Independent Broadcasting in Ghana

Implications and Challenges

Edited by
Kwame Karikari
INDEPENDENT BROADCASTING IN GHANA
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IMPLICATIONS AND CHALLENGES

Edited by

KWAME KARIKARI
Acting Director, School of Communication Studies
University of Ghana, Legon, Ghana

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This book is a vivid testimony of Ghana’s recent efforts towards democratizing her media systems and organizations. It represents a major landmark in the road towards freedom of the press in the African context. The battle for access to free speech and flow of information in Ghana takes place within a worldwide context of popular resistance, struggles for national liberation and the control of power, knowledge and free expression. Things are not any easier or less difficult than elsewhere in this respect in this blessed land which witnessed Kwame Nkrumah’s brilliant saga. But given the magnitude of the economic, social and political crises in Africa, it is appropriate to raise a fundamental question: why is progress with regard to freedom of the press in general and more particularly in the area of radio broadcasting so slow in taking root in this continent?

It is important to examine this question from a historical standpoint. Historians recognize that humankind’s primary communication revolutions took place in Africa. It is here that the first separation between the sender and receiver of a message took place through cave paintings. The second major break in communication’s history was represented by the advent of writing through thousands of years of hieroglyphical systematic abstraction in ancient pharaonic Egypt. The third communication revolution in world’s history was initiated by the Ashantis in particular and before them by the ancient Egyptians who were able to relay the first coded signals over considerable distances using “talking” drums and a sophisticated telegraphic language before Morse’s invention in the nineteenth century. When Gutenberg started his first experiences within a context dominated by Europe’s feudal and religious contradictions during the Middle Ages, Africa was still able to preserve and use her writing systems in the Congo, Mozambique, Ndebeleland, Angola, and other kingdoms as demonstrated by the Congolese historian Theophile Obenga.

The loss of leadership in world communications is a recent phenomenon in Africa. It coincided with her decisive encounter
with Western and Arab civilizations in the past four hundred years. It culminated in the advent of the submarine cable which was used during the Ashanti war to defeat militarily one of the most enlightened political leaderships in the African resistance movement. The advent in 1935 of the first wired radio distribution system in Accra took place at a time when Africa was in a posture of total defeat. The late Professor Paul A.V. Ansah gave in his *GBC Golden Jubilee Lectures* a vivid description of the Empire Broadcasting Service in British-ruled tropical Africa. Ansah contended that “radio was to cater for the information, cultural and entertainment needs of the political and educated élite who consisted of European settlers, colonial administrators and the small group of educated Africans.” In France’s empire in Africa, the Société de Radiodiffusion de la France d’Outremer carried out the same elitist and repressive approach to radio broadcasting as described by Francis Bebey in his excellent book *Radio Broadcasting in Black Africa*. In the Portuguese territories, the state of radio broadcasting was even worse given the backwardness of Portugal’s colonial apparatus as suggested by Sidney Head’s book *Broadcasting in Africa*.

Africa’s radio broadcasting systems of the post-colonial era are but a pale carbon copy of the former colonial systems’ radio broadcasting philosophies and practices. Fundamentally, the description given by Ansah of the first radio distribution systems in Africa is still valid with the exception of a few externally-driven traps like the *mass* variable which is a strong indicator of Africa’s total domination by the mega corporations of the *wired world*. Many African journalists were killed over the past decades. A considerable number of media scholars and practitioners are still being jailed and tortured for their professional integrity and the correct fulfilment of their daily responsibilities. For most of them, the concept of a *global village* advocated for by Marshall Mac Luhan is a hoax. They know that internationally as well as nationally the media are still ruled to a great extent by a selfish, arrogant and sometimes unSophisticated greedy élite of managers, false prophets and megalomaniacs.
Time has come for change in Africa. The principles and ideals of popular democracy are taking place slowly but decisively throughout the continent. It is encouraging to see criers selling diversified products of the press in the streets of Lagos, Dakar, Nairobi, Bamako, Cotonou or Harare. There are also signs for hope in the advent of free commercial, independent and community-based radio broadcasting experiments throughout the continent. But Africa is still in the darkest ages of communication's history and world broadcasting.

The African élite must recognize that radio is not necessarily and only a tool for political and dictatorial propaganda. Radio is a tremendous means for scientific education, political enlightenment and socio-cultural progress. It can even become a major channel for empowering the disenfranchised through the utilization of national languages and their promotion as official languages.

If radio is to become the voice of the voiceless and a conveyor of popular will in the African context, it must fulfil two basic needs of the audiences. First, it must disseminate information and news relevant to the economic and social dignity of civil society understood here as people's organized elements completely marginalized by state power and its international allies. Secondly, the message conveyed must be the expression of popular control over the minority of professional politicians and not the means through which a silent majority is stifled.

Participants to the national debate on radio liberalization in Ghana organized by the graduate School of Communication Studies, University of Ghana, Legon, discussed complex issues like the legal and technical implications for a fair access to the airwaves, the necessity to enact new legal instruments guaranteeing the protection of journalists but also of privacy and the pressing demand for the creation of a national body entrusted with the powers of decentralizing and democratizing the management of radio broadcasting services in the service of all. The recommendations of this national workshop represent a major step forward in Ghana's efforts towards nation-building and national democracy. It is hoped that they will
assist the national authorities and civil society to place radio broadcasting in Ghana in a worldwide movement for democratic development and popular empowerment.

