History of Broadcasting Service in British India: The Beginning

PROF.KALAM NARREN

Abstract: The history of broadcasting in India is a less trodden path till date. Unlike other technological marvels, who travelled from western part of the world to India during 19th-20th centuries, radio did not receive much needed push from the colonial government in India to make it commercially viable. On the other hand, when the huge potential of broadcasting had already been tapped by the governments of many countries for administrative efficacy, British Government of India did not even consider that aspect, at a time when they were still struggling to cope up with the huge landmass of undivided India, its society, culture, rituals; and moreover when the anti-British nationalist movement was on its rise. Though there were private amateur radio-enthusiasts in India, and continuous support from the BBC, the colonial government of India, for reasons unknown, was extremely apprehensive about launching a state-backed broadcasting service in India for initial years. But with the time, the British India government slowly changed its stance, especially when the Second World War was knocking at the door.

Key-words: Wireless, Radio, Broadcasting, British India Government, License

Introduction

Manoranjan Bhattacharya, a name famous in the genre of children literature in colonial Bengal, beautifully portrayed in his *Nutan Puran* (published in early 1930s) an imaginary World Badminton Championship where Indrajit alias Meghnad, son of Ravana, the King of Lanka in the epic *Ramayana*, thoroughly defeated Indra, the King of Gods, in the final match to win the title of the championship. He also narrated how Ravana, getting the news over radio, immediately ordered for a celebration in Lanka; or how did Sakuntala get the news of that celebration in Lanka while listening to the radio sitting on the banks of the river Malini. These references to radio in contemporary children literature make one understand two things: first that radio, as a technological spectacle, has by that time acquired a somewhat familiarity in the contemporary middle and elite class society, and second, people were startled by the power of

radio which could convey any message to people, near and far, in a flash, that too through audible medium. It was this second aspect which probably worked behind renaming of broadcasting as *Akash Vani*, a typical Indian classical way of expressing its appreciation and assimilation of something alien but unique, and tagging it to celestial authority.² However, the particular name, 'All India Radio' emerged out of a conversation between Lionel Fielden, Controller of Broadcasting in India and the then Viceroy, Lord Linlithgow. They felt that the words 'Indian State' of Indian State Broadcasting Service', functioning till then as the only custodian of broadcasting service in India, should be replaced, especially after the passing of India Act if 1935. So they thought of something which might communicate a pan-India flavour to the initiative, and thus the Indian State Broadcasting Service became 'All India Radio' on June 8, 1936.³

Hesitation

Although the telegraph and the railways had ushered in communication revolution in colonial India and helped the colonial authority to expand its tentacles of imperial design into this part of the world, including dealing with the Sepoy Mutiny and crushing it in 1857, it seems that the legacy of such modernising initiatives did not encourage the colonial administrators for further initiation of technological developments in this part of the world. However, since the beginning of the 1920s, the anti-colonial sentiment started to get a reoriented look with a new element of mass movement being introduced under the charismatic and media-aware leadership of M.K. Gandhi. Perhaps the inauguration of the Bombay wireless station particularly on the seventieth anniversary of the 1857 uprising (in 1927) denoted a recognition, and acknowledgment, within the colonial administration that radio broadcasting could have acted as an important tool for stronger functioning of the Empire as well as a potential technological deviation for the Indian common people. As it has been recognized that the monopolistic control of information strengthens the authority of those in power, and one would expect a colonial state (i.e. British India) to make the most of this device.⁴ The twenties of the twentieth century in India was marked by several new socio-political trends, including the Khilafat-Non Co-operation mass movement; all of which aimed the British India government as a potent factor to be dealt with. It is to be remembered in this context that Europe had already showed that the broadcasting medium could be used by Fascist Italy to manufacture an illusion of political consensus and by

the Soviet Union to broadcast revolutionary messages through the length and breadth of the former Tsarist Empire.⁵ Even in Britain, broadcasting media came to the aid of the ruling circles during the nine-day general strike in May, 1926.6 It goes without saying that with these international instances in the context, and given the contemporary socio-political scenario, the opportunities for this new wireless medium to effectively play in the social, cultural and political fields were unquestionably considerable. However, the early adventure of Indian broadcasting was, in reality, rather less straightforward than any such international lessons might suggest. Even the vision of wireless's future put forward in the Viceroy's speech would prove somewhat wide of the eventual mark. Indeed, looking back to the advent of the wireless broadcasting medium in India (and its reception by the public and the Imperial authorities) one is confronted 'with a distinctly turbulent early history; filled with moments of great technological promise and geopolitical opportunity followed by long periods of political and financial neglect, widespread mistrust (and misunderstanding), and an undercurrent of 'official' scepticism'. This was not in tune to all the earlier broadcasting experiences all over the world. It is because of 'a very particular set of geographic, political, social and economic conditions' that radio's growth in India got hampered and ultimately deferred from British, European and colonial 'models' of broadcasting development during the 1920s/1930s.8

