishing content creation hubs.**

iii. **Improving the infrastructure and simplifying permission process for content production and filming at various tourist spots, heritage sites and popular locations to showcase Indian places at the global stage for boosting Indian tourism.**

iv. **Entering into co-production agreements with other countries to facilitate collaborative projects, enabling Indian content creators to access international markets and resources and enabling foreign producers to produce content in India.**

v. **Encouraging incorporation of techniques like dubbing and subtitles in movies, television programmes, digital content, animated shows, children's entertainment and educational content to enable citizens across the country, Indian diaspora communities as well as global audience to access content in vernacular/international languages.**

b. Promoting Local Content

i. **Enhancing the use of platform services of distribution platform operators for proliferation of local and regional content.**

ii. **Creating co-funding schemes in partnership with state governments, local self-governments (Panchayats) and urban local bodies for extending financial support to local talent, content developers and technicians.**

II. Goal: Strengthen Public Service Broadcasting

3.21 Prasar Bharati, with All India Radio (AIR) and Doordarshan (DD) as its two constituents, operates with the mandate to organize and conduct public broadcasting services to inform, educate and entertain the public and to ensure a balanced development of broadcasting on radio and television. AIR and DD offer extensive coverage to the Indian population, making them one of the largest networks in the world.

3.22 The consultation paper highlighted areas like modernizing and strengthening of public service broadcaster for quality content production and dissemination. It also discussed establishing of digital platforms like those in Canada and Denmark to widen its global reach.

3.23 In this background, the CP raised Q6 as reproduced below for seeking the comments of the stakeholders.

Q6. What broad guiding principles, measures and strategies should be considered in the NBP to strengthen India's public service broadcaster (i.e. Prasar Bharati) to promote quality content creation, dissemination of DD and AIR channels and maximizing its global outreach? Also suggest, what support and measures should be provided for the proliferation of television and radio broadcasting services provided by the public service broadcaster in fulfilment of its mandate?

Comments of the Stakeholders

3.24 In response to the Q6 of the Consultation Paper regarding content production and dissemination by public service broadcaster, some of the stakeholders opined that public service broadcaster should be subjected to similar regulations as with other DPOs to ensure level playing field. They stressed upon the need to upgrade DD Free Dish to an addressable system to reduce piracy, create a level playing field with other DPOs and obtain an accurate subscriber count.

3.25 Some stakeholders expressed that the public service broadcaster should enhance regional language programming across new mediums by increasing content on national themes. It has been mentioned by the stakeholders that the public service broadcasters should explore new monetization models, expand international collaborations along with protecting its intellectual property. The public service broadcaster should explore PPP model for content sourcing and creation and decentralizing content production to develop programmes in regional languages for local audiences and review regional content creation performance regularly.

3.26 Further, it is submitted that the public service broadcaster should enable community radio stations to source news and current affairs from AIR and translate and transmit in local languages and dialects. It is also mentioned that the public service broadcaster should strengthen transmission reception infrastructure in border and remote areas and establish SOPs for emergency content dissemination and developing disaster-resilient broadcasting infrastructure. It has been further highlighted that to match the current trends of broadcasting, there is a need for trained and skilled manpower by the public service broadcaster.

Analysis of the issue and views of the Authority

3.27 As per the provisions of Prasar Bharati (Broadcasting Corporation of India) Act, 1990, the primary duty of the Prasar Bharati is to organise and conduct public service broadcasting to inform, educate and entertain the public and to ensure a balanced development of radio and television

broadcasting. Prasar Bharati plays a crucial role in nation building which necessitates continuous focus on providing meaningful and accurate content within the country and abroad.

3.28 India has a large diaspora across many continents and countries. The Authority is of the opinion that Prasar Bharati should sign bilateral agreements/MoUs which would facilitate distribution of content in other countries, in developing partnerships with international broadcasters and exploring new strategies to address the demands of emerging technologies. The advantage of signing such MoUs would result in exchange of programmes in the areas of culture, education, science, technology, sports, news and other fields. This would also help promote Indian content, showcasing India's soft power on a broader scale.

3.29 Likewise, AIR should establish content-sharing agreements through MoUs with radio stations in other countries. This would allow AIR content to be broadcast on digital multicast channels in those markets, while also providing access to international content for expatriates and workers living in India.

3.30 To enable the content outreach of Doordarshan and AIR, adequate funding would be required for high-quality content development for both domestic and international audiences. Also, there would be requirement of upgrading and expanding broadcasting infrastructure, including studios, transmitters and digital platforms. The Authority, therefore, is of the view that the Government should provide sufficient funding for the development of quality content production and further dissemination of television and radio services of Doordarshan and AIR.

3.31 To enhance content outreach, Prasar Bharati is considering launching its own OTT platform. With its extensive library of Indian and regional content in various languages, Prasar Bharati should leverage the content from Doordarshan and AIR on this new platform. Internationally[54], public

[54]https://www.researchgate.net/publication/375871024_The_platformization_of_public_service_media_A_comparative_analysis_of_five_BVOD_services_in_Western_and_Northern_Europe

service broadcasters of countries like Denmark, Canada, Finland, Ireland, etc. have also started their OTT/VoD platforms. These public broadcasters have also adapted to processes of digitization and datafication by:

i. Developing a central VOD service
ii. Investing in exclusive content, catalogue acquisition and production partnerships as ways to expand scale and scope
iii. Using data to create richer user experiences and gain insights into audience practices

3.32 Therefore, the Authority is of the view that Prasar Bharati's efforts should focus on content, technology, user experience and strategic promotion to create popular OTT platforms. Collaborating with the MIB for policy support and funding will be essential for developing popular OTT platforms.

3.33 According to the Prasar Bharati website[55], AIR reaches nearly 92% of the country's area and 99.19% of the total population through Short Wave (SW), Medium Wave (MW) and Frequency Modulation (FM). FM[56] coverage specifically reaches 59.2% of the geographical area and 73.5% of the population. The Authority believes that Prasar Bharati should expand its FM infrastructure to cover more regions of the country. Additionally, radio services, being terrestrial, are critically important for information dissemination during emergencies or disasters.

3.34 Currently, radio broadcasting in India is largely analog. Digital radio technologies provide several advantages over analog systems, including improved audio quality, functionality and efficiency. Data transmitted digitally are less prone to interference and distortion compared to analog signals. Additionally, digital radio technologies offer increased spectrum efficiency, enabling broadcasters to transmit more channels and services

[55] https://prasarbharati.gov.in/homepage-air/

[56] https://prasarbharati.gov.in/wp-content/uploads/2023/08/19-LIST-OF-EXISTING-STATIONS-AND-TRANSMITTERS-310723.pdf

within the same bandwidth, thereby addressing the issue of limited bandwidth.

3.35 The Authority is of the view the Prasar Bharati with support from MIB should switch to digital radio by bringing out a transition plan providing appropriate protection for analog radio during the interim period. Prasar Bharati needs to ensure that digital radio broadcast system should be able to accommodate future upgrades, features and services. The transmission should be in multiple languages to cater to the linguistic diversity of India. Moreover, it is also required to be ensured that the ecosystem of digital radio receivers gets developed and the digital radio receivers are commercially available at reasonable and affordable prices.

3.36 It may be noted that adherence to quality standards is essential for the operation of any digital solution. Transmission systems and radio devices should also comply with standards and performance metrics to ensure long-term operations. The digital radio ecosystem needs to demonstrate the ability to monitor operations of radio transmissions to ensure quality of the services and reliable operations. These quality standards for digital radio transmission and reception need to be established for transition from analog radio broadcasting to digital radio broadcasting.

3.37 The Authority is of the view that with proliferation of digital radio services, adopting a digital radio broadcast transmission standard is necessary to ensure that all digital radio broadcast receivers in India are compatible with all digital radio broadcast transmitters which would enable the continuation of a ubiquitous and free radio service in India. Prasar Bharati in collaboration with Telecommunication Engineering Centre (TEC) should establish a standard for digital radio broadcasting.

3.38 Further, there are concerns with the non-addressable 'DD Free Dish' platform. Presently, there is no effective mechanism to authenticate data about the number of subscribers accessing DD Free Dish services. Various reports reveal different data for DD Free Dish households. While

some reports indicate there are 45 million[57] households with DD Free Dish, other sources suggests that the number of DD Free Dish households are at 58 million[58], reflecting a huge difference in the subscriber's data. Addressability of DD Free Dish STBs would provide a possible breakthrough to get the exact subscriber counts.

3.39 The Authority is of the view to upgrade the non-addressable 'DD Free Dish' platform to addressable systems. Addressability enables efficient transmission of television signals through a STB installed at the customer's premises, facilitating conditional access and ensuring content security. The installation of a Subscriber Management System (SMS) linked to the STB enables the generation of accurate subscriber-wise data, management of subscriber information, channel details and other related activities, thereby enhancing the quality of service provided to subscribers.

3.40 Therefore, the Authority is of the view that to leverage the potential benefits of the addressable system and to fulfil the mandate of Prasar Bharati of delivering quality content and services in public interest, 'DD Free Dish' platform needs to be upgraded to addressable systems in a time-bound manner with a defined sunset date. This would also address the issue of level playing field with private television channels.

3.41 As emerging technologies reshape content production and distribution, the Authority is of the view that Prasar Bharati should prioritize reskilling and upskilling its workforce through training programs, workshops and collaborations with industry experts. Also, as mentioned earlier, launching internship programs in collaboration with industry and academia would help enhance broadcasting and distribution skills among aspiring talent.

[57] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

[58] https://www.business-standard.com/industry/news/future-of-broadcasting-rise-of-free-to-air-channels-is-aiding-growth-of-tv-124051900524_1.html

3.42 In view of the above, the Authority recommends the following strategies to strengthen the public service broadcasting:

B2. Reinvigorating public service broadcaster for quality content creation and distribution

Quality content creation and distribution

a. **Providing adequate support and funds from the Government to Prasar Bharati for upgrading and expanding the broadcasting infrastructure for developing high quality and innovative content to enable people especially from marginalized and underprivileged communities to have quality experience.**

b. **Enhancing production capacity and upgrading studios to support high-quality content creation and post-production facilities for television, radio and OTT platforms to widen its reach.**

c. **Bolstering strategic partnerships and collaborations with international broadcasters, content creators and media organizations to co-produce and distribute content, exchange expertise and expand global reach.**

OTT platforms

d. **Developing OTT platforms by Prasar Bharati for the promotion of the content of Doordarshan and AIR channels.**

e. **Developing facilities for creating new age media utilizing technologies like 3D technology, AR-VR, animation, sound technologies and other emerging platforms and tools for immersive viewing and listening experience.**

f. **Leveraging the extensive archives of content library of Doordarshan and AIR, especially, erstwhile popular content, by remastering and relaunching it for the audience including new age audiences.**

All India Radio

g. **Developing transmission infrastructure and content creation to extend the reach of AIR to the uncovered areas of the country.**
h. **Enabling Prasar Bharati for developing the ecosystem for transition from analog to digital radio transmission in a phased manner to become fully digital within three years.**
i. **Establishing content-sharing relationships between AIR and radio stations of other countries enabling reach of AIR content at global level.**
j. **Creating standards for digital radio in collaboration with Telecommunication Engineering Centre (TEC).**

DD Free Dish

k. **Enabling addressable systems for 'DD Free Dish' platform to maintain subscribers' detail, ensuring quality of service and preventing unauthorized distribution of the content to address the issue of level playing field particularly for the private television channels.**

l. **Promoting the availability of programmes and channels of friendly neighboring countries on the platform of Doordarshan and 'DD Free Dish' and vice-versa.**

Skill Development

m. **Reinvigorating Prasar Bharati by investing in reskilling and upskilling of the existing workforces through training programs, workshops and collaborations with industry experts.**

n. **Designing internship programmes by Prasar Bharati in collaboration with industry and academia in various disciplines of broadcasting.**

3.43 The section ahead covers content delivery through radio, OTT broadcasting services, films, music and application of techniques like animation, visual effects for content creation. All the various means of

delivery methods along with television compete, compliment and combine to fulfil the ever-increasing demand for entertainment and information globally. The aim is to enrich the content growth, addressing the issues emanating from skill gaps and deficiencies in infrastructure, and implementing strategies to promote and proliferate Indian content both locally and globally. The detailed analysis of the various segments of the sector have been elaborated in the subsequent paragraphs.

III. Goal: Facilitate content proliferation through Digital Radio Broadcasting

3.44 Radio, due to its extensive coverage, ease of portability, low setup costs, and affordability, is widely regarded as one of the most popular and cost-effective mass communication mediums. Being the most economical electronic medium to broadcast and receive, radio breaks down barriers of illiteracy and isolation, making it the preferred electronic medium for the underprivileged.

3.45 To support quality content proliferation through radio, MIB and TRAI have taken several initiatives. Some of the recent initiatives include:

- MIB approved a 43% [59] (i.e. from ₹52 to ₹74 per ten seconds) increase in the base rates of advertisements on private FM radio stations.
- TRAI in its Recommendations on 'Issues related to FM Radio Broadcasting' dated 05th September 2023[60] has recommended to allow private FM broadcasters to broadcast news and current affairs programs, limited to 10 minutes in each clock hour.
- Also, as mentioned earlier, TRAI also recommended de-linking the license fee from the Non-Refundable One Time Entry Fee (NOTEF) to provide financial support to radio stations.

3.46 It needs to be mentioned here that radio due to its innate ability to create relevant regional content is capable of influencing the masses

[59] https://www.livemint.com/news/india/govt-revises-advertisement-rates-for-private-fm-radio-11696858478393.html

[60] https://trai.gov.in/sites/default/files/Recommendation_05092023.pdf

particularly in the remote areas through content transmitted in local languages. Dissemination of educational and informational content on agriculture, healthcare, government schemes and incentives, news and current affairs, sports and other relevant issues pertaining to them, which keeps the local people aware of the government schemes etc. and helps them to avail the benefits of such schemes. It may be further noted that once digital radio is implemented and adopted, it will allow more genres and niche content at the same frequency, thereby increasing the variety of content availability for the regional masses.

3.47 Further, in radio broadcasting, Community Radio Stations (CRS) play a significant role in empowering communities by means of dissemination of crucial information, particularly to rural and remote communities. To support the CRS, MIB's Central Sector Scheme viz., 'Supporting Community Radio Movement in India'[61], aims to strengthen new and existing CRSs with resources, capacity and technology to upgrade the standard of the stations and increase reach and visibility to the interior regions of India. The scheme also aims to revitalize new and existing CRSs by providing required funds for resources, capacity and technology thereby increasing effectiveness of operational community radio stations.