The paragraphs above represent my personal reading of communications history and the role of radio broadcasting in post-colonial Africa.

The credit for expressing myself as freely as I did here must go to the International Development Research Centre (IDRC) who generously contributed to the organization of the Conference on Privatization (democratization) of Broadcasting in Ghana in March, 1993.

Through an innovative programme on the Democratization of Communications (DEMCO) launched by the Centre’s Regional Office in Western and Central Africa, IDRC in cooperation with other institutions has played a key role in providing assistance to governments (Mali, Senegal), associations of journalists (Niger, Senegal), research institutions (Ghana, Cameroun, Nigeria, Côte d’Ivoire), regional programmes like the PANOS Institute’s project on Radio Pluralism in West Africa, and Pan African gatherings of scholars and practitioners of the African Council on Communication Education in Ouagadougou, Cairo and this year in Accra. Our task in Ghana was facilitated by Mr. Kwame Karikari, Acting Director of the School of Communication Studies, University of Ghana, Legon.

Dr. Jacques Habib Sy
Senior Program Specialist
International Development Research Centre
Nairobi, Kenya.

September, 1994.
Acknowledgement

The success of the Conference was made possible by the commit­ment of the entire staff of the School of Communication Studies.

Special mention must be made of Mr. Kwame Karikari, Lecturer, who was Principal Coordinator of the Conference, Dr. A.K. Bonnah Koomson, Lecturer, Co-Cordinator, and Ms. Margaret Ivy Gyan, Assistant Coordinator, who supervised the administrative work of the conference organisation.

Mr. H.K. Deih, Principal Administrative Assistant of the School, tirelessly typed all the conference documents and typeset the entire book.

Finally, Prof. P.A.V. Ansah, who was then convalescing from ill-health, was our indispensable Consultant. The Conference was to be his last major public programme with the School. Sadly, he passed away three months later on June 14, 1993. May his soul rest in perfect peace.
INTRODUCTION

*Kwame Karikari*

What started as optimism for democratic political reforms across Africa seems to be giving way to despondency and cynicism. Euphoria is being replaced in places by creeping apprehension about reviving authoritarianism. Restoration of press freedom, celebrated by a harvest of newspaper publications, is waking up to the jolting reality of a bumpy road full of restrictive laws, intimidation by ultra-sensitive politicians and, at the least, demand for high professional ethics and standards, and the harsh facts of economic constraints.

In this highly fluid political context, though, the one outstanding historic development is the rise of independent broadcasting — particularly of Radio: the end, or abrogation by law and/or in practice, of state monopoly of Radio/TV broadcasting in many countries.

Radio today is as indispensable to the existence, cohesion and development of modern society as oxygen is to the survival of living beings. With Television, and both supported by satellite and other new communication technologies, the two electronic media of mass communication — to repeat a cliché — are making the world much smaller than any prophet could have dreamt only decades ago.

The strategic place of Radio and TV in modern state entities as effective media of mass communication, of mass education for social awareness, of cultural enlightenment, of advancing commercial activity, and even of contributing to imparting scientific and technological knowledge and innovations, is not a debatable issue anymore.

For Radio particularly, its accessibility — in terms of affordability, ubiquitous message transmission — to rural, particularly non-literate, populations is incomparable. For development purposes, the accessibility of Radio in terms of language use makes
it a most effective mass medium.

The absence of a national Radio broadcasting system in any country today would, therefore, approximate a sudden descent of darkness at noon. The void thus created would engender a social confusion whose political, cultural and economic consequences, though impossible to quantify, would be enormous indeed.

It would seem difficult to imagine how, for example, in the absence of Radio/TV broadcasting, people in a country would synchronize their watches and clocks — to pose a seemingly mundane issue. In fact, historically, this has been an important effect of Radio broadcasting. It is no more mundane if we consider the significance of standard time to production and social organization. It has been observed that in Britain,

Radio was to bring the precise measurement of time into the home. It was engaged in the domestication of standard national time. Of course, there were clocks in the home long before radio arrived, but it was only with the wireless that nationwide, indeed worldwide, time could be relayed directly into the private sphere.1

This would apply to the colonies as well where the BBC dutifully relayed the imperial chimes of the Big Ben.

On a political note, however, for the liberal democratic as well as the authoritarian political system, the electronic media serve as efficient, indeed indispensable, channels of reaching the people in a state with laws, policies and programmes. In today’s multi-ethnic (or multi-racial) societies, as is characteristic of Africa’s countries, mass media’s role for promoting social and political integration and the processes for nationhood cannot be over-emphasized.

While they may not stop or eliminate divisive social strife, it is being argued that the absence of broadcasting would tend to favour, rather than otherwise, the conditions for divisiveness. The absence of Radio/TV broadcasting would contribute to creating a favourable condition for a drift into narrow communal and ethnic self-centredness with all its dangerous social consequences. This is crucial for countries still struggling to improve the standards and
conditions of political and material life of the peoples, countries striving to develop. This is a phase in which the mass media are most required “to proliferate symbols and information supportive of a sense of national identity.” Indeed, a mass resort to listening to only foreign broadcasts would not solve the problem, but more likely thwart the shaping of national cultural self-identity and self-confidence.