Indifference

India entered into the 1920s with its first better-concerted mass movement, involving the Hindus and the Muslims alike to undo the 'wrongs' like the Khilafat or the Jaliwanwallabagh; and their common target was the British India Government. The movement was unprecedented in intensity, where involvement of many sections of Indian society, who were unrepresented till date, was a striking feature. M.K. Gandhi emerged as the most prominent leader of the Indian National Congress and the mood of the contemporary country, might be for the first time, wished to rise above the regular conflicts of self-interests, to the level of putting up a united front against the British India Government. Though the movement was suddenly withdrawn by Gandhi, especially because of his commitment to the path of non-violence, the nature of the movement raised many questions at the Government level. The colonial rulers did not see such mass mobilization for a common cause till that time.

Though the rising political consciousness among the Indians was transforming the political mood of the country very frequently in 1920s, the British Government in India did not show any interest towards broadcasting, the latest technological innovation making its mark across the countries (Argentina, Australia, Cuba, Canada, France, Germany, US, UK, and even Ceylon), to become a tool for the rulers to deal with contemporary situation. This initial indifference and consequent slow progress in the development of broadcasting in India can be attributed to the approach of Lord Reading, the Viceroy of India from 1921 to 1925. Rufus Issacs (later known as Lord Reading) was a liberal politician and acted as Lord Chancellor during 1910 to 1913 in Asquith's liberal cabinet. It was during this time that he got 'unwittingly involved' in a scandal about 'pushing the shares of the Marconi Radio Telegraph Company, of which his younger brother Godfrey Issacs was Joint Director'. 9 It is known that it was a rude shock for him and according to his biographer, Rufus Issacs never referred to again and it seemed that he was determined to blot out of his memory so harrowing an ordeal. Around ten years later, in 1921, when Rufus Issaes became the Viceroy of India, it was quite natural that no initiative at the level of the British India government was taken to finance the broadcasting under government control. However, in spite of this indifferent attitude on part of the British India government, private enthusiasts flourished in different parts of the country with their respective radio adventures.

Private Initiatives

The indigenous Indian radio enthusiasts had been energetically testing wireless technologies since the early 1920s. This early interest in radio in India was being driven largely by the Radio Clubs that had formed in the large urban centres of Bombay, Calcutta and Madras, through which educated and enthusiastic amateurs, backed by the financial instincts of both indigenous Indian and European (British) entrepreneurs, sought a rather more 'collective' approach towards this new scientific marvel.¹¹

It was in 1922 that F.E. Rocher, the Managing Director of Indian States and Eastern Agency Limited for the first time proposed for the introduction of broadcasting operation in India to the British India Government.¹² A few months later, this proposal was discussed in a broadcasting conference at Delhi, and following the resolution taken in that meeting, Marcony Company came to Calcutta. It was under their supervision and with the help of Marcony Type u.1.1/2 K.M. transmitter set, that the Bengal Radio Club started broadcasting on a limited scale from 'Temple

Chambers', a building near High Court. Limited broadcasting with these types of small sets also started in Madras and Bombay from 1924.¹³ It is also known that scientist Sisisr Kumar Mitra started broadcasting in 1926 from Ballygunge Science College in Calcutta on an experimental basis. 14 Apart from Bengal Radio Club, the Bombay Presidency Radio Club was an early leader in this field thanks to the efforts of Giachand Motwane, one of the Club's founding members, who is widely credited with having made the first recorded (i.e. 'noted') radio transmission in India, during 1920s.¹⁵ This was soon followed by commercially funded broadcasting experiments by the Times of India newspaper group and Bombay's Post & Telegraph (P&T) Office during the summer of 1921. Further experimental systems were recorded in Bangalore, Hyderabad and, again, in Bombay where several rival stations had been established, and fairly rapidly closed, during the early 1920s. The Chinoy brothers – R.M. Chinoy and Sultan Chinoy, the Parsee entrepreneurs, floated a company in 1923 called the Indian Radio Telegraph Company. They secured the technology of the Marcony Company and started constructing transmitters in Poona in 1925. 16 To the observers in Britain, the state of Indian broadcasting by the mid-1920s was for all justified reasons beginning to look rather haphazard, and was provoking murmurs of dissatisfaction in London broadcasting circles.¹⁷ However, it was with the foundation of the Indian Broadcasting Company that regular broadcasting to a certain extent started in India.