3.48 CRSs are an essential tool for social empowerment because of their role in preserving local and regional cultures. CRSs play a significant role in developmental efforts by broadcasting programs that address a wide range of local issues, including agricultural concerns, education, women's empowerment, health, sanitation, and local culture, among others, in the local language or dialect.

3.49 TRAI in its recommendations on 'Issues related to Community Radio Stations' dated 22nd March 2023[62] has analysed and highlighted the vital role of CRS in country. The Recommendations mentions that *CRSs also play a very vital role in dissemination of educational content to rural*

[61] https://mib.gov.in/sites/default/files/Appendix-I%20Brief%20of%20ongoing%20schemes%20English.pdf

[62] https://trai.gov.in/sites/default/files/Recommendation_22032023.pdf

population. CRSs established by educational institutions not only broadcast educational programs for students, but also provide hands on experience to students on various aspects of radio broadcasting– technological as well as content generation. At present, out of 408 operational CRS, only 90 CRS are operated by government educational institutes. There is a need to encourage universities of Central/ State Governments to establish and operate CRS. For this purpose, provisions for budgetary support to universities of Central/ State Governments is the need of the hour. MIB may actively pursue providing license/ spectrum for such institutions on priority basis.

3.50 Further, TRAI in the above-mentioned recommendations has *inter-alia* recommended that:

i. MIB may actively pursue with Central and State Governments to sponsor more programmes on CRS for helping CRS in their sustainability.

ii. All the universities of Central/ State Governments may be provided budgetary support to establish and operate Community Radio Stations. MIB may actively pursue providing permission/ spectrum for such universities.

3.51 Keeping in mind the immense importance of radio and CRS, the Authority recommends the following strategies for promoting the content proliferation through radio and CRS.

B3. Promoting content proliferation through Digital Radio Broadcasting

a. Facilitating programme creation like news, education, entertainment, awareness programmes on FM radio services in different languages covering all regions.

b. Permitting private FM broadcasters to air self-curated news bulletins and current affairs programmes.

c. Promoting local cultures and dialects and empowering marginalized groups and communities by addressing their

challenges through Community Radio Stations (CRS). Upgrading and launching incentive schemes to promote and expand the reach of CRS in the country.

IV. Goal: Support the growth and proliferation of Indian Content through OTT broadcasting services

3.52 OTT broadcasting services, predicted to become the largest segment of the sector. as per industry analysis[63], is valued at ₹644 billion in 2023. The share of OTT services is estimated to reach ₹955 billion at a CAGR of 13.5% by 2026 and Increased smartphone penetration, affordable data charges and fixed line broadband penetration have led to the increased usage of OTT. With its wider reach and coverage globally, OTT platforms hold the potential to foster Indian content at a faster pace.

3.53 Industry data reveals that regional content apart from Hindi language have witnessed a growth of 52% in 2023, increasing from 50% in 2022. Internationally too, various countries have taken initiatives to flourish regional content via OTT platforms.

3.54 The Authority sought stakeholders view to promote the growth of Indian content through OTT platforms on the question raised in the consultation paper below.

Q7. What policy measures and regulatory aspects should be adopted in the NBP to nudge the growth of Indian regional content through OTT platforms?

Comments of the Stakeholders

3.55 In response to Q7 regarding OTT services, one stakeholder opined that OTT should not be included in the NBP as it does not fit the classification of a broadcasting service. Additionally, multiple stakeholders have offered differing opinions on OTT services. A summary of their comments is provided below.

[63] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

3.56 Views of the stakeholders who have opposed content quota on OTT services:

i. OTT platforms cater to diverse Indian audiences by offering subtitles and audio in various languages, making global content accessible regardless of the original production language.

ii. Regional OTT market share increased from 47% in 2021 to 52% in 2023, consumers have access to local content due to market demand and competition.

iii. There's a natural market trend towards investing in local content as platforms compete for viewers. This competition leads to a diverse range of content that aligns with consumer preferences.

iv. Imposing content quotas can restrict creative freedom and stifle growth of the OTT industry, affecting jobs and technological development.

v. Content quotas can stifle local industry development by reducing competition, which may lead to less innovation and lower content quality. Such policies can also distort market dynamics and reduce content exports.

3.57 Views of the stakeholders in favour of content quota on OTT services:

i. At least 33% of the content to be shown on OTT platform should be local content

ii. Multi-language OTT platforms should be mandated to carry a minimum percentage of regional content. OTT platforms can be directed to maintain a catalogue of regional content on their platforms. OTT platforms can be mandated to finance regional films and shows from the revenues generated from the Indian regional market and engage local artists, technicians and crew in the production of such works. This will promote growth of regional OTT content as well as create employment opportunities for skilled workers across India.

3.58 A few stakeholders also opposed carriage of DD channels on OTT services. Their views are:

i. Regulatory requirements to mandatorily allocate and invest resources for meeting public broadcasting objectives impact creative autonomy and the ability to cater to the diverse needs of OTT consumers.

ii. Any agreement between private services and the public broadcaster should follow negotiations and licensing on fair, reasonable, and non-discriminatory terms as is common practice around the world.

Analysis of the issue and views of the Authority

3.59 OTT broadcasting services offer video or other digital media related content over the internet, providing a crucial platform for promoting content in local languages and cultural heritage. The Authority believes that these platforms go beyond entertainment, contributing to the promotion of local languages and a diverse range of Indian content in various formats to a global audience, often overlooked by mainstream media. OTT services serve as a dynamic platform for emerging talent, fostering a vibrant ecosystem for linguistic expression and enriching the cultural heritage of Indian regions. Over the years, OTT broadcasting services have emerged as a promising platform attracting viewers and generating revenues.

3.60 The Authority is of the view that the Government should create opportunities by providing incentives to local news, filmmakers, and content creators to share their work on OTT platforms. This would be a pivotal strategy to amplify regional voices and foster cultural diversity. Incentivizing local participation in OTT platforms would ensure representation of diverse cultures and contribution to the broader goal of preserving and promoting cultural heritage.

3.61 The Authority has taken the note of the challenges being faced by the regional OTT platforms[64] from national and international players in terms of content creation and retention of subscribers/viewers. Beyond creation of original new content, inadequate resources and funding for technological support, content acquisition, platform maintenance and

[64] https://www.medianews4u.com/what-is-the-future-for-small-regional-ott-players/

marketing efforts led to financial difficulties and have been the reasons for some smaller regional OTT players discontinuing their business operations.

3.62 These platforms[65], focussing on local content, need funding for technological advancements, content acquisition and marketing. Investment in these areas supports platform expansion and audience reach, potentially increasing revenue. As regional OTT platforms strive to enhance their content, the Government's support in creating and distributing regional content could help these platforms thrive.

3.63 The Authority feels that this support would also enable these platforms to invest in technologies like AI for personalized recommendations, enhancing audio and video quality for users, maintaining their platforms, creating quality content and developing better marketing strategies. This in turn, would attract more viewers and subscribers to regional OTT platforms. Additionally, Government support would facilitate advertising and sponsorship opportunities, allowing businesses to connect with specific regional markets and enhance brand visibility.

3.64 Moreover, as these OTT platforms emphasize regional content, expanding their reach would highlight India's culture and heritage on an international scale. To achieve this, the Government should support regional OTT platforms by dubbing content from regional languages into international languages for e.g. the six official languages of the United Nations[66] i.e., Arabic, Chinese, English, French, Russian and Spanish. Also, quality content production requires proper skillsets. It is desirable that either through Government support or through PPP model, training programmes may be offered to the regional content creators.

[65] https://timesofindia.indiatimes.com/blogs/voices/the-role-of-regional-ott-platforms-in-promoting-local-languages-and-cultures/

[66] https://www.un.org/en/our-work/official-languages#:~:text=These%20are%20Arabic%2C%20Chinese%2C%20English,on%20issues%20of%20global%20importance.

3.65 The Authority is of the view that yet another important facet would be incorporation of features like subtitles/captions at the time of content creation. It is learnt that incorporating accessibility features like SLS, AD etc. on OTT platforms is easier to implement than on linear TV. This would unlock and enhance media access for Deaf and Hard of Hearing as well as for blind and visually impaired persons. More importantly, it would improve mass reading literacy and language skills for those with weaker reading abilities.

3.66 Further, the Government has taken various steps to bridge the digital divide in the country through initiatives like Digital India[67] programme including BharatNet[68], Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)[69], etc. More internet penetration will lead to more adoption of OTT services by the consumers and more people will have access to a wide range of content, regardless of their location or economic status.

3.67 In view of the above, the Authority recommends the following strategies for the promotion of Indian content through OTT platforms:

B4. Supporting the growth and proliferation of Indian Content through OTT broadcasting services

a. Launching schemes to create common infrastructure and co-production facilities to support small and local players to create quality Indian content including regional content for global outreach through OTT platforms.

b. Supporting regional OTT platforms through strategic partnership between public service broadcaster and the state/local governments for providing technological support, content acquisition, platform maintenance and marketing strategies.

[67] https://www.digitalindia.gov.in/
[68] https://usof.gov.in/en/bharatnet-project
[69] https://www.pmgdisha.in/about-pmgdisha/

c. Encouraging incorporation of features like dubbing and inserting subtitles in Hindi, English, vernacular languages and other international languages for regional content promotion and improved access, addressing both Indian and International audiences.

V. Goal: Supporting Indian Content production through films, animation, visual effects, gaming and music

Films

3.68 According to industry estimates, the film segment[70], is projected to grow from ₹197 billion in 2023 to ₹238 billion by 2026, at a CAGR of 6.5%. Both the government and the industry have implemented several initiatives to foster this growth. MIB has facilitated the creation of Film Facilitation Offices (FFOs) to promote filming in India.

3.69 While the film sector shows promise, it faces persistent challenges such as skill development, infrastructure limitations and piracy. Addressing these challenges and devising solutions can stimulate employment and encourage investment in the film sector both domestically and internationally. In this regard, the Authority has raised the following question for stakeholders' views on the film segment.

Q8. What new strategies and measures should be envisaged in the policy for the film industry to enhance audience engagement, infrastructure development, upskilling artists, reduce piracy, increase foreign direct investment or any other aspect? What steps are required to make India a preferred filming destination? Provide your comments with detailed justification.

Comments of the Stakeholders

3.70 The comments provided by an association of producers in response to Q8 of the Consultation Paper primarily emphasizes the importance of

[70] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

institutional funding, incentives for film producers, infrastructural support, and the need to enhance screen density. The comments received relates to the challenges of the film industry in terms of institutional funding, issues related to incentives and infrastructure.

3.71 The primary challenges identified by the industry is the insufficient availability of institutional funding. They submitted that even though the industry has achieved 'Industry' status, access to structured institutional funding from both nationalized and private sector banks in India remains limited. This is mainly due to the inherent risk associated with films. Consequently, filmmakers are compelled to seek funds from private moneylenders at excessively high interest rates. They suggest that the Government should consider incentivizing private sector banks or implementing regulatory reforms to encourage private sectors to offer loans to the film industry.

3.72 Stakeholders have raised concerns about filming location incentives, factors such as resources, logistical support, visa requirements, aesthetic appeal, political climate, local laws and financial considerations. The stakeholders suggested that tax credits, subsidies and grants can make certain locations more cost-effective. However, Indian producers often choose international locations due to better financial incentives, lower qualifying thresholds, and fewer limits on incentives. Challenges with state incentives in India include lower amounts, stringent requirements, lengthy procedures and lack of clarity. The stakeholders suggested that offering similar incentives to those for foreign productions, creating budget-specific schemes for independent filmmakers and implementing a single-window clearance system to streamline approvals and reduce bureaucracy are much needed.

3.73 Stakeholders have highlighted the need for better infrastructural support for the film industry. Many film studios got closed or converted into other establishments. further, there are only three film cities, that is, in Mumbai, Hyderabad and Noida. The stakeholders submitted that establishing film schools and training institutes for various filmmaking

disciplines, as well as developing cultural centres, film incubators and networking hubs is essential. It is also proposed that the Government and industry should find innovative ways to build infrastructure through Government initiatives or PPP models, supported by financial incentives and policies.

Animation, VFX and Post-Production

3.74 The animation, VFX and post-production segment stood at ₹132 billion in 2023 and is estimated to grow to ₹185 billion at a CAGR of 17.5%, as estimated by industry reports[71]. The Government of India (Department of Commerce) has designated audio-visual services as one of the 12 Champion Service Sector[72] and announced key policy measures aimed to nurture sustained growth of the identified sectors.

3.75 The AVGC Taskforce report released by MIB in 2022 is specifically based on 3 salient strategic pillars viz., creating world class products in India, upskilling and empowering the youth and offering technological support and other incentives to promote the sector. Further, several state governments have implemented AVGC policy in their respective states. In this background the Authority raised the following question for stakeholders' comments.

Q10. What further steps and initiatives should be adopted by the Central and State Governments and the industry for the growth of animation, VFX and post-production segment? Provide your comments with detailed reasoning and justification.

Comments of the Stakeholders

3.76 Stakeholders are of the view that MIB should notify the final version of the AVGC-XR policy prepared by the Taskforce in mission mode and implement incentives under the policy on priority. Further, it has been

[71] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

[72] https://www.pib.gov.in/PressReleasePage.aspx?PRID=1898023#:~:text=Centre%20has%20formulated%20'Action%20Plan,Transport%20%26%20Logistics%20Services%2C%20Accounting%20and

suggested that Central government should look at state-level policies and implement best practices from them uniformly. Moreover, stakeholders submitted that online gaming is at the core of the AVGC sector. Thus, to ensure holistic development and regulation, the prompt finalisation and notification of a national AVGC policy is essential, accompanied by dedicated oversight and coordination between state and central governments.

3.77 One of the stakeholders suggested that Governments should review co-production treaties with other countries and scope of incentives meant for film production should also include AVGC-XR production in its ambit. Another stakeholder submitted about the requirements for infrastructure, training in the necessary areas of animation, VFX and post-production. Developing advanced post-production facilities for editing, sound mixing, visual effects, colour grading, animation and VFX could enhance the quality of Indian films and make them more competitive in the global market.

Online Gaming

3.78 The online gaming industry is experiencing huge growth in the recent times. Industry studies predicts that online gaming sector is expected to grow at CAGR of 20.7% to reach ₹388 billion in 2026 from ₹220 billion in 2023. The online gaming segment poses potential to contribute to the nation's economy encompassing FDI inflows, employment opportunities, and revenue generation for the government. In this regard, the Authority has raised the following question to gather stakeholders' comments.

Q9. Online gaming being a rising sector holds potential for contributing to economy, what policy and regulatory aspects should be adopted for the orderly growth of online gaming in India? Further, suggest measures to support local game developers to compete and grow. Also suggest safeguards to protect general public (especially underage players) from negative and psychological side effects, while promoting healthy gaming.