The potential of using the electronic media to promote democratic and progressive socio-political development has never been as urgent as today, when all over Africa peoples strive for structural reforms and a new order of liberalism, openness and participation. These are media appropriate for audience participation. And in a situation of pluralism, they could make immense contribution to open discussion of issues of popular and community concerns. Additionally, they are best placed to promote public education on constitutional matters and to sensitize public opinion on issues of democracy and human rights.

Though the exact impact of mass media on influencing attitudes and behaviour may be immeasurable and debatable, there cannot be a controversy over the fact that they are still important channels for creating, at least, awareness about development issues. “The value of radio as the most economical instrument over other technologies of instruction is a universal given.”

Despite problems and difficulties which various studies have observed about the use of Radio for education, literacy and development, there is still a universal support for its continued utilization as such. The argument is that the potential of the medium as an instrument to promote social change through education is under-utilized. In Africa, it is observed that the problem is inadequate, improper use of the medium, making Radio one of the “wasted resources.” Meanwhile, it is strongly advocated that a reorientation of programming and organization would improve drastically Radio’s contribution to education and development.

Though interpersonal communication, through, for example, agricultural extension officers, public or community health nurses,
has helped to bring to rural people crucial information about fertilizer, new seeds, purchasing depots, or immunization and new and better health attitudes and practices, the success of some of these development projects is also largely attributable to electronic media intervention. Indeed, these mass media bring to the notice of the world in good time for solutions, incidence of epidemics, disasters and other calamities when they occur in provinces very remote from the centres of political and economic power.

There abound, for example, several favourable reports about Radio listener groups as forums for providing conditions for greater impact of the medium for development. These cover cases from African as well as Latin American or other developing countries. The challenge, overall, is that, “The mass media, if they disseminate ‘modern’ values, have generally positive effects on developing countries.”

But societies do not exist solely to subsist, work and “develop” their material conditions. Indeed, this never-ending enterprise of “development” must involve cultural and artistic advancement. Entertainment is a major mode of cultural expression as well as of promoting leisure which constitutes one important measure of a people’s standard of living, that is, levels of development.

As the 20th century closes, it could only be a woeful experience for a people in a country if they were deprived of first-hand experience of some of the spectacle from an Olympiad, a world soccer cup final, a regional athletics encounter, even the exploits of their own sportsmen in the city.

More devastating, would the absence of broadcasting be for the development of local artistic and cultural creativity? How would musicians improve their art? Who would know them — their recordings — beyond the confines of a local palm-wine or beer bar, or at best the homes of the few who can own record or audio cassette players? The storytellers, folksingers, dramatists, comedians — indeed generations of performing artistes — are threatened with a silent death where no mass media exist to enhance their creativity. And that goes with it a vital economic activity and incomes.
Business is doomed to shrink where channels for advertising are blank, where channels for information about consumers' needs and manufacturers' and sellers' responsibilities are blocked, or terribly impaired. Without Radio/Television broadcasting today a country is rendered vulnerable to impediments to development, much as human beings would be to famine if they lost their knowledge and tools of food production.

Fortunately, Ghana is far from such a deprivation. The challenge today is for an expansion of ownership, control and output of these media of mass communication to serve purposes which express and satisfy larger and wider interests than the state has provided in its more-than-half-century monopoly. The demand is part of the universal striving in Africa for broadening the content of and participation in public discourse through these media, unfettered by the whims of political authority or the intimidations of narrow-minded sectarianism.

Whereas the demand for mass media pluralism responds to the state's political abuses of these technologies as instruments of ideological aggression, the phenomenal advances in and simplification of the new communication technologies (as shown in a number of the presentations below) have made the demand a practicable, realizable project. When individual citizens and groups can afford to own and operate technology to enhance expression of views independent of state authority, it is no more acceptable to tolerate a monopoly of the channels. Sooner than later it becomes impossible to maintain or justify that monopoly.

The question is not any more whether independent broadcasting must be permitted. Where, as in Ghana, it has not started, the question is how soon. Independent broadcasting is here to stay. What this means for free expression, or the manifestation of pluralism of ideas in public affairs, could be far-reaching. At this moment it will be highly speculative to conjecture how emerging independent broadcasting will enhance the advancement and improvement of the material, political and cultural conditions of life for the peoples.

Precisely because of that uncertainty, the School of Communication Studies, with support from the West Africa Regional Office
of the International Development Research Centre, Dakar, organized a National Conference on the Privatization of Radio and Television on March 1-3, 1993, to raise public discussion with the hope of influencing public opinion to promote legislation supportive of pluralistic broadcasting as guaranteed by the 1992 Constitution.

The vision is that improvements in economic and cultural conditions would be served better by mass media freed from monopoly by the state. Further, ideological and political pluralism without mass media pluralism is severely circumscribed.

As stated elsewhere, pluralism is nothing else but the free expression of social and political reality. That is, pluralism is not a simple question of numbers. It is the absence of monopoly and uniformity in social and political life. It demands that variety, difference, contrariety, divergence are permitted, tolerated and even encouraged. Society itself is characterised as such, both in its natural and social expressions.

Applied to the mass media, it demands the existence of publications, radio or TV stations free to express and exhibit the ideological expression of this: in politics, in religious beliefs, in economic policy perspectives, in cultural diversity such as the use of any language and respect of differences in practices.

It is expressed in terms of diversity of ownership patterns: private, public, state, commercial, non-profit. It is manifest in the variety of organizational and management structures and practices. Media pluralism supposes and must express diverse objectives, ideological and political orientations, and audiences. It is, at the end of the day, how diverse are the opinions promoted, and the breadth of programme output and the social interests they satisfy.