Indian Broadcasting Company

The Indian Broadcasting Company (IBC henceforth) was registered in July, 1926. One year later, its ceremonial inauguration (July 23, 1927) is generally considered to mark the beginning of organised broadcasting in India, and it took place only a matter of months after the British Broadcasting Corporation (BBC) was awarded its first charter to provide public service programming across the UK by the British government. The second broadcasting station was set up at Calcutta one month later, on August 26th. Though unlike many other technological innovations, 'the beginnings of broadcasting in India and Britain were almost contemporaneous' due to persistent indifference on behalf of the British India Government towards it at the initial phase, the broadcasting in India was on the verge of losing out its vast potential to become a tool for the rulers as well as the ruled.

John Reith, General Manager of British Broadcasting Company, approached the India Office on the issue as early as March 1924 by advocating the potential benefits of the burgeoning 'British model' (i.e. centralised, licensed monopoly) in transforming the broadcasting operations in the Indian subcontinent.¹⁹ It was further argued that the erection of broadcasting stations would provide a connecting link between all parts of the Indian Empire, bringing the most remote outlying districts into close touch with principal cities. In any other instance, contemporary political situation taken into account, an alert reception would have been expected. But for reasons unknown, as Reith later noted in his autobiography (*Into the Wind*),²⁰ that his appeal to the India Office (and a subsequent appeal to the Viceroy in 1925) bore no fruit despite clear evidences that anti-colonial sentiment was clearly mounting among the people of British India.

By 1926, British India Government, guided by the 'Retrenchment Committee' (which sought to reduce post-War governmental spending) and some influential financial officers settled on a less interventionist approach to the broadcasting question, proposing instead to support an application for a commercial broadcasting license (on a monopoly basis) by the recently-formed Indian Broadcasting Company (IBC). Shortly after receiving confirmation of the IBC plan Birkenhead, then the Secretary of State for India, wrote privately to the Viceroy on the subject of "broadcasting in India". Invoking Reith's proposed benefits of a widespread broadcasting network connecting "all parts of the Indian Empire" he wrote,

So far as I can judge, the Company to which a monopoly has been given for five years intends to do business with the English speaking population, that is to say Europeans and the educated Indians of the cities. Their installations at Bombay and Calcutta, each with a radius of 1,000 miles will hardly touch the northern part of the Punjab or any part of the Frontier Province ... The man who we wish to reach is not so much the resident in the city as the inhabitant of the small town and large village. He is the man who is most behind in knowledge of events and most liable to be misled; at the same time he is the man on whom a good influence would have the greatest result.²¹

This was a highly significant intervention, as there were clear concerns in London that the proposed system of commercial broadcasting would fail to reach the very people who, in the opinion of the India Office, needed to be contacted most; in particular India's rural populations and the Hindi, Urdu and Bengali-speaking inhabitants of the main cities. Far from being a call for vernacular education and or entertainment, Birkenhead's interventions were being driven by,

what appears to have been, growing sensitivities within the India Office to the potential strategic and geo-political value/influence of radio across British India, and in the most remote Frontier Provinces in particular.²² The final paragraph of Birkenhead's correspondence provokes a clear sense of urgency in tackling this issue:

I imagine that to establish a custom of the use of receivers with loud speakers for the benefit of assembled villagers, it would be necessary at the outset for Government and the Company in association to send round a small travelling staff with receivers to tour some of the more important villages in each district. I am convinced that immense possibilities lie behind these suggestions. I beg of you to give them your earnest and personal attention.²³

Irwin's reply (dated 9th September, 1926) rather downplays Birkenhead's chief concerns, offering only an air of concordance on the 'general importance' of Indian broadcasting, while providing a more pointed reminder that, 'up to the present day the policy of the Government has been to leave broadcasting to develop naturally under private enterprise'. As Irwin continued, however:

We are... fully alive to the fact that if progress of broadcasting in India is in any way to resemble that in the United Kingdom, it will have to be considered whether Government should take a more active part... Our two great difficulties will be: -1) the multiplicity of languages, and 2) the cost of receiving sets, which are beyond the means of the ordinary peasant. Neither difficulty, I think, ought to be insuperable.²⁴

Nonetheless, despite these apparent concessions from the Viceroy on 9th September, there is no evidence of their subsequent translation into affirmative action with regard to the IBC policy and/ or remit. Under the terms of agreement with the Government of India which were concluded on 13th September 1926, IBC undertook to be and remain a genuine Indian company, install and start working within nine months, efficient broadcasting stations in Bombay and Calcutta, expand the service, if commercially practicable, and allow any bona fide importer of wireless

apparatus to be a member of the company. In return, the government gave it a five-year monopoly and promised to pay it 80% of all license fees received on account of wireless stations in British India (excluding Burma) from the date the broadcasting service started.²⁵ The effects of the IBC's launch were swift to be felt as the commercial backers became hungry for financial returns. The reign of India's amateur 'Radio Clubs' was brought to a resounding end as the IBC, floated by the prospect of revenue generated from the sale of radio licenses, exercised the rights and privileges (and authority) granted to it under the terms of its five-year broadcasting agreement.²⁶

It is of immense importance to reassess the speech given by the successor of Lord Reading, i.e. Lord Irwin, as the Viceroy of India to understand the slow change in the attitude of the British India government towards broadcasting in India. In his inaugural speech at the inauguration ceremony of the Indian Broadcasting Company, he said:

India offers special opportunities for broadcasting. Its distances and wide spaces alone make it a promising field. In India's remote villages there are many who, after the day's work is done, find time hang heavily enough upon their hands, and there must be many officials and others whose duties carry them into out-of-the way places, where they crave for the company of their friends and the solace of human companionship. There are, of course, too many in households, those whom social customs debars from taking part in any kind of recreation outside their own homes. To those and many more broadcasting will be a blessing and a boon of real value. Both for entertainment and for education its possibilities are great, and as yet, we perhaps scarcely realize how great they are! Broadcasting in India is today in its infancy, but I have little doubt that, before many years past, the numbers of its audience will have increased tenfold, and this new application of science will have its devotees in every parts of India.²⁷

With these words began the history of regular broadcasting in India under the Indian Broadcasting Company. The effective range of Bombay and Calcutta stations was about thirty

miles. Whether for education or entertainment, companionship or culture, Irwin anticipated a rapidly developing 'listenership' and that before long, such were the 'special' geographical opportunities provided by the subcontinent's scale and open spaces -'broadcasting' would attract devotees in every part of India.

However, by the end of 1927 only 3,594 radio licenses had been issued. India's physical geography too considered by Irwin to be the basis of broadcasting's "special opportunities" in the subcontinent rather backfired against the IBC's commercial development, because of vastness of landmass accompanied by socio-cultural variety. In addition, the questions of how radio would be powered in the rural areas, and how to pay for expensive facilities and expertise, all of which would have to be imported, were sufficient discouragement to most. Combined, these inescapable realities of the Indian geographical and demographic landscape left an increasingly costly wireless network without the subscriber-base needed to achieve a necessary financial return. This was a very different set of circumstances to those being experienced in Britain and continental Europe.²⁸

The IBC's broadcasts suffered both in terms of 'range' and 'reach'. While the costs of expanding wireless networks beyond the urban centres of Bombay and Calcutta was prohibitively expensive, the root of the problem lay in the IBC's failure to achieve and consolidate sustainable audiences (i.e. an ample 'reach') in those spaces where their transmissions were already audible. Broadcasting from their two stations, located in Bombay and Calcutta, they catered to the small European community and westernised Indians while ignoring the masses. This neglect was to prove a costly (if not unforeseen) error of judgment. By February 1930 the IBC's finances had reached crisis-point, forcing the company into liquidation on 1 March 1930. Indian broadcasting, after less than four years of centralised operation, was officially bankrupt.²⁹ In a so-far unnoticed turn of speed, the British India Government agreed to meet the costs of the liquidation process. Even more interesting was the announcement almost one month later that the Government had decided to purchase the assets of the IBC, which were to be placed under the control of the Department of Industry and Labour.³⁰ This may simply have been a kind-hearted bailout plan for the affected shareholders, but what is certain is that this represented a major and dramatic shift in government policy which, for almost a decade, had been primarily concerned with reducing government expenditure under the terms of the post-War Entrenchment Committee. Nevertheless,