Comments of the Stakeholders

3.79 In response to Q9 of the Consultation Paper, the comments of the stakeholders are summarized below:

i. The Government should notify the self-regulatory bodies under the IT Rule 2021.

ii. The National Policy for AVGC to be finalized at the earliest. Also ensuring dedicated oversight and coordination between state and central governments to facilitate holistic development and regulation of online gaming in India.

iii. Adherence to age gating measures, restricting non-SRB-certified games, appointment of nodal officers, promoting responsible gaming, implementing KYC procedures, and others.

Music

3.80 The music industry's revenue stands at ₹24 billion in 2023 and is predicted to reach ₹37 billion at a CAGR of 14.7%, based on industry estimates[73]. The Indian Music industry is at the forefront of employment generation, creation of diverse music genres and promotion of India's soft power. The Authority sought the comments of the stakeholders to amplify the music industry through the question raised in the consultation paper as reproduced below.

Q11. What strategies and measures should be included in the policy for the music segment to enhance infrastructure development, upskilling artists, financial certainty and to resolve other challenges being faced by artists? What steps should be taken to encourage the global promotion of Indian music and artists? Please provide your comments with detailed reasoning.

Comments of the Stakeholders

3.81 The comments received from one of music associations reflects the importance of protection of copyright works across the boundaries to

[73] https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/media-and-entertainment/2024/ey-in-india-s-media-entertainment-sector-is-innovating-for-the-future-03-2024-v1.pdf

leverage and promote music as a service export. It referred to a report which highlights that India ranks second in music piracy (based on visits to pirated websites) which is hindering the growth of the music sector. The stakeholder submitted few measures to address piracy and safeguarding the creators and rightsholders in the music industry:

i. Creation of law enforcement across states for the criminal enforcement of copyright laws. Further, specialized units dedicated to investigating and prosecuting digital piracy cases could be established to ensure efficient enforcement.

ii. Creation of an alternative administrative enforcement mechanism involving rightsholders, various Ministries such as DPIIT, MeitY, MIB, and MHA, Departments and Government agencies related to bolster enforcement efforts.

iii. Strengthening international enforcement via partnerships and cooperation, exemplified by public-private initiatives to combat cross-border piracy effectively.

3.82 Recognizing the growth potential of the music industry and importance of skilling, one of the stakeholders has proposed that National Skill Development Corporation may be encouraged to launch new technical courses and formal training opportunities to support the growth of the industry.

Analysis of the issue and views of the Authority

3.83 The Authority has taken note of the issues faced in content creation for films and music and the infrastructure constraints in animation, visual effects and post-production activities. This section discusses the issues first related to films and post-production activities, AVGC followed by music.

3.84 The Authority acknowledges that India is globally recognized for its vibrant film production and distribution industry. Nevertheless, significant challenge persists in obtaining expedited approvals for producers to make films at various locations across the country. In this

regard, MIB has facilitated the Film Facilitation Office (FFO)[74] to encourage filming in India by introducing Film (F) visa for foreign film production in India and single window clearance with various state governments.

3.85 Continuous engagement of FFO with nodal officers of states through workshops & film offices have resulted that 19 states have their film policy, 17 states have an online single window filming ecosystem and 19 states have incentives for film makers. However, concerns remain for states that are yet to implement a single window system, film policy, and incentives. Notably, FDI[75] in all film-related activities such as film financing, production, distribution, exhibition, marketing etc. is permitted up to 100% for all companies under the automatic route. Without a single window system, producers are required to obtain multiple permissions from various entities including ministries, different authorities, and sometimes municipalities. **Table 3.1** below illustrates the approvals needed for film production in the absence of a single window system.

Table 3.1: Approvals required for film shooting

Location	Specific Authority
Sensitive areas of J&K, NE India or border belts	Ministry of Home Affairs
City/Town/Village	District Magistrate or Police Authorities
Forest	State Forest Department
Historical Site	Archaeological Survey of India
Defence Area	Ministry of Defence
Airport	Airport Director
Railway Station/Train	Railway Board and State Railway Zone

[74] https://ffo.gov.in/en

[75] https://www.pwc.in/assets/pdfs/fdimanual.pdf

3.86 The Authority has noted that when domestic and international filmmakers apply for state and local permissions, these permissions are processed and issued by the respective state nodal officers, whose contact information is provided to the applicant. The FFO also assists in obtaining these permissions. The Authority is of the view that MIB and State Governments may collaborate to formulate and implement film policies, single window clearance, offer attractive incentives to Indian and foreign film producers for filming at Indian destinations through FFO.

3.87 Another highlighted issue is the challenge of film financing. Despite being granted 'Industry Status' in 2001, the film industry struggles to secure structured institutional funding from nationalized or private sector banks in India, primarily due to the inherent risks associated with films. Small players and independent filmmakers, in particular, often find it difficult to obtain bank financing. Additionally, while several film funds have been established, their success has been inconsistent because investments are typically made in smaller productions, which carry higher risks.

3.88 In view of this, the Authority is of the opinion that the Government should facilitate financial support and bank loans to film producers from both private and public sector banks. This can be achieved by establishing a mechanism to evaluate risk, considering the track record and credibility of filmmakers, as well as the viability of their projects. Additionally, risk mitigation measures should be implemented to reduce the potential for financial losses. Furthermore, the Government could offer insurance or develop guarantee schemes to incentivize banks to provide loans to filmmakers, covering a portion of potential losses in case of default.

3.89 The Authority has also received comments on the constraints of limited infrastructure and a few film cities (only 3 at present in Mumbai, Hyderabad and Noida). Such lacking infrastructure have become a key impediment for the growth of the sector. The Government along with the State Governments, industry partners and local authorities needs to

identify places which would enable the facilitation of creation of production and distribution houses, film studios and film cities.

3.90 Creation of state-of-the-art infrastructure would enable flow of domestic and foreign investments and create opportunities for employment across regions. The Authority is of the view that MIB should facilitate the establishment of state-of-the-art film cities including film production infrastructure and facilities via PPP model in different economic regions/geographical territories for the production of quality films in cost-effective manner.

3.91 Further, the Government has formed an AVGC Task Force in 2022. Several State Governments like Telangana, Karnataka, Maharashtra have implemented AVGC state policies in their respective states. The Authority is of the view that the Government may come out with a national AVGC policy at the earliest which is expected to provide a thrust for the growth of the entire content production industry. Moreover, providing an enabling infrastructure and necessary support in the field of education, R&D, creation of IP etc. would generate employment, and facilitate creation of quality and secure content creation.

3.92 The Authority believes that the rise and adoption of emerging technologies creates opportunities for startups in the sector. The Government through various startup schemes or through STPI or any other organizations may support the growth of this sector. The Government should come out with ways that would encourage the utilization of the application of AVGC in other sectors like entertainment, education, healthcare etc.

3.93 It may be noted that the gaming is one of the major parts of the AVGC sector and has immense potential for growth. The Authority believes that the Government should devise incentives to attract skilled gamers, content creators and industry professionals to foster the growth of gaming content and make India a 'Gaming Content Hub'. The

Government may refer to Dubai's recent launch of Gaming Visa[76], a part of Dubai Program for Gaming 2033 (DPG 2033) aimed at transforming the city into a thriving gaming hub by 2033.

3.94 Gaming Visa intends to create 30,000 new jobs in the gaming industry and contribute an estimated $1 billion to the city's GDP by 2033. Its goals include nurturing local talent through specialized educational programs, workshops, and events, offering funding, mentorship, and networking opportunities for entrepreneurs and startups and research and development in the gaming sector to foster new technologies and games. On similar lines, AVGC policy in India also intends to establish India a Gaming Hub. Therefore, the Government needs to speed up releasing and implementing the AVGC policy in mission mode.

3.95 The next part of the discussion relates to the music industry. The Indian music generates over INR 400 crore[77] from the international markets, as per industry estimates. However, internationally countries like Australia and South Korea have significantly benefitted from music exports.

- Australia's[78] music industry generates INR 1,073.8 Cr. (USD $137 million) annually from international markets as service exports. The establishment of 'Sounds Australia,' a music export office, has contributed to a significant increase in international royalty revenue for Australian artists, nearly tripling from INR 108.7 Cr. (USD 13.89 million) in 2013 to INR 297.9 Cr. (USD 38.07 million) in 2022.
- South Korea's[79] music exports increased from INR 104 Cr. (USD 13.39 million) in 2007 to INR 5861.8 Cr. (USD 749 million) in 2021. This exponential growth underscores the importance of supporting international endeavours of the music industry.

[76] https://www.businesstoday.in/nri/visa/story/dubai-launches-dubai-gaming-visa-for-gamers-influencers-check-how-to-apply-eligibility-criteria-and-more-431185-2024-05-28
[77] https://www.iprs.org/wp-content/uploads/The_Rise_of_Music-Publishing-in-India-report_final.pdf
[78] https://www.billboard.com/music/music-news/australia-annual-music-exports-report-8520286/
[79] IFPI GMR Report 2022

3.96 India's music export revenue is mainly generated from publishing[80] and recording[81] activities. Although Indian music has a greater reach worldwide, its revenue generated is less as compared to other countries. The Authority has noted that the Indian music is highly prone to digital piracy. As per reports[82], India ranks second in music piracy (11.5%) based on visits to music piracy websites.

3.97 The Authority is of the view that to enable the Indian music industry to achieve similar levels of success in music exports and cultural influence, it is crucial to implement policies that promote music as a service export. This includes protection of copyrighted works across the boundaries tackling cross-border piracy and strengthening the law enforcement agencies. These have been deliberated in detail under the 'combating piracy and content security' section.

3.98 Furthermore, the Government may play a crucial role in helping the music industry to embrace the latest sound recording technologies to create an immersive listening experience. This can be achieved through initiatives such as providing funding and grants for technology upgrades, offering tax incentives for investments in advanced recording equipment and organizing training programs and workshops to educate industry professionals about new technologies. Additionally, the Government may foster partnerships between the music industry and technology companies to promote innovation and R&D in sound engineering. The Authority is of the view that by facilitating access to cutting-edge recording technologies, the Government could enhance the quality of music production to provide listeners a superior audio experience.

3.99 The Consultation Paper highlighted the following about social security to the on-call artists in the music industry. The Authority believes that

[80] Music publishing revenue comes from copyrights and royalties. Publishers collect royalties from songwriters and composers for the use of their compositions when songs are performed, broadcast, sold, streamed, or reproduced in any form.

[81] Recorded music revenue is the total revenue generated by the recorded music industry, including streaming, publishing royalties, and recording royalties.

[82] https://www.muso.com/magazine/global-piracy-by-industry-report-2023

there should be some specific schemes for the on-call artists that ensures their social security. The CP mentioned that:

'Another aspect that requires due consideration is providing social support to music authors. These authors rely on on-call opportunities such as session work, live performances and creating content for music labels or film producers, as the primary sources of income, which are not available frequently.

Various countries have implemented schemes to ensure the healthcare and social security of artists. For example, in France, under its Social Security Code Article L.382-1 on authors and artists, funding for a flexible mechanism for unemployment protection for artists and technicians under fixed-term contracts is provided. The scheme also offers an old-age pension, sickness benefits, healthcare insurance, disability allowance, survivor's pension, and maternity cover, which allows self-employed authors and artists to obtain the same benefits as regular employees. These provisions are implemented by the Authors' Society.

Similarly, in the Republic of Korea, the Ministry of Culture, Sport and Tourism took several ad-hoc measures including loans at low-interest rates, a creative funds program, an artists' employment insurance scheme, etc. The Authority is of the view that MIB in collaboration with Ministry of Culture should devise schemes that would ensure social security to these artists.'

3.100 In view of the above, the Authority recommends the following strategies for supporting content growth for films, animation, VFX and post-production segment:

B5. Supporting Indian Content production through films, animation, visual effects, gaming and music

a. Making India a preferred filming destination

i. Devising schemes in partnership with State Governments to formulate and implement film policies, single window clearance, attractive incentives to Indian and foreign film

producers for filming at Indian destinations through Film Facilitation Office (FFO).

ii. **Facilitating financial support and bank loans to the film producers from private/public sector banks and Non-Banking Financial Companies (NBFCs) by creating a mechanism for risk evaluation, risk mitigation and risk coverage particularly for small producers.**

iii. **Establishing state-of-the-art film cities including film production infrastructure and facilities via PPP model in different economic regions/geographical territories to facilitate cost-effective quality film production.**

iv. **Facilitating the industry to adopt emerging technologies to help filmmakers with post-production tasks, such as editing, coloring, sound design, automatically creating video summaries from text articles, using natural language processing, computer vision and cloud-based solutions for remote post-production.**

b. Developing a support ecosystem for Animation, Visual Effects, Gaming and Comics (AVGC)

i. **Notifying 'National Policy for Growth of 'Animation, Visual Effects, Gaming, Comics & Extended Reality' (AVGC-XR) Sector in India' in mission mode.**

ii. **Enabling supporting infrastructure facilities in various states to aid development of AVGC-XR hubs to become preferred destinations promoting employment and economic development.**

iii. **Collaboration among Central and State Governments and the industry to work with each other to develop future roadmap for the growth of AVGC sector in India with special emphasis on the application of AVGC-XR in various sectors such as entertainment, education, health, skill development etc.**

iv. **Establishing and funding Centres of Entrepreneurship (COEs) and technology incubators focusing on AVGC related technology at institutions like Software Technology Parks of India (STPI) to ensure widespread reach of technology.**

v. **Making India a global 'Gaming Content Hub' to unlock international market for India by creating and supporting infrastructures such as plug and play labs, incubators encouraging startups and new players.**

c. Amplifying the Music industry segment

i. **Implementing stringent measures to enforce copyright laws to combat music piracy and developing technical solutions to deal with music piracy websites.**

ii. **Encouraging global promotion of Indian music as a service export expanding cultural influence among Indian diaspora as well as global audience.**

iii. **Facilitating the music industry to adopt the latest sound recording technologies for immersive listening experience.**

iv. **Introducing special schemes to ensure social security of on-call artists in the music industry.**

CHAPTER IV

PROTECTING INTERESTS AND SOCIO-ENVIORMENTAL RESPONSIBILITIES

4.1 The third mission covers the following goals through the National Broadcasting Policy:

i. Enforce content security through copyright protection
ii. Address social and environmental responsibilities
iii. Recognize the role of broadcaster during disasters

I. Goal: Enforce content security through copyright protection

4.2 The broadcasting industry in India has experienced significant growth in recent years, fuelled by technological advancements and increasing consumer demand. However, with this expansion comes the pressing issue of copyright infringement and piracy, posing substantial challenges to content creators, broadcasters and other stakeholders. Instances of television content piracy, music piracy and visits to websites having unlicensed or pirated content have come to notice of the authorities. Over 30%[83] of the visits to websites are at such websites that hosts pirated content.