But when we crave for pluralism in Radio broadcasting, it may not be enough to be satisfied with the existence of stations manifesting the attributes of pluralism. In any case, much as we may wish it, the outcome will be dictated by the reality of who has the wherewithal to invest. This is where the real test of how truly plural the mass media will be comes up.
Who will wield the social and economic power to invest? Would not “pluralism” be circumscribed by cash flow? That is, will pluralism not be a preserve of the elite? Indeed, may it not be dominated or extremely influenced by foreign interests? Corporate bodies of a non-economic character, such as political parties, religious organizations and trade unions may be able to invest in broadcasting stations. Would the peasantry - the majority unorganized mass of the poor in our rural areas - be part of this development? Would the rural areas be covered? Who would pay for that?

Regardless of the geographical location and coverage of radio broadcasting, would content be pluralistic enough to respond to the needs of lower social classes? Or would they be devoted to the interests of the elite, while only incidentally providing doses of “development” messages underived from the total social experiences of these social groups?

Can, or will the new stations move beyond confining political debate among the urban (and “traditional”) élite? Can they broaden social discussion to include women’s issues over and above the traditional women’s programmes on home management? Will peasants, the working classes, the media-marginalized in society be part of broadcasting pluralism?

When some measure of concern is shown for the marginalized, can programming on new stations minimize the traditional didactic role of the well-known “rural radio,” always teaching and preaching, and provide space for these social groups to express their realities by determining programme content and format? Can or will new stations resist the temptation to seduce the public with cheap but profitable “pop” music?

Independent TV stations may face this latter challenge more strongly than Radio. The capital outlay for TV and the running costs for original programme production or acquisition of high-standard productions are considerable. The easier attractions to an entrepreneurial class traditionally dependent on or suffocated by external capital, and subsisting in a dependent economy where survival hinges desperately on quick and immediate returns, are to be either junior partners (holding franchises) to foreign investors in the industry, or to rely on cheap, sub-standard foreign mass produced
programmes with dubious cultural relevance. Either way pluralism so founded is circumscribed and lame.

It could also be asked: is pluralism not possible under one centralized national broadcasting system, state-owned or public-owned?

Technically, numerous community-based Radio (and TV) stations can be established under the ambit of a single, central national system. The Ghana Broadcasting Corporation, for example, is setting up FM stations in all regional capitals, in addition to district stations at Apam, Dormaa Ahenkro, and Swedru (which has transmitters supplied by the School of Communication Studies) as well as others planned for the future. Decentralization of the management system and autonomy in programming for localized public or state-owned stations may promote a measure of independence and diversity particularly in linguistic and other cultural expressions. Whether or not such stations would be able to broadcast diverse political and social views would require their autonomy from national and local political elites and dominant economic interests.

P.A.V. Ansah noted that,

Centralization of radio has limited access by linguistic, cultural, and religious minorities and led to calls for decentralization to encourage more local programming and therefore greater access by minorities and other interest groups. But even if a certain amount of decentralization is conceded, it will bring about only a limited amount of pluralism, because ultimate control will still be vested in the state.8

The problem remains also that regardless of intent, for one thing, the political attitudes and democratic culture necessary for effective insulation of the state from state-owned broadcasting stations are still in their formative stages of development in Ghana. The tendency of the state and officials to view public debate as an exclusively official exercise is far from bridled. Besides, individuals and groups may set up broadcasting stations as of right to offer different, divergent, even unpopular viewpoints. That way certain
specialized interests may be catered for.

Would, on the other hand, absolute privatization ensure pluralism? That would seem to equate pluralism with the facade of numbers. What if the terrain is occupied only by those with the wherewithal to invest? Indeed, a bastardization of pluralism under absolute privatization would be the result particularly where a system of broadcast networks comes under the monopoly of a few entrepreneurs or a handful of sectarian organizations. The profit motive would dictate that investors scramble for urban stations and tailor programming toward material and audiences attractive to advertisers. The rural areas and economically deprived communities and social groups stand to be media-deprived. It would be cheaper, convenient and easier under the circumstance for stations to churn out entertainment and shun public affairs programming.

How then can we ensure that pluralism in broadcasting manifests the diverse political, cultural and social interests?

The state’s establishment of localized stations is welcome provided that these stations do not monopolise the radio spectrum, that management and programming are decentralized, the public have a say in these matters, other forms of ownership are encouraged and protected by law, and that access is not monopolized by ruling political parties. The Conference proposes appropriately a supervisory role for the constitutional body, National Media Commission; a truly independent body to oversee allocation of frequencies. But beyond the state and the private entrepreneur, again P.A.V. Ansah’s proposal provides a framework for serious consideration. Thus:

One possible way might be to establish a kind of partnership between the public sector and the private or non-public sectors (non-governmental organizations such as cooperatives, church organizations, universities, labour unions, civil liberty unions, consumer associations, women’s organizations, and environmental protection associations). These groups could operate broadcasting stations and thus provide alternative voices and ensure greater access without being compelled by purely profit considerations. Such partnerships could ensure pluralism and diversify and encourage participation in cultural policy making, promotion, and dissemination.
All the advantages of localized radio using FM transmitters notwithstanding, the system by its very nature is parochial in orientation. Its signals are limited to small geographical enclaves. The tendency to foster communal narrowness would be strengthened where audiences have access to only or mostly FM-only receiver sets which cannot pick up distant short-wave signals. The effects are more significant where programming is so narrowly-tailored that audiences are over time cut off from larger, national or global issues and occurrences. To minimize this, stations must be required to devote some time to national public affairs programming. FM-only receiver sets, which are normally cheaper on the market, may be discouraged, and the Ghana Broadcasting Corporation’s short-wave transmissions must be sustained to provide these important services of a national, global perspective. Local stations must complement the national service by providing those community-specific or special-audience needs which the former cannot and does not provide. The local and particular must combine with the national and general to satisfy local and national interests and development.