'the IBC's new status as a branch of government necessitated a change in the organisation's public identity; its name stripped of commercial overtones and replaced with a designation more in tune with the Reithian notions (prevailing in Britain) of broadcasting as a 'public service'.'³¹

The Indian State Broadcasting Service

The Indian State Broadcasting Service (ISBS henceforth) was inaugurated within the Department of Industry and Labour on 1 April 1930. It was exactly the time when the nationalist movement of India was witnessing its second large-scale mass movement, i.e. the Civil Disobedience Movement. This is to be mentioned here in this context that this famous Dandi March of Gandhi, ended at the small village of Dandi in Gujarat, attracted enough press coverage, especially at the international level, thanks to the American journalists and photographers. Gandhi's Dandi March exposed the nature of British rule in India at the international level. From all rational angles, it seemed to be an opportunity for the government to utilise the newly re-designated Indian State Broadcasting Services (ISBS) in the service of Indian state consolidation and political unity, and to counter of the charge of misrule in India. And yet, Indian broadcasting continued to limp, for reasons unexplainable, shrouded in a state of inactivity. The events of early-1930s seem to have dented the wiser public (i.e. British Indian) belief in wireless broadcasting as a sustainable medium - a mood reflected in the number of radio licences in force which declined for the first time since 1927. With the acute economic crisis worldwide (after 1929) and 'the deflationary policies being pursued by the Government of India, the Department of Industry and Labour also appeared to lose faith in the future of wireless broadcasting, announcing the ISBS's "imminent closure" on 9 October, 1931.'32 Radio, again, seemed to have failed in exploring its potential with regard to unifying British India, and appeared fated to fail in exploiting it.

In Britain the news of ISBS's closure evoked with huge dismay. The Federation of British Industry again approached the India Office throughout the winter of 1931 to reconsider the reported closure. This time the campaign, again for reasons unknown, led to some positive response and the future of Indian broadcasting was again placed 'under review'. By 23rd November, 1931, it had been decided that broadcasting should be allowed to continue, for an interim period, for further assessment. For one full year, the operation of the ISBS was put under scrutiny. This time gap was proved to be vital, as it turned the table in favour of ISBS. In late December, 1932 there seemed to be a change in fortune for the ISBS which, significantly, had

rather less to do with interventions from the Government than a 'broader paradigm shift in the broadcasting landscape of India, and, indeed, the British Empire as a whole'. There was a sudden increase of licensed listeners, 'the total at the end of 1933 being 10,872 and at the end of 1934, 16179'. ³³ There were reasons behind this sudden increase in licensed listeners, which has been summed up in an analytical way:

The sudden increase to 16,000 licenses during this period must, therefore, be attributed to another factor, namely, the opening of the BBC's Empire Service in 1932 (December 19th) and the consequent purchase of sets by a large number of Europeans in India. From 1934 onwards, when talk of further development of broadcasting accelerated still more licenses were there; the total reaching 25,000 at the end of 1935, 38,000 at the end of 1936 and 50,000 at the end of 1937.³⁴

However, this has to be admitted that the Empire Service bolstered Anglophilic expectations for radio of the elite Indian subscribers, aiming primarily the resident Europeans, but did little to attract a broader band of Indian listeners. Still, by the late 1930s, within eight years following the Empire Service's inauguration, wireless broadcasting in India appears to have witnessed an important change, and, finally, seemed to have found its evolutionary path towards maturity, so far as its technological reach was concerned. By the beginning of the second World War, license subscriptions in India totaled almost 74,000, a tenfold increase over the 1932 figure.³⁵ It was now a situation when radio listeners could hear programmes redirected from transmitters located across the country; from Peshawar and Lahore in the North-West Provinces, through Delhi and Lucknow (United Provinces), to Calcutta and Dacca in Bengal in the east. Further west and south, shortwave (SW) and medium-wave (MW) transmissions from Bombay and Madras broadcast out over large sections of central and southern India with a radio network that catered for both urban and rural audiences.³⁶