4.3 To combat the menace of piracy, the Authority raised the following question for the stakeholders' comments.

Q14. What additional measures should be adopted to combat piracy and ensure content security through copyright protection in the broadcasting sector? How can the technology driven solutions be developed and deployed to prevent unauthorised distribution and detection of the source of original content. Provide your comments with detailed explanations.

Comments of the Stakeholders

4.4 In response to Q14, various stakeholders commented for utilizing technology-driven solutions like Digital Rights Management (DRM),

[83] MUSO Report-2023 Piracy by Industry Data Review

fingerprinting, watermarking, blockchain based solutions, geo blocking and other techniques to combat piracy.

4.5 Several stakeholders suggested forming an inter-ministerial committee, combating cross-border piracy through international collaboration and strengthening copyright laws and enforcement mechanisms. Additionally, they emphasized the importance of imposing penalties on infringers and providing legal remedies for rights holders to seek damages and injunctions against piracy.

4.6 Other comprehensive measures suggested by stakeholders include maintaining a list of 'Infringing Websites and Mobile Applications' for administrative takedown and enforcement action against violation of copyright. They also suggested mandatory registration requirements like KYC to identify owners of infringing channels and accounts, making the OEMs accountable for products like CAS, SMS and all other headend equipment w.r.t. signal leakage and low security. Additionally, stakeholders opined for developing model enforcement codes and SOPs to address piracy risks across different broadcast platforms and services and disseminating these to law enforcement agencies.

Analysis of the issue and views of the Authority

4.7 India has embraced a digital-first approach as it continues to adopt and innovate technology. However, this technological advancement has also exposed the nation to various challenges, digital piracy being one of them. With the increased consumption of internet and IP based transmission of content, there is a need for implementation of stringent measures to monitor and prevent unauthorized distribution of original content. The subject matter of Indian intellectual property, relevant to the broadcasting industry primarily takes the form of copyrights.

4.8 Copyrights in the broadcasting industry relates mainly in the production, broadcasting and use of cinematographic films (CF), music, advertising, web series, theatrical plays, televisions serials, gaming, animation etc. It may be noted that piracy causes an estimated revenue loss of about Rs.

20,000 crores[84] annually to the film industry. Piracy not only causes financial losses to the producers and the content creators but also impacts the overall value chain of the industry through job cuts, reduced investment in new projects and a decrease in tax revenues for the Government.

4.9 Online piracy through rogue websites, applications or through other measures has significant economic consequences, both for the industry and for the individuals who create and distribute content. Piracy infringes the intellectual property rights of the legitimate copyright holders and impacts their ability to create new content. Moreover, pirated content is often made available for free or at a significantly lower cost than legally licensed content, making it an attractive option for many consumers. However, accessing and downloading pirated content carries serious risks, with the most significant being exposure to malware and viruses. Websites hosting pirated content are often loaded with malicious software that can infect a user's computer, steal personal information and cause damage to the device as well as financial loss to the user.

4.10 The Authority is of the view that MIB may make use of new technologies such as AI and Data Analytics to identify rogue/infringing websites and create a database of these websites for issuing advisories/guidelines for the following:

i. Internet service providers (ISPs) to remove or disable access to the infringing websites
ii. Payment gateways to not permit flow of payments to or from such infringing websites
iii. Search engines to take necessary steps to remove infringing websites identified in their search results
iv. Advertisers or advertising agencies shall not host any advertisements on the identified infringing websites

[84] https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1974394

4.11 It may be noted that India is signatory to various international treaties such as the Berne Convention and the TRIPS Agreement, which provide a framework for the protection of intellectual property rights globally. Therefore, the Government should strengthen its global collaboration by enhancing international cooperation and coordination to address cross-border piracy issues, strengthening diplomatic ties in this regard to encourage other countries to enforce anti-piracy measures and facilitating the extradition of individuals involved in copyright infringement.

4.12 In this regard, to deal with audiovisual piracy, a campaign titled 'Operation 404'[85] was initiated by Brazil's Ministry of Justice and Public Security in 2019. Spread over 4 phases, the campaign involved around 100 search and apprehension orders and resulted in the blocking of over 1000 websites and 700 apps that were streaming illegal content. The campaign saw cross border collaboration of the Brazilian Civil Police, US enforcement agencies, UK's Intellectual Property Office (IPO) and Police Intellectual Property Crime Unit (PIPCU) with ANCINE (Brazil's Movie Agency), ANATEL (Brazil's Telecommunications Agency) and the National Council on Combating Piracy and Intellectual Property Crimes (CNCP), collectives like the Alianza Group, Alliance for Creativity and Entertainment, Motion Pictures Association (MPA), International Federation of Phonographic Industry (IFPI).

4.13 Digital piracy surpasses borders, and its global nature demands coordinated action at the international level. The collaboration of Brazilian authorities with the UK IPO, PIPCU and US is an illustration of international collaboration against digital piracy. The Authority advocates similar joint efforts involving Indian law enforcement agencies and global partners for strengthening of legal frameworks, enhancing enforcement mechanisms and fostering international cooperation for effectively addressing cross-border piracy.

[85] https://bwlegalworld.com/article/how-can-india-implement-public-private-partnership-as-a-means-to-tackle-digital-piracy-456786

4.14 Further, 'Police' and 'Public Order' are State subjects in India as per the Seventh Schedule[86] of the Constitution of India and accordingly law enforcement agencies of States and Union Territories are responsible for dealing with cyber-crimes including digital piracy. In the State of Maharashtra, Maharashtra Intellectual Property Crime Unit (MIPCU) is a public-private initiative under the Maharashtra Cyber Cell that deals with complaints on digital piracy.

4.15 Since digital piracy is not limited to boundaries of a nation or state, the establishment of dedicated IP crime units like MIPCU in other states and union territories is imperative in facilitating coordination with authorities from other jurisdictions to take integrated action against digital piracy and effectively enforce intellectual property rights. In this regard, the Authority is of the view that Law Enforcement Agencies (LEAs) should establish a dedicated anti-piracy unit within LEAs to combat physical and digital piracy activities and should be provided with model enforcement codes or SOPs to address piracy risks across different broadcast platforms and services.

4.16 It may be specified that the Copyright Act is the primary legislation governing copyright in India. To establish an effective process, provisions related to civil and criminal remedies for copyright infringement can be strengthened. For instance, section 63 of the Copyright Act provides offences of infringement of copyright or other rights and section 64 provides power of police to seize infringing copies.

4.17 Introducing specialized copyright tribunals or fast-track courts can expedite the resolution of copyright infringement cases. The establishment of such tribunals is within the purview of the Government to ensure a quicker and more efficient legal process. The Authority is of the view that setting up of specialized courts or tribunals would expedite the resolution of copyright infringement cases. These courts may be

[86] https://www.mea.gov.in/Images/pdf1/S7.pdf

equipped with judges and legal professionals specialized in intellectual property law to ensure swift justice.

4.18 The Authority feels that an inter-ministerial committee may be established to enforce the rights of content owners and thereby combating piracy. Such a committee could be established under DPIIT including representations from MIB, MHA and MeitY. This committee should formulate actionable points to strengthen enforcement mechanisms both at the national and state levels to combat piracy.

4.19 The Authority also acknowledged that deploying technology driven solutions helps in combatting the issues related to piracy and copyright infringement. Robust authentication mechanisms through Digital Rights Management (DRM) technologies to control access to digital content and employing advanced encryption techniques to secure the integrity and confidentiality of digital content, making it more challenging for pirates to tamper with or reproduce copyrighted material needs to be implemented. Utilizing fingerprinting algorithms to automatically detect copyrighted content across various online platforms may also be considered.

4.20 Additionally, MIB may establish rules to hold OEMs accountable for products such as CAS, SMS and other headend equipment which causes signal leakage due to low security. This could be achieved through comprehensive documentation, including product specifications, test results and compliance information as well as regular audits and assessments to ensure accountability. It is essential that all equipment proposed to be deployed must conform to BIS standards to ensure quality and reliability. Further, it is re-emphasized that to prevent unauthorized distribution of content, signals of DD Free Dish should be encrypted and upgraded to an addressable system.

4.21 In view of the above, the Authority recommends the following strategies for combating piracy and enabling content security through copyright protection:

C1. Combatting Piracy and ensuring Content Security through Copyright Protection

a. **Strengthening the enforcement mechanisms under Copyright Act to deter piracy, impose penalties on infringers, provide legal remedies for rights holders to seek damages and injunctions against piracy.**
b. **Collaborating with Law Enforcement Agencies (LEAs) for establishing dedicated anti-piracy units within LEAs and provide them with necessary tools and resources to proactively combat physical and digital piracy activities in real-time.**
c. **Developing model enforcement codes/Standard Operating Procedures (SOPs) to be shared with LEAs to address piracy risks across different broadcast platforms and services.**
d. **Setting up specialized courts or tribunals at both Centre and State level to fast-track the disposal of copyright infringement cases.**
e. **Constituting an inter-ministerial committee under DPIIT including MIB, MHA, MeitY to formulate actionable points to strengthen enforcement mechanisms both at the national and state levels to combat piracy.**
f. **Establishing mechanism for creating database and records of 'Infringing websites and mobile applications' for administrative takedown and enforcement action against copyright violations.**
g. **Fostering international collaborations by participating in global treaties and working groups focused on intellectual property enforcement and anti-piracy measures including sharing best practices, joint operations, and mutual legal assistance treaty to combat piracy.**
h. **Encouraging use of technology driven solutions like Digital Rights Managements (DRM), fingerprinting, encryption and digital watermarking, blockchain technology to prevent unauthorized distribution and combatting piracy.**

i. **Framing rules for OEMs accountability for products like CAS/SMS and all other headend equipment w.r.t. signal leakage and low security.**

j. **Migrating DD Free Dish from unencrypted non-addressable system to digital addressable systems to prevent piracy and unauthorized re-distribution of the content.**

II. Goal: Address social and environmental responsibilities

4.22 Broadcasting is a powerful tool for increasing awareness about various social and environmental issues and responsibilities. The consultation paper also emphasized several socio-environmental responsibilities where broadcasting industry can play a significant role. Some of these responsibilities include gender equality at workplace, accessibility standards for Persons with Disabilities (PwDs), safety of women and children and raising awareness about underprivileged and minorities. Environmental responsibilities include the need to reduce carbon footprints, utilize energy-efficient technologies, adopt green broadcasting and sustainable practices. The Authority raised the following questions to gather the comments of the stakeholders.

Q18. What role the broadcasting sector should play to fulfil social and environmental responsibilities? Provide in detail the key focus areas and the strategies the sector should consider. Also provide strategies on the following specific issues:

i. To empower Person with Disabilities (PwDs) to access the information and entertainment programmes

ii. To encourage gender equality w.r.t. the participation and safety of the women workforce

iii. To raise awareness about the issues of marginalized tribal communities, minorities and LGBTs

iv. To adopt green broadcasting practices

Comments of the Stakeholders

4.23 In response to Q18(i) regarding empowering PwDs to access information and entertainment programs, stakeholders emphasized the need for

practices such as Same Language Subtitles/Captions (SLS/SLC), Audio Descriptions (AD), and Indian Sign Language (ISL) for users who are deaf, hard of hearing, blind, or visually impaired. This will also increase media literacy. Some stakeholders suggested that the NBP should adopt universal design principles in creating and implementing accessibility standards and recommended that television and OTT content should include default-on captioning that can be switched off as needed. However, one stakeholder noted that existing laws already mandate such accessibility measures and argued against additional requirements through the NBP, citing the financial and operational constraints on broadcasters and OEMs.

4.24 In response to Q18(ii) regarding gender equality in the workplace, some stakeholders suggested to integrate gender perspectives and women's voices into news reporting, journalism and media coverage to ensure balanced and accurate representation of gender issues and concerns. The Consultation Paper also raised concerns to address the issues of marginalized tribal communities, minorities and LGBTs on Q18(iii). Stakeholders believe that the broadcasting sector should prioritize inclusivity, diversity and representation to ensure that all members of the society, including marginalized groups, are properly represented and their issues are addressed.

4.25 Further, in Q18(iv), regarding green broadcasting practices, some of the stakeholders commented that the sector should embrace paperless workflows, digital asset management systems, and cloud-based storage solutions to reduce paper usage. Waste generation and carbon emissions associated with printing and document management should be minimized and environmental conservation programmes should be telecasted through broadcasting to raise awareness.

Analysis of the issue and view of the Authority

Social Responsibilities

4.26 It is essential for the policy to ensure that the broadcasting sector serves the broader interests and social goals of the society. The Authority believes that the broadcasting sector plays a crucial role in fulfilling social responsibilities. Also, MIB in its revised Uplinking/Downlinking Guidelines of 2022[87] has specified that TV broadcasters may undertake public service broadcasting for a minimum duration of 30 minutes a day.

4.27 It is to be underscored that to empower Persons with Disabilities (PwDs), the Government had initiated the Accessible India Campaign or Sugam Bharat Abhiyan in 2015. The Government have enacted Rights of Persons with Disability Act, 2016 for PwD to get universal access, equal opportunities for development, independent living and participation in all aspects of life. Section 29(h) of the Rights of Persons with Disability Act, 2016[88] stipulates that persons with hearing impairment have access to television programmes with sign language interpretation or sub-titles. Section 42(ii) of the Act facilitates that persons with disabilities have access to ICT like electronic media by enabling audio description, sign language interpretation and close captioning.

4.28 The Authority believes that incorporating accessibility features for PwDs, such as Same Language Subtitles (SLS), Same Language Captions (SLC), Audio Descriptions (AD), and Indian Sign Language (ISL), should be encouraged during the production of content for films, television programs and digital media to facilitate such persons to access the content. This initiative would not only facilitate equal access to entertainment and information but also promote greater media literacy among all viewers. It aligns with the broader goal of creating an inclusive

[87] https://mib.gov.in/sites/default/files/Guidelines%20for%20Uplinking%20and%20Downhinking%20of%20Satellite%20Television%20Channels%20in%20India%2C%202022.pdf

[88] https://www.indiacode.nic.in/bitstream/123456789/15939/1/the_rights_of_persons_with_disabilities_act%2C_2016.pdf

society where everyone, regardless of their abilities, can participate fully in cultural and social activities.

4.29 Moreover, the implementation of these features can set a positive precedent for other industries, demonstrating the importance of inclusivity and accessibility in all areas of life. By prioritizing the needs of PwDs, the broadcasting sector can contribute to a more equitable society, where diversity is celebrated, and everyone has the opportunity to thrive.