In sum pluralism in broadcasting is an outlet for the widest possible range of Radio or Television station ownership, organization and output. However, the ensuing scenario of a seeming babel on the airwaves does not have to engender rancourous sectarian outpourings likely to thwart national development or provoke antagonistic divisiveness. Yet, as a number of the contributions point out, promoting pluralism must confront this fear and address mechanisms of preventing a degeneration into a cacophonous atmosphere of irresponsible broadcasting.

As the Conference report recommends, democratic ways can be found to regulate broadcasting, without inhibiting freedom of expression, in such a way that practices which counter the progressive processes of development and national integration will be prevented effectively and problems arising therefrom will be rectified.
That the 1992 Constitution abolishes licensing as a pre-requisite for establishing and operating mass media in Ghana does not entirely preclude regulating broadcasting operations.

Why is there a need for regulation? What is to be regulated? Who is to regulate? Who appoints the regulator? What kind of regulation?

The Conference report addresses these questions and the contributions in this publication provide many of the arguments.

Mass media responsibility and accountability arise from the premise that what makes mass communication distinct from other forms of communication is that it is at once a public activity. What is communicated, the content or the output of the mass media is public and belongs to the public domain.

In broadcasting, the radio spectrum through which messages are broadcast is a limited natural resource which, for efficient, judicious and fair use, is “allocated” to countries, thus at the same time becoming national natural resource.

Essentially, two categories of the elements comprising broadcasting require one or another form of regulation, namely:

- the Radio Spectrum (frequency) and
- the output of Radio Broadcasting, that is, the content of broadcasting.

The natural resource, which is the radio spectrum, cannot be a monopoly of anyone. Indeed, that is one reason why governments cannot monopolize its use for broadcasting purposes. Its use must be open to citizens capable of using it to society’s benefit. But just because it is a limited resource, and because it must be available, potentially, to everybody, its use must be fairly, equitably and judiciously made. As resource belonging to all, it must be secured against abuse and exploitation detrimental to the whole of society. Thus the need for clearly defined transparent and democratically legislated regulation.

Whereas the content or output of broadcasting constitutes public property, the process of its production involves the exercise of the right to free speech and free expression of ideas. In fact, ultimately that is the essence of pluralism. In other words, pluralism must be
tested by how freely differing, varying, divergent, contrasting or even unpopular views or ideas may, in this case, be broadcast without state or other external interference, and without fear of such interference. Therefore, any talk of regulation pertaining to the content of broadcast material or messages must raise complex and sensitive questions and fears. However, a number of factors require that broadcast content is subject to some form of public accountability and responsibility on one hand, and protection on the other. These are, primarily:

- consideration of the effects of the material on the rights and legitimate interests of individuals, groups and institutions;
- sensitivity to public order and security;
- sensitivity to the cultural, religious and psychological sensibilities of individuals and groups;
- the interests and protection of consumers, such as in advertising;
- protection of the young, particularly children, against abuses detrimental to their sound development;
- protection of broadcasters from state and/or other external interference and control; and the protection of the rights, and reward for the creative production of artists and intellectuals.

In summary, regulation pertaining to broadcast content, involves:

- Audience/public rights and interests;
- Public order and security;
- Professional ethics and standards;
- Broadcasters' rights and
- Artistic and intellectual property rights and reward.

Obviously the law courts exist to protect individual and group rights from abuses by the media. The National Media Commission's role, as provided in the Constitution and Act establishing it, must also suffice to guide the Commission’s work of ensuring freedom of
expression and responsibility in broadcasting. It must be admitted, however, that it is easier monitoring press responsibility than with broadcasting simply because the latter is transitory and would require expensive infrastructure for recording and recall — even if that is found to be necessary.

As much as possible, government must be far away from the supervision of responsibility. It would be preferable if fewer regulations existed for stations to operate on. But to leave the field completely without a mechanism of ensuring accountability would encourage avoidable problems. Ultimately, however, new stations would need to adhere to the principle that, "The basic responsibility of mass communication is to turn out the highest-quality product it can, which requires that it develops an awareness of the depth and breadth of the public needs and interests." The two patterns in which the communicator organizes his sense of responsibility are self-regulation and professionalization.

Professional associations of broadcasters would help to protect members' rights and enforce ethical codes among members. Consumer protection bodies are weak and so is public consumer rights consciousness. Under circumstances like these, advertising companies and broadcasters would do well taking initiatives for ethical codes to be enforced by peers.

However chequered the development of the print press is in Ghana, it is a tradition close to a century and a half. Radio is a little over half a century old. But that is half-a-century of state ownership and control. Valid as the criticisms and fears of state-controlled broadcasting are, it is also incontrovertible that centralized broadcasting has promoted social, cultural and economic development, however limited. It has also been an important factor in the promotion of the progressive processes of national integration.