Conclusion

Broadcasting is both public and intimate. The voice addresses millions but speaks only to the unit of two or three; to units, moreover, whose attention must be chiseled out from other pursuits. The ear, divorced from the eyes, makes new demands. In the intimacy of the listener's private

space, the great singer, so popular at music conferences, has not, after all, so good a voice; the orator who easily sways a crowd, becomes a monotonous sound effect; the academician, who holds so many degrees, is unexpectedly dull and tedious. The honours of broadcasting go only to those people who can present their material effectively, whether through some happy combination of voice modulation, manner, material, or through a flair for devising programmes in a way, which captures listener's imagination. The ultimate aim of broadcasting may be wider, but there is no escape from the fact that first and foremost, it must please the listener. A book, a film, a play or a newspaper can make its appeal to certain sections of people, and ignore the rest. But broadcasting cannot and must not afford to ignore even a single person and must attempt to cater to all. The success story of radio, especially in post-independence India, proves this point beyond doubt that compared to other technological tools introduced in colonial India; radio stands out as the only one which proved to be essentially a tool that held high the claim for democracy, a tool that could successfully connect to the cross-section of pluralist Indian society.

End Note

¹ Indira Biswas, Sambad Kathai Betar Jagat (in Bengali), 1929-1944, Kolkata, 2012, p. 17.

² In September, 1935 Akashvani Mysore, a private radio station was set up by Prof. M.V.Gopalaswamy, a Professor of Psychology in University of Mysore, which, over the years, evolved into a professional broadcasting institution. In fact, he is credited with having given the Indian Name *Akash Vani* to All India Radio. When Ashok Kumar Sen became the Director of AIR, Rabindranatha Tagore sent him a poem on August 5, 1938, where he wrote, *Dharar Angina Hote Oi Shono/ Uthilo Akash Vani/ Amar Loker Mahima Dilo Se/ Martyalokete Ani*. ['From the Earthly paradise/ Listen to the celestial song/ Which brought the message of the immortality/ to the mortal world of ours.': (Translation by the author)] The confusion is still there regarding the origin of the name of *Akash Vani* and people are divided between Tagore and Gopalaswamy for the credit to be conferred upon.

³ Lionel Fielden, , *Broadcasting in India: Report on the Progress of Broadcasting in India*, Delhi, Simla, 1940, p. iv.

⁴ Partha Sarath Gupta, *Radio and the Raj*, Calcutta, 1995, p. 1.

⁵ Ibid.

⁶ Asa Briggs, *The B.B.C.: First Fifty Years*, Oxford, 1985, pp. 96-97.

⁷ Alasdair Pinkerton, 'Radio and the Raj: Broadcasting in British India (1920-1940'), *Journal of the Royal Asiatic Society*, Third Series, Vol. 18, No. 2 (Apr., 2008), p. 168.

⁸ Ibid.

⁹ Partha Sarathi Gupta, *Radio and the Raj 1921-47*, Calcutta, 1995, p. 4.

¹⁰ H. Montgomery Hyde, *Lord Reading*, New York, 1967, p. 161, cited in Partha Sarathi Gupta, Ibid.

- ¹⁵ Alasdair Pinkerton, Op. Cit. p. 170.
- ¹⁶ Partha Sarathi Gupta, Op. cit. p. 4.
- ¹⁷ Alasdair Pinkerton, Op. Cit. p. 170.
- ¹⁸ Partha Sarathi Gupta, p. 1.
- ¹⁹ Alasdair Pinkerton, p. 170.
- ²⁰ Ibid.
- ²¹ Ibid. p. 171
- ²² Ibid.
- ²³ Ibid
- ²⁴ Ibid.
- ²⁵ Partha Sarathi Gupta, *Power, Politics and the People: Studies in British Imperialism and Indian Nationalism*, London 2002, p. 173.
- ²⁶ Alasdair Pinkerton, Op. Cit. p. 173.
- ²⁷ Ibid.
- ²⁸ Ibid. p. 174
- ²⁹ Ibid. p. 175
- ³⁰ Lionel Fielden, *Broadcasting in India: Report on the Progress of Broadcasting in India*, Delhi, Simla, 1940, p. x.
- ³¹ Alasdair Pinkerton, Op. Cit. p. 175.
- ³² Ibid. p. 176
- ³³ Ibid. p. 177
- ³⁴ Lionel Fielden, Op. Cit. pp. 1-2
- ³⁵ Alasdair Pinkerton, Op. Cit. p. 178
- ³⁶ Ibid.

¹¹ Alasdair Pinkerton, Op. Cit. p. 169.

¹² Pon Thangamani, *History of Broadcasting in India with special reference to Tamilnadu 1924-1954*, Chennai, 2000, pp. 21-22.

¹³ Indira Biswas, Op. Cit, pp. 18-19.

¹⁴ Ibid.