4.30 Further, the Authority is of the view that the broadcasting sector needs to consider and deliver content that addresses and raises awareness on social issues like poverty, addressing gender stereotypes and child labour. Through content production and dissemination, there is a need to promote educational shows and content for children and life skills programmes for adolescents. The industry also needs to create content in multiple languages that raises awareness and addresses issues of underprivileged including marginalized tribal communities, minorities and LGBTQIA+.

4.31 Ensuring gender equality in the workplace is a crucial social aspect that demands attention. This is particularly important in the broadcasting sector. The Authority believes that implementing incentive schemes for employing women in broadcasting can significantly contribute to a supportive work environment that promotes gender equality. By fostering a culture of equality and providing resources for women's advancement, these efforts will help address gender disparities within the industry and encourage greater representation and participation of women at all levels of the broadcasting sector.

4.32 Another critical area that the broadcasting sector needs to address is the safety risks and challenges faced by both women and children. Ensuring safer environments involves increasing knowledge and awareness of various laws and government schemes, such as the Protection of

Children from Sexual Offences Act (POCSO) and the Prevention of Sexual Harassment (POSH) Act.

4.33 The Authority believes that it is essential to explore strategies that educate and empower women and children. This can be achieved through targeted educational content and awareness campaigns broadcasted across multiple platforms. By highlighting the provisions and protections offered by various laws, the broadcasting sector can play a pivotal role in informing the public about their rights and the resources available to them. Moreover, these initiatives should not only aim to increase awareness but also to foster a culture of vigilance and support within the community. Educational programs can teach children how to recognize and report inappropriate behaviour, while also informing women about the steps they can take to ensure their safety and seek help if needed. In addition to educational content, the broadcasting sector can host discussions and workshops featuring experts in law, child protection, and women's rights. These programs can provide deeper insights into the practical applications of these laws and the importance of creating safe spaces in both personal and professional settings.

4.34 The Authority is of the view that by dedicating resources and airtime to these crucial issues, the broadcasting industry can significantly contribute to the creation of a safer and enabling environment for women, children, underprivileged and marginalized communities. This proactive approach will not only enhance public understanding and compliance with these laws but also empower individuals to take action against violations, thus promoting a more secure and just society.

Green Broadcasting Practices

4.35 It may be noted that in addition to production and distribution, consumption is also an issue because two percent[89] of global Green House Gas (GHG) emissions result from Information and Communication Technology. Therefore, embracing sustainable practices in broadcasting

[89] https://greenfilmshooting.net/blog/en/2013/07/29/green-broadcasting/

operations is of strategic necessity. To reduce carbon footprints and enhance sustainability, the Authority is of the view that a policy framework be formulated for the adoption of energy-efficient technologies within the broadcasting industry. This would include leveraging solar-powered broadcasting equipment and designing energy-efficient studios.

4.36 The Authority further believes that guidelines should be issued for the broadcasting industry for pursuing waste management practices including sustainable procurement practices, recycling, waste segregation, paperless workflows, responsible disposal methods for electronic waste and hazardous materials. Implementing such guidelines would enable broadcasters to reduce waste generation, promote recycling and ensure the responsible handling of hazardous materials.

4.37 Additionally, the Authority believes that broadcasters and content providers should leverage their influential platforms to create and disseminate compelling content that highlights the Sustainable Development Goals (SDGs). The SDGs are a collection of 17 global goals set by the United Nations General Assembly in 2015, intended to be achieved by 2030. They cover a broad range of social, economic, and environmental development issues.

4.38 Promoting sustainable industry practices, such as reducing carbon emissions, minimizing waste, and adopting ethical sourcing methods, can contribute to a greener and more environmentally conscious broadcasting industry.

4.39 In view of the above, the Authority recommends the following strategies towards socio-environmental responsibilities.

C2. Focusing on social responsibilities and optimizing utilization of green broadcasting practices

a. Achieving social responsibilities through content dissemination

i. Encouraging incorporation of accessibility features for Persons with Disabilities (PwDs) like Same Language Subtitles (SLS), Same Language Captions (SLC), Audio Description (AD)

and Indian Sign Language (ISL) at the time of content production for films, television programmes, digital media etc.

ii. **Raising awareness through programmes underscoring the issues of the underprivileged including marginalized tribal, minorities and LGBTQIA+ communities.**

iii. **Promoting life-skill and value education through broadcasting for adolescents and youth.**

iv. **Incentivizing schemes for women employment in broadcasting sector and creating supportive working environment targeted for promoting gender equality at workplace.**

v. **Educating about safety of women and children by raising awareness about various laws and Government schemes including POCSO and POSH through broadcasting media.**

b. Adopting green broadcasting practices

i. **Creating a policy framework for adoption of sustainable industry practices in broadcasting sector like energy-efficient technologies using solar-powered broadcasting equipment and energy efficient studios to reduce carbon footprints.**

ii. **Issuing guidelines for waste management practices including sustainable procurement practices, recycling, waste segregation, paperless workflows, responsible disposal methods for electronic waste and hazardous materials.**

iii. **Programming broadcasting content like educational programmes, public service announcements and documentaries to raise awareness on the importance of responsible and sustainable use of natural resources, renewable energy, conservation practices, environmental protection and climate change mitigation in fulfilment of Sustainable Development Goals (SDG)-2030.**

III. Goal: Recognize the role of broadcaster during disasters

4.40 Broadcasting plays an immense role during natural calamities. Therefore, a comprehensive Standard Operating Procedures (SOPs) are required to be followed by the broadcasters during disasters. Broadcasting mediums including television, radio and CRS need to promote public safety through real-time information and delivering safety protocols and standards that are required to be followed.

Q19. Keeping in mind the immense role of broadcasting during disasters, how can the latest technologies be effectively utilized to provide disaster alerts and timely updates on television/mobile/radio during disasters? Elaborate with proper justifications.

Comments of the Stakeholders

4.41 Stakeholders have made several comments regarding the role of broadcaster during disaster. One of the stakeholders mentioned that CAS and SMS tools can broadcast messages to subscribers via B-mail and a static on-screen display. Another stakeholder submitted that once D2M is rolled out across the country, it could provide disaster alerts and timely updates. Some stakeholders suggested utilizing cell broadcasting on mobiles and FM radio broadcasting for disaster and emergency alerts. Additionally, there is a suggestion to expand the use of internet-based broadcasting platforms, streaming services, and online portals to deliver live updates, news bulletins, and multimedia content during disasters.

Analysis of the issue and view of the Authority

4.42 The Authority recognizes the critical role that broadcasting plays at the time of disasters. Broadcasting is a crucial medium for disseminating information, ensuring that the public is aware of the necessary do's and don'ts to follow before, during, and after disasters. The Authority is of the view that the broadcasting infrastructure should be robust and resilient specifically in the disaster-prone areas. Proper guidelines should be followed to ensure that broadcasting facilities are designed and constructed to withstand disasters. Such guidelines can help maintain essential communication services during and after calamities.

4.43 Additionally, the Authority underscores the importance of developing a robust broadcasting infrastructure for Doordarshan and All India Radio (AIR) managed by Prasar Bharati. This infrastructure is vital for ensuring the availability of broadcasting services, including emergency alerts and information, during disasters when other forms of communication may be disrupted.

4.44 Furthermore, the Authority feels that the government should take initiative for the framing and enforcement of standard operating procedures (SOPs) to be followed by service providers during disasters. These SOPs, to be developed in coordination with relevant ministries and departments, including the National Disaster Management Authority (NDMA), are crucial for ensuring a coordinated and effective response to disasters. Additionally, establishing an institutional framework to leverage broadcasting media for disseminating early warning disaster notifications, weather forecasts, evacuation procedures, and safety guidelines is seen as essential. This framework would help maximize the reach and impact of such information, potentially saving lives and mitigating the impact of disasters.

4.45 The Authority has taken a note of the 'Common Alerting Protocol Based Integrated Alerting System'[90] which aims to integrate the alerts issued by Alert Generating Agencies (IMD, CWC, INCOIS, DGRE, FSI), alert disseminating agencies (TSPs, TV, Radio, Cable TV, social media, Indian Railways, Coastal Sirens, etc.) and the disaster management authorities on a CAP based platform. The Authority is of the view that the broadcasting sector should implement the CAP protocol for speedy dissemination of disaster alerts to the maximum number of vulnerable persons in order to ensure preparedness.

4.46 Also, CRS plays an immense role to help people for disaster preparedness. Community radio specialises in providing local information to the local people thereby has capability to mitigate disaster

[90] https://www.ndma.gov.in/Capacity_Building/Ops_Comm/IT_Comm_Project

risk, especially in pre-disaster preparedness and raising awareness targeting different community groups. Therefore, the Authority encourages the collaboration of CRS with the NDMA during emergency situations. Moreover, the Authority further believes that utilizing CAS and SMS to broadcast messages to the subscribers via B-mail and a static on-screen display on television would ensure that critical information reaches a wide audience promptly and effectively, enhancing communication during emergencies and disasters.

4.47 The Authority emphasizes the importance of public service broadcasting, to educate citizens about disaster precautions, response, and preparedness. By leveraging the extensive reach of Doordarshan and All India Radio, Prasar Bharati can disseminate vital information on safety measures, emergency protocols, and preparedness strategies to a broad audience. This proactive approach can significantly enhance public awareness and readiness, potentially reducing the impact of disasters and ensuring a more informed and resilient population.

4.48 In view of the above, the Authority recommends the following strategies in the National Broadcasting Policy:

C3. Developing a comprehensive plan for disaster preparedness, response, relief, restoration and reconstruction

a. **Mandating guidelines for creating resilient broadcasting infrastructure in disaster prone areas.**

b. **Developing robust broadcasting infrastructure of Doordarshan and AIR by Prasar Bharati to maintain availability of services during disasters.**

c. **Framing and enforcing standard operating procedures to be followed by service providers during disasters and natural calamities in coordination with relevant Ministries/Departments, including National Disaster Management Authority (NDMA).**

d. Establishing institutional framework to make use of broadcasting media to promote dissemination of early warning disaster notifications including weather forecasts, evacuation procedures and safety guidelines.

e. Implementing 'Common Alerting Protocol Based Integrated Alert System' through text messages on mobile, television, digital radio and other media for timely notification of disaster alert messages.

f. Utilizing CAS and SMS to broadcast messages to subscribers via B-mail and a static on-screen display on television.

g. Utilizing community radio stations in collaboration with the NDMA during emergency situations.

h. Utilizing public service broadcasting to educate citizens about disaster precautions, response and preparedness.

C4. Other Issues

Grievance Redressal Mechanism

4.49 The Authority raised the following question on effective grievance redressal mechanism for stakeholders' comments.

Q17. What other strategies should be adopted in the policy document for ensuring a robust grievance redressal mechanism to address and resolve complaints with respect to content as well as services effectively? Provide your comments with proper explanation.

Comments of the Stakeholders

4.50 In response to Q17 of the Consultation Paper, the stakeholders proposed that there is no requirement of additional grievance redressal mechanism to address in the policy as the current system is working well. Stakeholders opined that the self-regulatory approach in IT Rules, 2021 is functioning well and no evidence of market or regulatory failure that requires added policy emphasis.

4.51 Few stakeholders also commented that for the consumer complaints against DPOs, the CPGRAMS portal cater to the needs of consumers in relation to distribution networks. Further, present grievance redressal mechanism is comprehensive enough and no further modification is required. Some stakeholders were of the view that the industry needs to embrace forbearance-based strategy for grievance redressal.

Analysis of the issue and view of the Authority

4.52 In respect of grievances and complaints pertaining to broadcasting content, there exists three tier grievance redressal mechanism under Cable Television Networks (Regulation) Act, 1995 and IT Rules, 2021. The Cable Television Networks (Regulation) Act, 1995 addresses grievances and complaints related to contents through a three-level structure: self-regulation by broadcasters, self-regulating bodies, and oversight by the Central Government. The Cable Television Networks (Amendment) Rules, 2021[91], further institutionalizes a statutory mechanism for redressal.

4.53 For the consumer complaints against distributors, the Centralized Public Grievance Redress and Monitoring System[92] (CPGRAMS), is available to cater to the needs of consumers in relation to cable TV networks.

4.54 Further, as per draft Broadcasting Services (Regulation) Bill, 2023, to ensure compliance to the Programme Code and the Advertisement Code and to address the grievance or complaint, a three-tier redressal mechanism has been proposed.

4.55 A similar three-tier grievance redressal mechanism has also been specified in the IT Rule 2021 for social media intermediaries, digital media (OTT), and publishers of online news. Further, in 2023, the amended IT Rule[93] also included online gaming as an intermediary. The three-tier grievance redressal mechanism include Self-regulation by the

[91] https://mib.gov.in/sites/default/files/227661.pdf

[92] https://pgportal.gov.in/

[93] https://www.meity.gov.in/writereaddata/files/244980-Gazette%20Notification%20for%20IT%20Amendment%20Rules%2C%202023-%20relating%20to%20online%20gaming%20%26%20false%20information%20about%20Govt.%20business.pdf

publishers at Level-I, self-regulation by the self-regulating bodies of the publishers at Level-II and an oversight mechanism by the Central Government at Level-III.

4.56 Considering the comments received from the stakeholders and observing the availability of the existing grievance redressing mechanisms, the Authority is of the view that the elaborate grievance redressal mechanisms is available to address the consumer complaints and at this moment no further intervention is desirable.

Separate Regulatory Authority for Broadcasting

4.57 MIB in its reference mentioned about specific regulatory authority for broadcasting while mentioning the fact that globally there are converged regulator for telecom and broadcasting. TRAI in its pre-consultation paper has raised the issue seeking comments of the stakeholders about the need for a separate regulatory authority for broadcasting. Majority comments of the stakeholders reflected that TRAI only should regulate both telecom and the broadcasting sector.

4.58 Further, in the consultation paper it has been mentioned that TRAI has been regulating the telecommunications and broadcasting sectors and is well-versed with the latest policies, practices, licensing framework, and other relevant information. Worldwide also, several countries like USA, UK, Australia, Canada, Korea, Malayasia, etc. have resorted for a single converged regulator covering telecom and media. Also, comments of the stakeholders supported for a single regulator for both the sectors.

Rule of prominence

4.59 MIB in its reference highlighted a specific issue of prominence to television channels of the public service broadcaster on the Electronic Programme Guide (EPG). It may be mentioned here that TRAI has taken up this issue separately in its Consultation Paper on 'Review of Regulatory Framework for Broadcasting and Cable services' dated 8th August 2023 and the issue is under consideration and analysis.