Pluralism in broadcasting poses many and complex challenges. These challenges are not unsurmountable. For the challenges to be productive goals to overcome, rather than setbacks, government must be committed to the enterprise; organizations establishing stations must be committed to high professional standards and
responsibility; and the laws and regulations defining their operations, while insisting on accountability, responsibility and a measure of public service for national development, must have flexibility to allow for experimentation and particularity in a highly competitive industry. Conditions must be created, and encouragement must be given, for a national project with a great promise to bring out and harness the best out of our diversity for higher common achievements.

NOTES AND REFERENCES

7. ibid.
Introduction

Radio has become such a common part of our daily lives that we take it for granted and can hardly imagine how earlier generations managed to live without it until the early 1920s. It has been used for several ends, but to us in the developing countries which emerged from colonial domination generally in the early 1960s, radio helps to weld us together into cohesive national units and political entities. During the colonial period, radio remained a monopoly in the hands of the colonial government and the national leaders had no access to it to use for mobilizing the people. Right from its inception, radio was perceived as an instrument in the hands of the government for achieving whatever objectives the government chose to define. This led to the notion that government monopoly control over radio in the public interest could be taken for granted.

In any case, for the purposes of nation-building, it was not difficult to put up a case for the government control or monopoly over radio. One of the functions of radio is to create a sense of national identity and African governments stood in great need of this in the immediate post-independence period. This integrative role of radio is what Cantril and Allport refer to when they write:

When a million or more people hear the same subject matter, the same arguments and appeals, the same music and humour, when their attention is held in the same way and at the same time to the same stimuli, it is psychologically inevitable that they should acquire in some degree common interests, common tastes and common attitudes. In short, it seems to be the nature of radio to encourage people to think and feel alike.1
This task is rendered much easier if people speak the same language which is unfortunately not the case in many African countries, including ours. Since radio has the advantage of overcoming distance and literacy barriers, it becomes an indispensable instrument for nation-building. It was felt that central control was necessary if radio was to fulfil its unifying and integrative role and help build national loyalty and a sense of belonging among peoples sharing different ethnic cultures and loyalties. The role of radio was to weld and distil these local, ethnic cultures into a single, homogeneous national culture over a period. It was felt that any form of decentralized control would provoke divisiveness, parochialism, disintegration and ethnic particularization which would retard the march towards national integration and unity. So that, in terms of both ownership, control and structure, a unique, centralized system appeared appropriate in the immediate post-independence period.

This trend towards government or state or public ownership and control of radio was accepted, tolerated or taken for granted as normal and not challenged because it appeared to be the normal, accepted norm throughout the world, with the American system of private ownership being a departure or aberration or deviation from the norm, the exception rather than the rule even in the libertarian tradition. This centralized control happened to suit the ideological position taken by most African leaders apart from the most conservative. Most African countries adopted a socialist ideology and patterned their practices and structures along the lines of their ideological mentors and role models in Eastern Europe and China. The countries did not take long to degenerate into petty oligarchies. The leaders appear to have grown wings, hero worship was promoted, individual freedoms and fundamental rights were gradually but systematically whittled away, and a potent medium like radio became a suitable tool for government propaganda and the domestication of the masses. It became a microphone and megaphone for the government. A monolithic one-party system became established and the official opposition was outlawed, but it only escaped underground. The seeds of instability were sown and
a spate of military coups started since it appeared to be the only method through which an obscene, obscure and opaque despotism could be eliminated.

In these military interventions, the radio which covered the whole country in almost all of Africa played a decisive role. The fate of an attempted coup d'état depended on who got hold over the radio station. This led a Ghanaian scholar to observe in 1985 that given the political importance of radio in times of crises, an operative rule for coup makers may be: “Seek ye first the radio station and its effectiveness and all other things shall be added unto it.” And he adds that that explains why many African radio stations look like veritable fortifications with sandbags and barbed wire fences and trenches.2

The fear has been that where there is more than one station, it can be used to counter the coup attempt. The coup attempt in Nigeria led by Lt. Dinka in 197... in which General Murtala Mohammed was killed was foiled when the loyal troops seized the regional radio station in Ibadan and started broadcasting counter messages. This means that a multiplicity of stations can have both advantages and disadvantages as far as political stability is concerned.

In the assault on basic human rights, the first casualty has almost always been the freedom of speech. The leaders having experienced the power of the print media to mobilize the people as a collective organizer, clamped down on private newspapers and nationalized others or turned party publications into state organs. They had no problem with radio because for reasons already mentioned, government ownership was taken for granted. It was assumed that radio would be given a certain professional autonomy, so public corporations were set up by legislative instruments. This was supposed to give greater autonomy to radio than the systems which came directly under ministerial control. In actual practice, however, the distinction was only cosmetic and nominal because the supposed state corporations were very much restricted by the instruments of incorporation and the activities of the board of directors could be vetoed by the minister acting on behalf of the president. This has
been the pattern in most African countries including Ghana. For example, despite the theoretically corporate status given the Ghana Broadcasting Corporation (GBC), the Minister of Information “may, subject to the provisions of this instrument, give directions generally to the Corporation, and the Corporation shall be bound to comply with such directions.” Article XI of the instrument gives sweeping powers to the President which effectively and totally undermine the corporate status.3

One practical reason which did not encourage people to go into radio ownership and exploitation was the nature of the technology itself. Unlike printing which has been with us since the end of the 15th century, radio is a relatively new phenomenon born only in the second decade of this century. It is rather complicated and uses the electromagnetic spectrum for its operations. The very fact that it uses this national resource whose distribution and allocation must be properly organized imposes a certain kind of restriction which implies a controlling authority, but with the development and sophistication of the technology, the whole environment and equation have changed and it is necessary to adapt accordingly.