4.60 The summary of the recommendations is provided in Chapter V.

CHAPTER V

SUMMARY OF RECOMMENDATIONS ON THE INPUTS FOR FORMULATION OF 'NATIONAL BROADCASTING POLICY-2024'

PREAMBLE

1. **Broadcasting sector plays a critical role in shaping public discourse, fostering cultural exchange and driving socio-economic development. Being a sunrise sector, it possesses huge potential to contribute to the GDP, creating employment opportunities, increasing share in export of services and attracting domestic as well as foreign investment. The sector is highly dynamic, vibrant and transforming, showcasing India's technological expertise and rich cultural diversity. Broadcasting services inform, educate and entertain the masses, empower the consumers and inspire the nation in its journey of progress and prosperity.**

2. **Service sector, which is the largest sector in India, accounts for 54.86% of India's total GDP as per the statistics released by Ministry of Statistics and Programme Implementation. Broadcasting sector has the potential to contribute significantly to the service sector, however, exact contribution of the broadcasting sector alone to the GDP is not readily available in the public domain. Combined contribution from trade, hotels, transport, communication and broadcasting sectors constitutes 17.57% of the GDP for the year 2023-2024.**

3. **Broadcasting sector is the cultural ambassador of the country and has given a unique identity to India. The advent of the digital revolution has been transformative with digitized streaming services and has dramatically transformed content production, distribution and consumption.**

4. **The objective of this document is to lay down a consistent policy and principles framework, that will enable creation of a vibrant**

marketplace for content production and distribution, fostering creativity and elevating India's soft power globally. With innovative talent pool, skilled workforce and powerhouse of creative minds, there is an untapped potential for the broadcasting industry to proliferate and build a robust ecosystem to deliver high-quality content that serves the diverse needs of our society.

5. **India's television broadcasting landscape has large number of service providers, comprising of 330 broadcasters, 859 registered MSOs, 1 HITS operator and 4 pay DTH operators. Besides, there is a free-to-air DTH service named 'DD Free Dish' owned and operated by the public service broadcaster of the country viz. 'Prasar Bharati'. Further, a few IPTV service providers are also providing television services to the consumers. Such a varied number of distribution technologies and players has led to competition in the market and offered wider choices and affordability to the consumers.**

6. **On the radio front, while All India Radio (AIR) is the radio vertical of the country's public service broadcaster, i.e., 'Prasar Bharati', there are 388 private FM radio stations operating in India. Further, recognizing the unique needs of specific sections of the society, the Government permits establishment of Community Radio Stations (CRS). The CRS provides developmental, agricultural, health, educational, environmental, social welfare, community development and cultural programs, meeting the special interests and needs of the local communities. At present, there are 479 CRS operational in different parts of the country.**

7. **Besides television and radio broadcasting, the digital media i.e. Over-the-top (OTT) broadcasting services have emerged as one of the dominant media for content production, dissemination and consumption through the Internet. New streaming services and upcoming technologies like 3D videos, 360-degree live video, animation, visual effects, virtual reality, augmented reality and mixed reality; artificial intelligence etc. have changed the way**

content is created and consumed. Content creation and dissemination through films, music and content creation for online gaming have also witnessed huge growth and hold immense potential to generate employment opportunities, promote Indian culture and contribute to the growth of the Indian economy. The policy envisages a holistic and harmonized environment providing freedom to innovate, adopt and harness the emerging technologies.

8. The objective of the policy is to facilitate the growth of the sector with quick adoption of the emerging technologies for providing an immersive and enriching experience to the consumers in a cost-effective manner, while safeguarding the interest of the stakeholders involved in the broadcasting sphere. Achieving these goals necessitates collaboration among the key stakeholders viz. the Central and State Governments, local governments and agencies, television and radio broadcasters, OTT service providers content creators, distributors, equipment manufacturers, academia, research institutes, industry including startups and Small and Medium Enterprises (SMEs).

9. Acknowledging the industry's enormous potential, the policy aims to create a robust framework that will not only aim to enhance the sector's economic contribution but also establish India as a global leader in the broadcasting sector. The Government of India has bolstered the sector's growth by liberalizing Foreign Direct Investment (FDI) limits to attract foreign investors.

10. Several other initiatives have been taken by the Ministry of Information and Broadcasting (MIB) for the progress of the sector in the recent past. These initiatives include consolidating the policy guidelines for uplinking and downlinking of satellite television channels which has eased out the compliance requirements from the permission holders and enabled ease of doing business; revamping of the BroadcastSeva portal which facilitates the online application process, making it more efficient for stakeholders to request for

required permissions. MIB has also constituted an Animation, Visual Effects, Gaming and Comics (AVGC) Promotion Task Force in April 2022 to promote the AVGC sector in the country. The Task Force emphasizes on 'Create in India' campaign with exclusive focus on content creation 'In India, For India and For World'.

11. In synchrony with the growth of the broadcasting industry, there is an imminent requirement to lay down a long-term policy which emphasizes establishing a robust and consistent regulatory framework to ensure fair competition, consumer protection and content integrity. This policy also aims to overcome the challenges posed due to technological advancements, security issues, particularly in content distribution, by implementing measures to combat piracy, unauthorized distribution and ensuring copyright protection.

12. India's rich culture and heritage are valuable assets that can be promoted and amplified by enhancing the broadcasting ecosystem. Diversified with varied art forms, ancient literature and folklores, India holds global attention, contributing significantly to the country's soft power. Realizing the country's rich heritage and linguistic diversity, the Government has undertaken several initiatives to promote India's cultural wealth worldwide. Further, the growth of India's broadcasting sector will enable it to act as a connecting bridge between the country's culture and its dissemination to a wider global audience. Moreover, broadcasting plays a pivotal role in improving media access, reading literacy, learning Indian languages and promoting inclusivity at national scale through measures such as adding Same Language Subtitles (SLS)/ Captions (SLC), Audio Description (AD), Indian Sign Language (ISL) or any other accessibility features to the content at the source.

13. The indispensable role of broadcasting in shaping *inter-alia* public discourse, fostering national unity and promoting democratic values establishes the framework for the policy. Grounded on the principles

of universality, diversity, accuracy, fairness, quality, responsibility, accountability and freedom, the policy aims to ensure a vibrant, inclusive and responsible broadcasting landscape that serves the welfare of Indian citizens, preserves Indian cultural heritage and advances the democratic ideals.

14. **One of the key ideas behind the policy is to unleash the scope and reach of the broadcasting sector for it to become a torch bearer of 'Create in India' and 'Brand India' programmes of the government. The policy endeavours to establish a long-term vision for India's broadcasting industry, utilizing emerging technologies for positioning the country as a globally recognized Content Hub. It is suggested that the policy be called 'National Broadcasting Policy-2024'.**

VISION

To foster a competitive, affordable and ubiquitous ecosystem for sustained growth of the broadcasting sector, catering to the diverse needs of consumers that facilitates quality content creation, promotes democratic values and cultural diversity, enables inclusivity and literacy, attracts investments, safeguards intellectual property, develops resilient indigenous infrastructure, adopts emerging technologies, generates employment and drives socio-economic development through innovation and collaboration for strengthening India's soft image and positioning 'Brand India' globally.

MISSION

In pursuit of establishing India a global leader in the broadcasting sector, this policy intends to target broad roadmap for 10 years with special focus on the next 5 years. The National Broadcasting Policy-2024, envisages to achieve the following:

A. Propelling Growth

- **Establishing a robust broadcasting ecosystem by enabling growth-oriented policies and regulations through data-driven governance.**
- **Supporting creation of a resilient, adaptive and tech-agile infrastructure fostering R&D, technology innovation and indigenous manufacturing.**
- **Facilitating level-playing field and healthy competition; promoting ease of doing business and stimulating economic growth by enabling the reach of broadcasting services to all, positioning India as an 'Uplinking Hub' for television channels, attracting investments, generating employment opportunities and promoting skill development.**

B. Promoting Content

- **Supporting quality content production and distribution for television, radio and OTT broadcasting services, encouraging proliferation of Indian content, both locally and globally, by harnessing the power of emerging broadcasting technologies and making India a 'Global Content Hub'.**
- **Establishing India as a preferred destination for content creation.**
- **Enabling quality content production in public service broadcasting to inform, educate and entertain the masses.**
- **Promoting and facilitating the growth of Indian content through films, animation, visual effects, gaming, music and state-of-the-art post-production infrastructure.**

C. Protecting Interests

- **Combating piracy and safeguarding the rights of content creators and intellectual property holders through copyright protection.**
- **Fulfilling social responsibilities by ensuring awareness and enabling provisions for disseminating information to all strata of the society; and environmental responsibilities through green broadcasting practices and disaster preparedness.**

GOALS AND STRATEGIES

A. Propelling Growth: Establishing a robust broadcasting ecosystem

Goals

a. **Measure sector's performance based on various key economic parameters to enable data-driven policy decisions**
b. **Enable reach and access of television broadcasting services to uncovered households**
c. **Enable radio coverage in uncovered areas**
d. **Promote R&D and secure IPR in broadcasting sector**
e. **Promote manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment**
f. **Employment generation, bolstered up through training and upskilling for providing New Age Skills to the workforce**
g. **Encourage innovation-led startups and empower Small and Medium Enterprises**
h. **Foster conducive policies and regulatory practices for economic growth**
i. **Make India an 'Uplinking Hub' of television channels**
j. **Leverage digital terrestrial broadcasting as a complimentary broadcasting technology**
k. **Establish effective audience measurement and rating system**

Strategies

A1. Measuring of economic parameters for a data-driven governance

a. **Establishing an institutional framework to measure the contribution of broadcasting sector towards the economy of India. The parameters are to be measured in terms of gross output and value addition for direct economic contributions such as revenue generation, employment generation, subscription figures etc., as well as other indirect economic contributions.**
b. **Carrying out measurements in collaboration with the National Statistical Office (NSO) under Ministry of Statistics and Programme**

Implementation, industry associations, academic institutions and TRAI.

c. Developing online portals with centralized databases for data collection, aggregation, analysis and publishing using standardized methodologies and reporting formats in order to ensure consistency and comparability of data for all the stakeholders and the Government.

A2. Provisioning of affordable television broadcasting services to uncovered households

a. Identifying districts and blocks with low-density television penetration. Creating an incentive scheme to enable Distribution Platform Operators (DPOs) to provide television sets and Consumer Premise Equipment (CPE) through bundled schemes in such areas.

b. Facilitating financial support to consumers for affording television sets and CPEs through microfinancing, Self Help Groups (SHGs) and staggered payment options.

c. Devising a Skill Development plan for skilling local youth for operation and first line maintenance of TV sets, CPEs and network.

d. Leveraging fixed line broadband infrastructure including that created under BharatNet to extend the reach of television services in rural and low-density television areas.

e. Devising subsidized bundled schemes through the Public Service Broadcaster for provisioning of 'DD Free Dish' services including television set and CPE to the marginalized, tribal and economically weaker sections.

f. Encouraging DPOs to devise low-cost offerings, curate content for rural underpenetrated areas and identification, reactivation and reuse of inactive set-top boxes through appropriate incentive schemes.

A3. <u>Provisioning of radio coverage in uncovered areas</u>

a. **Establishing a comprehensive mapping system for identification of uncovered areas and expanding FM radio services by sharing infrastructure with other service providers including telecommunications service providers.**
b. **Facilitating a smooth transition from analog FM to digital radio broadcasting comprehensively encompassing resource allocation, infrastructure upgrades, phased transition plan, partnerships with technology providers, specialized training for industry professionals and supportive policies for radio broadcasters.**
c. **Reviewing the annual license fee structure of FM radio services for promoting the expansion of radio services.**
d. **Encouraging expansion of low power small range FM radio services in areas such as stadiums, open-air theatres, residential/ commercial complexes, convention centres, expo areas, etc.**

A4. Focusing on research and development of broadcasting technologies and equipment, and facilitating quick adoption of latest technologies

a. **Strengthening research and development in the broadcasting sector through:**
    i. **Strengthening the existing R&D centres in public sector, such as C-DOT, BECIL and other such R&D institutions to support local manufacturing of broadcasting equipment and enable research on emerging technologies.**
    ii. **Creating an environment for experimentation and innovations in the space of broadcasting technology to shift India from being a 'Technology Adopter' to 'Technology Innovator'.**
    iii. **Encouraging cloud-based storage of content to enable location-free access and transmission of programmes for broadcasting.**
b. **Creating a 'Technology Development Fund' for supporting R&D and startups in the field of emerging technologies and development of indigenous products for import substitution and promoting export in broadcasting sector.**

c. **Establishing 'Centre of Excellence for Broadcasting' at premier technological institutes and industry associations focusing on research, standardization, development and testing of emerging broadcasting technologies and products with collaborative efforts of MIB, BECIL, C-DOT, BIS, academia, startups and concerned industry stakeholders.**

d. **Formulating guidelines for 'Transfer of Technology' for the products developed through domestic R&D units for different stakeholders in manufacturing and distribution value chain.**

e. **Formation of a 'Standing Empowered Committee' for monitoring R&D activities, standardization and indigenization in broadcasting sector.**

f. **Facilitating the availability of Intellectual Property Rights (IPR) in Fair, Reasonable and Non-Discriminatory (FRAND) terms required for promoting local manufacturing.**

g. **Creating an enabling framework including Regulatory Sandbox for testing and quick adoption of emerging technologies in live environment. Facilitating demonstration of and experimentation with latest technologies, products, services and applications in broadcasting sector for understanding the opportunities and challenges involved therein.**

A5. Promoting manufacturing and adoption of new technologies including indigenous broadcasting technologies and equipment

a. **Mandating public service broadcaster to procure and deploy indigenous broadcasting technologies and equipment in certain proportion.**

b. **Incentivizing DPOs for procurement and deployment of indigenous broadcasting systems and equipment including Conditional Access System (CAS), Subscriber Management System (SMS), Set Top Box (STB) through incentive schemes.**

c. **Incentivizing indigenous development and adoption of digital radio systems including receivers.**

d. **Enabling the development of the STB manufacturing ecosystem for adoption of interoperable STBs by public service broadcaster and DPOs to empower consumer choice and reduce e-waste. Procurement by public service broadcaster can act as catalyst for indigenization of STBs and CAS.**

e. **Incentivizing Original Equipment Manufacturers (OEMs) developing core electronics components, through Production Linked Incentives (PLI) schemes, to setup their manufacturing base in India, making India 'Global Manufacturing Hub' targeted for broadcasting sector in consonance with the goals of the National Policy on Electronics 2019.**

A6. Skill Development and Capacity Building for employment generation

a. **Addressing skill gaps through internship programmes by Prasar Bharati and private sector in various aspects of content creation and distribution technologies to enhance skillset of the workforce to meet industry requirements, by devising appropriate incentive schemes.**

b. **Leveraging various Government schemes of Ministry of Skill Development and Entrepreneurship (MSDE) like NAPS, PMKVY to develop necessary skill sets through mentorship and apprenticeship for creating skilled workforce for the broadcasting sector.**

d. **Introducing degree and short-term courses related to media technology, certified by University Grants Commission (UGC) and accredited by All India Council for Technical Education (AICTE) in the curriculum of the existing colleges, universities and institutions of eminence in India for creating employment-ready workforce as well as upskilling and reskilling of existing workforce as envisaged in National Education Policy 2020.**

e. **Increasing the intake capacities of the existing public institutions like SRFTI Kolkata, FTII Pune, IIMC Delhi and establishing more such specialized institutes in various parts of the country.**

f. **Facilitating incorporation of courses on emerging technologies including immersive technologies like Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR), AI, Computer Vision etc. in the Qualification Pack (QPs) of Media and Entertainment Skill Council (MESC) to create a skilled talent pool.**

g. **Creating educational resources for content creation and broadcasting technologies and making them available in an open and accessible format such as National Programme on Technology Enhanced Learning (NPTEL) Swayam portal to promote self-directed and collaborative learning through interactive audio, video and texts.**

A7. Encouraging innovation-led startups and empowering Small and Medium Enterprises

a. **Establishing an institutional mechanism for enabling the development of startup ecosystem in the broadcasting sector by providing assistance through mentoring, networking, funding, and marketing the technology and product, developed by the startups through Government funding or PPP model.**

b. **Expanding the network of incubators and accelerators for providing startups with financial resources, technical guidance, infrastructure and networking opportunities.**

c. **Utilizing 'Technology Development Fund' for supporting startups and SMEs and pilot their deployments.**

A8. Simplifying and digitizing permission process and adoption of growth-oriented rules and regulatory practices

a. **Processing grant of 'Infrastructure Status' to the broadcasting sector for raising capital for investment in newer technologies.**

b. **Simplifying rules for promoting business flexibility, healthy competition and orderly growth of the sector.**

c. **Encouraging ease of doing business in the broadcasting sector by digitizing process of granting permissions, approvals and clearances under a single window system to create an enabling environment for attracting long-term foreign and domestic investment for the growth of sector.**

d. **Streamlining Right of Way (RoW) processes and standardizing RoW charges across all states for laying cables and erecting towers by utilizing a single window clearance and centralized payment system.**

e. **Enabling infrastructure sharing of broadcasting equipment and transport streams among the service providers of the broadcasting and cable television sector and also leveraging the infrastructure of telecom service providers for provision of broadcasting services.**

A9. Making India 'Uplinking Hub' by facilitating television channels to uplink using Indian uplinking facilities

a. **Enabling development of state-of-the-art robust uplinking infrastructure and competitive environment to encourage Indian and foreign television channels to uplink from India.**

b. **Establishing a single window clearance mechanism for licensing approvals, expediting processing of applications and reducing administrative burden for uplinking of foreign broadcasters' channels from India.**

c. **Encouraging collaboration between foreign companies and Indian partners through bilateral agreements to promote cross-border broadcasting activities and cooperation.**

A10. Leveraging and expanding digital terrestrial broadcasting for television and radio

a. **Exploring the use and expansion of digital terrestrial broadcasting to television and mobile devices as a complimentary broadcasting technology to co-exist with cable and satellite broadcasting.**

b. **Notifying the policy framework for digital radio broadcasting in time bound manner with a clear roadmap for rollout.**

c. **Enabling the delivery of digital TV content on mobile devices utilizing digital terrestrial broadcasting technologies such as 5G broadcasting (using features like network slicing) and D2M (Direct-to-Mobile) technology.**

d. **Opening digital terrestrial television and digital radio broadcasting service including news on radio to the private sector to infuse investment required for developing and maintaining infrastructure in a phased manner.**

e. **Leveraging digital terrestrial broadcasting for uninterrupted services during emergencies and natural disasters for public safety through television, radio and mobile and identifying futuristic use cases.**

f. **Ensuring effective utilization of spectrum allocated for terrestrial broadcasting and earmarking globally harmonized spectrum for Programme Making and Special Events (PMSE) covering radio microphones, in-ear monitors, wireless cameras, talkback systems, etc.**

A11. Transparent and credible audience measurement and rating system for television, radio and OTT broadcasting service

a. **Establishing transparent, credible and technologically equipped television audience measurement system that accurately reflects viewer preferences and behaviour by:**
   i. **Revamping the existing audience measurement system in India**
   ii. **Expanding the sample size to represent diverse landscape**
   iii. **Encouraging multiple rating agencies to carry out audience measurement for ensuring healthy competition**
   iv. **Adopting Return Path Data (RPD) and other latest technologies to enhance the accuracy of data**

b. **Establishing a policy framework for conducting radio audience measurement in India.**

c. **Creating a framework for disclosure of viewership data by OTT broadcasting service providers in a transparent manner for the purpose of audience measurements.**

B. Promoting Content: Encouraging Indian content outreach at global stage

Goals

a. **Establish India as a hub for content creation**
b. **Strengthen Public Service Broadcasting**
c. **Facilitate content proliferation through Digital Radio Broadcasting**
d. **Support growth and proliferation of Indian Content through OTT broadcasting services**
e. **Support Indian Content production through films, animation, visual effects, gaming and music**

Strategies

B1. Establishing India as a 'Global Content Hub'

a. **Initiatives for positioning India as a 'Content Hub'**

i. **Fostering creation and outreach of quality content exhibiting India's diversified art and culture, literature, history, mythology using new age technologies appealing to both Indian and International audiences.**

ii. **Enabling collaboration between Central Government, State Governments and industry partners to facilitate the growth of regional Indian content through funding, infrastructure support (content incubators and production hubs), education and skill development. Enabling creation of Special Economic Zones (SEZs) for establishing content creation hubs.**

iii. **Improving the infrastructure and simplifying permission process for content production and filming at various tourist spots, heritage sites and popular locations to showcase Indian places at the global stage for boosting Indian tourism.**

iv. **Entering into co-production agreements with other countries to facilitate collaborative projects, enabling Indian content creators to access international markets and resources and enabling foreign producers to produce content in India.**

v. **Encouraging incorporation of techniques like dubbing and subtitles in movies, television programmes, digital content, animated shows, children's entertainment and educational content to enable citizens across the country, Indian diaspora communities as well as global audience to access content in vernacular/international languages.**

b. Promoting Local Content

i. **Enhancing the use of platform services of distribution platform operators for proliferation of local and regional content.**

ii. **Creating co-funding schemes in partnership with state governments, local self-governments (Panchayats) and urban local bodies for extending financial support to local talent, content developers and technicians.**

B2. Reinvigorating public service broadcaster for quality content creation and distribution

Quality content creation and distribution

a. **Providing adequate support and funds from the Government to Prasar Bharati for upgrading and expanding the broadcasting infrastructure for developing high quality and innovative content to enable people especially from marginalized and underprivileged communities to have quality experience.**

b. **Enhancing production capacity and upgrading studios to support high-quality content creation and post-production facilities for television, radio and OTT platforms to widen its reach.**

c. **Bolstering strategic partnerships and collaborations with international broadcasters, content creators and media**

organizations to co-produce and distribute content, exchange expertise and expand global reach.

OTT platforms

d. **Developing OTT platforms by Prasar Bharati for the promotion of the content of Doordarshan and AIR channels.**
e. **Developing facilities for creating new age media utilizing technologies like 3D technology, AR-VR, animation, sound technologies and other emerging platforms and tools for immersive viewing and listening experience.**
f. **Leveraging the extensive archives of content library of Doordarshan and AIR, especially, erstwhile popular content, by remastering and relaunching it for the audience including new age audiences.**

All India Radio

g. **Developing transmission infrastructure and content creation to extend the reach of AIR to the uncovered areas of the country.**
h. **Enabling Prasar Bharati for developing the ecosystem for transition from analog to digital radio transmission in a phased manner to become fully digital within three years.**
i. **Establishing content-sharing relationships between AIR and radio stations of other countries enabling reach of AIR content at global level.**
j. **Creating standards for digital radio in collaboration with Telecommunication Engineering Centre (TEC).**

DD Free Dish

k. **Enabling addressable systems for 'DD Free Dish' platform to maintain subscribers' detail, ensuring quality of service and preventing unauthorized distribution of the content to address the issue of level playing field particularly for the private television channels.**

l. **Promoting the availability of programmes and channels of friendly neighboring countries on the platform of Doordarshan and 'DD Free Dish' and vice-versa.**

Skill Development

m. **Reinvigorating Prasar Bharati by investing in reskilling and upskilling of the existing workforces through training programs, workshops and collaborations with industry experts.**

n. **Designing internship programmes by Prasar Bharati in collaboration with industry and academia in various disciplines of broadcasting.**

B3. Proliferating content through Digital Radio Broadcasting

a. **Facilitating programme creation like news, education, entertainment, awareness programmes on FM radio services in different languages covering all regions.**

b. **Permitting private FM broadcasters to air self-curated news bulletins and current affairs programmes.**

c. **Promoting local cultures and dialects and empowering marginalized groups and communities by addressing their challenges through Community Radio Stations (CRS). Upgrading and launching incentive schemes to promote and expand the reach of CRS in the country.**

B4. Supporting the growth and proliferation of Indian Content through OTT broadcasting services

a. **Launching schemes to create common infrastructure and co-production facilities to support small and local players to create quality Indian content including regional content for global outreach through OTT platforms.**

b. **Supporting regional OTT platforms through strategic partnership between public service broadcaster and the state/local governments for providing technological support, content acquisition, platform maintenance and marketing strategies.**

c. **Encouraging incorporation of features like dubbing and inserting subtitles in Hindi, English, vernacular languages and other international languages for regional content promotion and improved access, addressing both Indian and International audiences.**

B5. Supporting Indian Content production through films, animation, visual effects, gaming and music

a. Making India a preferred filming destination

i. **Devising incentive schemes in partnership with State Governments to formulate and implement film policies, single window clearance, attractive incentives to Indian and foreign film producers for filming at Indian destinations through Film Facilitation Office (FFO).**

ii. **Facilitating financial support and bank loans to the film producers from private/public sector banks and Non-Banking Financial Companies (NBFCs) by creating a mechanism for risk evaluation, risk mitigation and risk coverage particularly for small producers.**

iii. **Establishing state-of-the-art film cities including film production infrastructure and facilities via PPP model in different economic regions/geographical territories to facilitate cost-effective quality film production.**

iv. **Facilitating the industry to adopt emerging technologies to help filmmakers with post-production tasks, such as editing, coloring, sound design, automatically creating video summaries from text articles, using natural language processing, computer vision and cloud-based solutions for remote post-production.**

b. Developing a support ecosystem for Animation, Visual Effects, Gaming and Comics (AVGC)

i. **Notifying 'National Policy for Growth of 'Animation, Visual Effects, Gaming, Comics & Extended Reality' (AVGC-XR) Sector in India' in mission mode.**

ii. **Enabling supporting infrastructure facilities in various states to aid development of AVGC-XR hubs to become preferred destinations promoting employment and economic development.**

iii. **Collaboration among Central and State Governments and the industry to work with each other to develop future roadmap for the growth of AVGC sector in India with special emphasis on the application of AVGC-XR in various sectors such as entertainment, education, health, skill development etc.**

iv. **Establishing and funding Centres of Entrepreneurship (COEs) and technology incubators focusing on AVGC related technology at institutions like Software Technology Parks of India (STPI) to ensure widespread reach of technology.**

v. **Making India a global 'Gaming Content Hub' to unlock international market for India by creating and supporting infrastructure such as plug and play labs, incubators encouraging startups and new players.**

c. Amplifying the Music industry segment

i. **Implementing stringent measures to enforce copyright laws to combat music piracy and developing technical solutions to deal with music piracy websites.**

ii. **Encouraging global promotion of Indian music as a service export expanding cultural influence among Indian diaspora as well as global audience.**

iii. **Facilitating the music industry to adopt the latest sound recording technologies for immersive listening experience.**

iv. **Introducing special schemes to ensure social security of on-call artists in the music industry.**

C. Protecting Interests: Safeguarding rights of content creator and leveraging broadcasting services for protecting socio-environmental interests of the society

Goals

a. **Enforce content security through copyright protection**
b. **Address social and environmental responsibilities**
c. **Recognize the role of broadcaster during disasters**

Strategies

C1. Combatting Piracy and ensuring Content Security through Copyright Protection

a. **Strengthening the enforcement mechanisms under Copyright Act to deter piracy, impose penalties on infringers, provide legal remedies for rights holders to seek damages and injunctions against piracy.**
b. **Collaborating with Law Enforcement Agencies (LEAs) for establishing dedicated anti-piracy units within LEAs and provide them with necessary tools and resources to proactively combat physical and digital piracy activities in real-time.**
c. **Developing model enforcement codes/Standard Operating Procedures (SOPs) to be shared with LEAs to address piracy risks across different broadcast platforms and services.**
d. **Setting up specialized courts or tribunals at both Centre and State level to fast-track the disposal of copyright infringement cases.**
e. **Constituting an inter-ministerial committee under DPIIT including MIB, MHA, MeitY to formulate actionable points to strengthen enforcement mechanisms both at the national and state levels to combat piracy.**

f. **Establishing mechanism for creating database and records of 'Infringing websites and mobile applications' for administrative takedown and enforcement action against copyright violations.**

g. **Fostering international collaborations by participating in global treaties and working groups focused on intellectual property enforcement and anti-piracy measures including sharing best practices, joint operations, and mutual legal assistance treaty to combat piracy.**

h. **Encouraging use of technology driven solutions like Digital Rights Managements (DRM), fingerprinting, encryption and digital watermarking, blockchain technology to prevent unauthorized distribution and combatting piracy.**

i. **Framing rules for OEMs accountability for products like CAS/SMS and all other headend equipment w.r.t. signal leakage and low security.**

j. **Migrating DD Free Dish from unencrypted non-addressable system to digital addressable systems to prevent piracy and unauthorized re-distribution of the content.**

C2. Focusing on social responsibilities and optimizing utilization of green broadcasting practices

a. Achieving social responsibilities through content dissemination

i. **Encouraging incorporation of accessibility features for Persons with Disabilities (PwDs) like Same Language Subtitles (SLS), Same Language Captions (SLC), Audio Description (AD) and Indian Sign Language (ISL) at the time of content production for films, television programmes, digital media etc.**

ii. **Raising awareness through programmes underscoring the issues of the underprivileged including marginalized tribal, minorities and LGBTQIA+ communities.**

iii. **Promoting life-skill and value education through broadcasting for adolescents and youth.**

iv. **Incentivizing schemes for women employment in broadcasting sector and creating supportive working environment targeted for promoting gender equality at workplace.**

v. **Educating about safety of women and children by raising awareness about various laws and Government schemes including POCSO and POSH through broadcasting media.**

b. Adopting green broadcasting practices

i. **Creating a policy framework for adoption of sustainable industry practices in broadcasting sector like energy-efficient technologies using solar-powered broadcasting equipment and energy efficient studios to reduce carbon footprints.**

ii. **Issuing guidelines for waste management practices including sustainable procurement practices, recycling, waste segregation, paperless workflows, responsible disposal methods for electronic waste and hazardous materials.**

iii. **Programming broadcasting content like educational programmes, public service announcements and documentaries to raise awareness on the importance of responsible and sustainable use of natural resources, renewable energy, conservation practices, environmental protection and climate change mitigation in fulfilment of Sustainable Development Goals (SDG)-2030.**

C3. Developing a comprehensive plan for disaster preparedness, response, relief, restoration and reconstruction

a. **Mandating guidelines for creating resilient broadcasting infrastructure in disaster prone areas.**

b. **Developing robust broadcasting infrastructure of Doordarshan and AIR by Prasar Bharati to maintain availability of services during disasters.**

c. **Framing and enforcing standard operating procedures to be followed by service providers during disasters and natural**

calamities in coordination with relevant Ministries/Departments, including National Disaster Management Authority (NDMA).

d. Establishing institutional framework to make use of broadcasting media to promote dissemination of early warning disaster notifications including weather forecasts, evacuation procedures and safety guidelines.

e. Implementing 'Common Alerting Protocol Based Integrated Alert System' through text messages on mobile, television, digital radio and other media for timely notification of disaster alert messages.

f. Utilizing CAS and SMS to broadcast messages to subscribers via B-mail and a static on-screen display on television.

g. Utilizing community radio stations in collaboration with the NDMA during emergency situations.

h. Utilizing public service broadcasting to educate citizens about disaster precautions, response and preparedness.