Factors Affecting Change in Attitudes
Two major factors that are affecting the conception, orientation and organization of radio with particular reference to Africa are the democratic wind of change and the rapid growth, development and expansion of the new communication technology since the middle 1960s. With the manufacture and launching of satellites and the conquering of outer space, man’s horizons have been widened and immense possibilities have been opened. Let us look at these two factors in turn.

Since the late 1980s, a new wind of change starting from Eastern Europe has been blowing over Africa, assuming the proportions of a hurricane in some places and pulling down buccaneer military dictators and other low-cost civilian despots. People have entered the phase of a new liberation and are clamouring for their rights of which they had been systematically deprived. Plurality of views is being taken for granted and an end is being put
to monolithic political institutions such as one-party systems of government through the so-called democratic centralism. Opposition is being recognized and dissent is no longer being equated with dissidence or subversion. The people are demanding their rights at the grassroots level and serving despots are being made very uncomfortable.

On the African continent, newspapers are springing up by the day with some disappearing equally fast, but pluralism is now recognized or taken for granted in almost all countries. While internal censorship of newspapers existed, physical seizure of banned foreign publications ensured that undesirable political literature could be kept out. In radio, efforts were made to restrict people's access to foreign broadcast material through jamming which was too expensive for many African countries to practise, or there was a restriction as to the kind of radio sets that could be imported. These measures were considered capable of ensuring that citizens could get access only to material that the officials considered healthy and non-controversial. This form of censorship appeared very effective in many African countries.

As radio technology became more sophisticated, it became more difficult to control the ownership of sets or the kind of outside programmes that could be heard. The equipment also became miniaturized and easy to operate, so more people had access to the technology and the equipment, so what has happened in the area of print is being asked for in the area of the electronic media, namely radio and television. For the purposes of this discussion, we shall limit ourselves to radio for the meantime. It has become more difficult to control or limit access to the technology or equipment and this has practical consequences. For example, the monopoly control has been challenged on practical, political and technical grounds.

At this juncture, it is perhaps important to point out that in broadcasting when we talk of a “public” system, the opposite system is not necessarily private; it may well be commercial, that is a radio station that is principally in business to make money and render
some public service in the process. The station need not be owned by an individual person or corporation to qualify as private; "public" is used here in the context of non-commercial. Even state systems in the public sector can be wholly commercial or partially so. When we talk of privatization in this context, we are dealing primarily with a non-government system which may or may not be commercially oriented.

Demands for Privatization
Since the second wind of change started blowing over our continent, there have been persistent calls by various groups to privatize radio and television so that there will be the same kind of pluralism in the electronic media as has been the case with the print media. The question one should start by answering is whether privatization of radio is feasible and desirable. As far as feasibility is concerned there is no technical problem, thanks to the new communication technology, so that technically there is no obstacle. As for its desirability, there can be no two ways about it. Once it will provide an opportunity for alternative voices to be heard, it will contribute to the democratic process by enabling individuals and groups to make their point of view heard.

In this context, however, it is necessary to enter a caveat here. More than thirty years after independence, total national integration, cohesion, solidarity and unity have not been achieved in certain African countries, and there are even more threats of secession. If care is not taken, privatization will be exploited by interested minority ethnic leaders to fan the embers of forces militating against national unity. It is a very sensitive political issue that must be very carefully considered to avoid creating a situation that will fill a country with contradictory signals and noises that will undermine national integrity, and at the level of development in Africa, attention ought to be paid to this. If it is considered necessary, besides ethnic minorities, there may be religious and other minorities whose interests must be catered for.
This means that regulations will have to be drawn up to take care of the allocation of frequencies and conditions for operating a station. But how are such modalities to be formulated? To avoid accusations of political bias, a demonstrably neutral and autonomous body representing technical and political personalities to ensure that consideration of applications is done objectively, freely and fairly without bias or favouritism towards certain applicants who support the government in power. The rules for formulating regulations for approving applications for licences should be openly debated by the National Assembly in conformity with constitutional proposals.

The Fourth Republican Constitution which came into force on January 7, 1993, makes provision for private ownership and operation of radio and television stations. Article 162 (3) reads: “There shall be no impediment to the establishment of private press or media; and in particular, there shall be no law requiring any person to obtain a licence as a prerequisite to the establishment of a newspaper, radio or other media for mass communication or information.” This is not a free for all, limitless allowance. Article 164 of the Constitution limits the wide berth given above. It reads: “The provisions of articles 162 and 163 of this Constitution are subject to laws that are reasonably required in the interest of national security, public order, public morality and for the purpose of protecting the reputations, rights and freedoms of other persons.”

It is on the basis of this provision that a body will have to be set up to ensure equity and fairness. Is it something that can be entrusted to the National Media Commission? Given its membership, can it have the technical competence to perform the function, or can it coopt individuals or representatives of institutions to assist?