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List of Acronyms

Abbreviations	Description
AD	Audio Description
AI	Artificial Intelligence
AIC	Atal Incubation Centre
AICTE	All India Council for Technical Education
AIR	All India Radio
AR	Augmented Reality
ARPU	Average Revenue Per User
AVGC	Animation, Visual Effects, Gaming and Comics
BECIL	Broadcasting Engineering Consultants India Limited
CAPEX	Capital Expenditure
CAS	Conditional Access System
C-DOT	Centre for Development of Telematics
CF	Cinematographic Films
CoE	Centre of Excellence
CoE	Centre of Entrepreneurship
CP	Consultation Paper
CPE	Consumer Premise Equipment
CRS	Community Radio Stations
CSR	Corporate Social Responsibility
D2M	Direct-to-Mobile
DBT	Direct Benefit Transfer
DD	Doordarshan
DoS	Department of Space
DPG	Dubai Program for Gaming
DPIIT	Department for Promotion of Industry and Internal Trade
DPOs	Distribution Platform Operators
DRM	Digital Rights Management
DTH	Direct-to-Home
EMC	Electronic Manufacturing Clusters
ESDM	Electronics System Design and Manufacturing
FDI	Foreign Direct Investment
FFO	Film Facilitation Office
FM	Frequency Modulation
FRAND	Fair, Reasonable and Non-Discriminatory
FTA	Free-To-Air
FTII	Film and Television Institute of India
GDP	Gross Domestic Product
GR	Gross Revenue
GVA	Gross Value Added

ICT	Information Communications Technologies
IIFCL	India Infrastructure Financing Company Limited
IIMC	Indian Institute of Mass Communication
IMTF	Inter-Ministerial Task Force
IP	Infrastructure Providers
IPR	Intellectual Property Rights
ISL	Indian Sign Language
ITI	Industrial Training Institutes
ITU	International Telecommunication Union
ISP	Internet Service Providers
LEA	Law Enforcement Agencies
MeitY	Ministry of Electronics and Information Technology
MESC	Media and Entertainment Skill Council
MFN	Multi Frequency Networks
MIB	Ministry of Information and Broadcasting
MIPCU	Maharashtra Intellectual Property Crime Unit
ML	Machine Learning
MoU	Memorandum of Understanding
MPA	Motion Pictures Association
MR	Mixed Reality
MSDE	Ministry of Skill Development and Entrepreneurship
MSO	Multi System Operators
MW	Medium Wave
NABM	National Academy of Broadcasting and Multimedia
NAPS	National Apprenticeship Promotion Scheme
NBFC	Non-Banking Financial Companies
NBP	National Broadcasting Policy
NDMA	National Disaster Management Authority
NEP	National Education Policy
NOTEF	Non-Refundable One Time Entry Fee
NPE	National Policy on Electronics
NPTEL	National Program on Technology Enhanced Learning
NSDC	National Skill Development Corporation’s
NSO	National Statistical Office
OEM	Original Equipment Manufacturers
OFC	Optical Fiber Cables
OGIs	Online Gaming Intermediaries
OHD	Open House Discussion
OPEX	Operational Expenditure
OTT	Over-the-top
PIPCU	Police Intellectual Property Crime Unit
PLI	Production Linked Incentive
PMGDISHA	Pradhan Mantri Gramin Digital Saksharta Abhiyan

PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PMSE	Programme Making and Special Events
POCSO	Protection of Children from Sexual Offences Act
POSH	Prevention of Sexual Harassment
PPP	Public Private Partnership
PwD	Persons with Disabilities
QP	Qualification Packs
R&D	Research and development
RAM	Radio Audience Measurement
ROI	Return on Investment
RoW	Right of Way
RPD	Return Path Data
SDG	Sustainable Development Goals
SEP	Standard Essential Patent
SEZ	Special Economic Zones
SHG	Self Help Groups
SLC	Same Language Caption
SLS	Same Language Subtitle
SME	Small and Medium Enterprise
SMS	Subscriber Management System
SOP	Standard Operating Procedures
SPECS	Scheme for Promotion of manufacturing of Electronic Components and Semiconductors
SRB	Self-Regulatory Bodies
SRFTI	Satyajit Ray Film & Television Institute
SSC	Skill Sector Council
SSO	Standard Setting Organization
STB	Set Top Box
STPI	Software Technology Parks of India
SW	Short Wave
TCoE	Telecom Centers of Excellence
TEC	Telecommunication Engineering Center
TSP	Telecom Services Providers
UGC	University Grants Commission
USOF	Universal Service Obligation Fund
VDF	Venture Debt Funds
VR	Virtual Reality
XR	Extended Reality

Annexure I

MIB Reference to TRAI for 'Inputs for formulation of National Broadcasting Policy-2024'

संजीव शंकर, (भा.सू.से.)
संयुक्त सचिव (प्रसारण)
SANJIV SHANKAR, IRS
Joint Secretary (Broadcasting)

भारत सरकार
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MINISTRY OF
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D.O. No. N-16/02/2018-BP&L(Vol.II) Dated: 13th July, 2023

Dear Shri Raghunandan,

The Ministry of Information & Broadcasting is in the process of considering to formulate a National Broadcasting Policy. The consultations with stakeholder Ministries have been carried out. The Broadcast Policy needs to identify the Vision of a functional, vibrant and resilient Broadcasting sector which can project India's diverse culture and rich heritage and help India's transition to a digital and empowered economy. In the light of the potentialities and intersection with national goals, a National Broadcasting Policy stipulating the vision, mission, strategies and the action points could set the tone for a planned development and growth of the Broadcasting sector in the country in the era of new and emerging technologies.

2. The Ministry has identified certain broad goals and strategies along with certain specific policy issues which are brought out in the Annexure.

3. It is requested that TRAI may also give its own considered inputs for the formulation of the National Broadcasting Policy.

4. This issues with the approval of the Hon'ble Minister of Information & Broadcasting.

Best Regards,

Yours sincerely,

(Sanjiv Shankar)

Encl: as above

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Annexure

Annexure to the reference under Section 11 of the TRAI Act, 1997 for formulation of National Broadcasting Policy:

A. Broad Goals and Strategy

i) Universal reach of Broadcasting

Broadcast Policy may curate the framework for generation of quality content, making content available to all through such measures as maximizing reach of Prasar Bharati, ensuring compliance to quality of service regulation; making content available to all by such measures as implementing the accessibility standards for persons with disability; make content affordable through expansion of Public Broadcaster's Role; Ensure Universal Service across the sector etc.

ii) Choice and adoption of State of Art and suitable distribution technology/mode

The Policy may encourage choice of state of art, cost effective and reliable distribution of technology; digital distribution technology for TV and Radio; transmission to broadband ready cable infrastructure; support Indigenised production of Consumer Premises Equipment; etc.

iii) Enabling environment for sectoral growth/Level Playing Field

It may be pursued through such measures as according infrastructure status to broadcasting, taking suitable measures to make India a preferred destination for foreign investment; harmonious licencing and promotion regime; providing statutory regulation for self-regulatory bodies, prioritise content security and copyright protection, Catalyse Skill up-gradation and development.

iv) Enhance Global Reach

Policy framework in this regard may indicate the roadmap to expand Global Outreach of public broadcast, expand global footprint of Indian satellite, agreement with public or private broadcasters of foreign

country in the field of broadcasting, exchange of news and audio visual programmes and working with entities to project Brand India by showcasing India's rich cultural heritage.

B. Specific Policy Issues:

Following Policy issues are flagged for consideration of the Authority:

(i) Definition of Broadcasting

The current definition of broadcasting is the derived definition taken from the Indian Wireless Telegraphy Act, 1933 and the Indian Telegraph Act of 1885 and needs a review, in view of the sweeping technological changes in the sector. There is a shift from liner television to digital and also from linear broadcast to on-demand services. As we are aware, the entire industry is undertaking a fundamental change – streaming platforms which are no longer just platforms for the TV programmes and films, have also become production houses for content and are with direct competition with TV and Video industry. Even the existing broadcasters and media companies are launching their 'On-demand' offerings and the global content producers are setting up their own streaming services. Globally, countries have reacted to this transformation. For example, in Germany a new media treaty came into force in November, 2020 called **'Medienstaatsvetrag-MstV'.** The law ensures that all digital platforms that provide or distribute media content are now under common regulation.

(ii) Framework for public broadcasting

In India, Prasar Bharati Corporation has been assigned the mandate of public broadcasting, to educate, inform and entertain the public; and for the development of the broadcasting sector in general. Broadcasters with public broadcasting responsibilities across the world, such as BBC in UK, NHK in Japan, etc., have devised various governance and sustenance model due to the inherent fact that public broadcasting is difficult to monetize. In this context, there may be a need to redefine the guiding principles for public broadcasting in India and also redefine the relationship between the Government and the Public Broadcaster. Further, public broadcasting has extremely important role during the time of disaster or National Emergencies; as the first choice for the public in getting correct and credible information on a real time basis. Also the

utility for Community Radio Stations for providing the last mile connectivity with the communities living in far flung areas, coastal regions, hilly areas etc., need to be prescribed a more supporting framework.

(iii) Rule of Prominence

There is a strong opinion in favour of ensuring prominence to television channels with public service responsibilities on the Electronic Programme (EPGs), New technologies and user interfaces for accessing video conent now mean that when consumers turn on a smart TV or Set Top Boxes, use any one of the many TV sticks available or just watch TV content using a devise different from a TV altogether, there often is no regulated EPG on which the Public Service Broadcasters can enjoy this prominence. Ofcom (UK Regulator) in its report 'Small screen – big debate' has identified the issue of prominence as the key catalyst in assisting public services broadcasters and has recommended a law in this regard.

(iv) **Creating an environment for experimentation and innovations**

There is a need to create an environment for experimentation and innovations in the space of broadcasting technology so that we may shift from being a "Technology Adopter" to "Technology Innovator". Many pubic service broadcasters around the world have strong R&D departments or labs to experiment with new technologies to enhance the experience of the audience or to bring more effective or efficient ways to produce content. This may be achieved either through creating an R&D department within the Ministry or signing MoU with a leading Indian Engineering Institution to work on new technology. Globally there are examples of Japan's NHK having tie up with NHK Technologies and BBC News Labs.

(v) Infrastructure sharing

As the technologies in broadcasting sector and telecommunication sector are moving towards the path of convergence, there are possibilities of utilizing the existing infrastructure of one by the other. Similar are the possibilities amongst the distribution platforms and also FM Radio sector and

between the public and private sector in the field of programme generating facilities. NBP may provide a policy framework and strategies in this regard.

(vi) Storage & Security

The sector is moving from server based storage to cloud based storage of content. There is a need to upgrade this infrastructure which would enable location-free access and transmission of programmes for broadcasting. Security issues, cyber attacks and hacking by vested interest require a multi-layered framework of security. Issues of piracy and copyright too require systematic and legal redressal.

(vii) Regulatory Authority for Broadcasting

As per the Telecom Regulatory Authority of India Act, broadcasting has been defined to be included in the definition of telecommunications and notified so in 2004. There is a view that broadcasting being a relatively small segment, compared to telecommunications, its issue and concerns are not adequately addressed within the regulating system of TRAI. The view is that broadcasting requires a light touch regulations which is in sync to the emerging and change market and therefore in India a need for separate regulatory authority for broadcasting may be explored. Although, globally the UK Office of Communications (Ofcom) and the US Federal Communications Commission (FCC) regulate both telecom and broadcasting sectors.

(viii) Promotion of local content

Big companies such as Netflix, Amazon and Apple TV have entered into streaming services in a big way across countries including India. Various countries have devised regulations to encourage to make local content mandatory on these platforms, for example, EU Law Makers proposed a legislation that would require streaming services like Apple TV and Netflix to feature 30% European content. In Canada, the amended Federal Broadcasting Act has put obligations on global media platforms to subsidise the development, production and distribution of local entertainment and cultural content. France has proposed a similar draft decree.

(ix) Encouraging diversity in Workplace

There is a need to encourage gender diversity in the broadcasting sector in India. A study by BCWI of 2020 have revealed that only 1% of the companies in media and advertising sector constitute among the 100 best companies for women in India. The study surveyed new technologies, newspapers, digital and radio and the findings are alarming and require to be addressed by way of a national policy.

(x) Accessibility Standards

In India, the Government had initiated the accessibility India Campaign or Sugam Bharat Abhiyan in 2015. Government of India have enacted Rights of Persons with Disability Act, 2016 to enable persons with disabilities to give universal access, equal opportunities for development, independent living and participation in all aspects of life. Section 29(h) of the Rights of Persons with Disability Act, 2016 requires TV to be accessible to persons with hearing impairment. There is a need to enhance the accessibility by making significant changes to the infrastructure of information and communication systems by way of various measures including Captioning and Indian Sign Language for hearing impaired on television and creating enabling environment for other forms of disabilities.

(xi) Audience measurement

Audience measurement for both TV and Radio is important for broadcasters and advertisers for the evolution of a credible, transparent and state of the art, method for audience measurement. This is also absolutely essential for a democratic country like India and is necessary for its growth and development. The National Policy may provide the guiding principles for the viewership rating framework in India.

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