In case a body is set up, what are the possible criteria they should consider in formulating guidelines for operating a radio station? First of all, it will be necessary to ensure that whatever its nature and objectives, each station should provide a minimum of public service, for example, home and foreign news, weather conditions, government social announcements and a certain amount of political education. This is because by broadcasting, people are using the
electromagnetic waves which are a public resource and they have to pay back in kind. Rules can also be formulated to ensure that ethnic or religious minorities are not ignored or discriminated against. Hours of transmission, the nature of commercials to be broadcast can all be considered, but it is essential that nothing is done to undermine or condone national integrity, otherwise the whole exercise will be retrogressive.

How can the private station survive? Private stations can be undertaken by individuals, religious groups, benevolent societies, professional organisations, and other interest groups as well as Non-Governmental Organizations (NGOs) should qualify to set up private radio stations providing general service or specialized programmes. The possibilities and opportunities are limitless. One obvious source of finance will be revenue from advertising, and for religious bodies, contribution from adherents and followers. With modern, miniaturized communication equipment, one needs a small number of persons to operate stations and the financial outlay will not be too crippling. The individual stations can formulate their own rules and regulations about earning income. They can establish a cable system and demand fees from their subscribers, but the bulk of revenue will have to come from commercials.

Esthetically, once one talks of media or television based on commercialism, the suspicion is that standards will drop and the criterion for evaluating tastes and success will be influenced by the tastes of the “lowest common denominator” which can affect national cultural values and standards. For this reason, while fully respecting the freedom of expression, guidelines may be formulated to ensure high standards. This should be done reasonably to avoid accusations of interference and high-handedness. Privatization should provide access to minorities and licences should have an expiry period after which there should be a reapplication. In considering an application, the competent authorities should consider the station’s previous performance to determine whether it deserves to have its licence renewed. This means that the body should have a complaints bureau to which aggrieved individuals and institutions can apply for
redress and if necessary or possible stop the renewal of a licence. But in all this, it is essential that the regulating body be perceived as objective, fair, impartial, unbiased and neutral.

**Educational Role of Radio**

It has been observed that when radio was imported into Africa the technology was imported together with certain programming patterns with the emphasis on entertainment, and this was responsible for generating the notion that radio is meant primarily or exclusively for entertainment. In view of the potential of radio for assisting in “cultural engineering”, social transformation and political integration, its use beyond these was considered and was found to be suitable as a weapon for development. Because of the development role assigned to radio, in Africa, radio is used, with varying degrees of success, as a development tool. This additional vocation of radio was introduced not long after independence. It was this notion that led Rosalynde Ainslie to observe about 25 years ago that “the whole orientation of broadcasting is nearly everywhere shifting from the concept of ‘entertainment’ - which has a place in any ‘European’ definition of the medium - to that of education in the broadest possible sense of the word.”6 In many African countries, radio is used not only for supplementing formal education, but also for general functional social education. Radio has been used extensively for promotional campaigns in the areas of agriculture, health, nutrition, civic education, environmental protection and family planning among other programmes.

The advocates of this deliberate, planned, purposeful use of broadcasting argue that because of the role assigned to radio, it should remain a government monopoly or public institution without any hint of private participation. It is argued that there is no guarantee that a non-public broadcasting system can discharge the developmental functions in a disinterested manner. Those companies and individuals who invest in broadcasting do perform certain services in the public interest, but their major or private concern is profit; where there arises a conflict between profit considerations
and the commitment to public service, the choice of the investor who is primarily motivated by financial gain is easy to guess. Broadcasting is thus seen as a nation-building instrument or development tool whose resources must be harnessed for the benefit of the nation, especially for the majority illiterates living in the rural areas.

This argument would have been valid and tenable if extending the facility to others automatically means government divesting itself completely of ownership and control of radio, and some purists have seriously argued along these lines. But there is really no serious talk of the government ceding the right to operate a radio station if the right is extended to others. What the others can do will be to supplement government’s efforts. It is difficult to agree with those who argue that government should keep out of the information business altogether. The point is that if it is the government’s responsibility to provide social services and utilities, why should it be kept out of the information business when information is an important social asset and resource? All that should be ensured is that broadcasting does not become a propaganda tool, the mouthpiece and exclusive preserve of the government or ruling party. It needs to be pointed out to those who argue that to maintain their developmental objectives radio and television should remain government monopolies, that examples from Asia and Latin America show clearly that private, confessional corporate, individual radio and television stations have contributed substantially to national development while remaining in private hands.

In a continent where there is a lot of flux, uncertainty, instability and volatility, the question of privatization of radio should be carefully handled because more than 30 years after independence, we have not seriously built any democratic institutions in Africa and national integration, unity, harmony and solidarity have continued to elude us. A statement to this effect was made by a Ghanaian minister way back in 1959. What was said in 1959 still has validity for many African countries which are experiencing civil war such as Somalia, Sudan, Western Sahara, Senegal (Casamance), Angola,
Rwanda, Mozambique, and Liberia which have minority ethnic or religious dimensions, or about to do so as in Togo or Zaire. On the occasion of commissioning new transmitters for Radio Ghana the minister declared:

The radio is a great unifying agency in our country. Through it people all over Ghana can appreciate that we are all of the same nation with the same ideas and aspirations ... Ghana is a unity and in this small country there is no room for regional and tribal groups each emphasizing their own difference from the rest of the country, at the expense of national unity.7

Speaking on the integrative role of radio, a Tanzanian minister also said in 1961,

A broadcasting system is a very powerful instrument and it can be a very dangerous instrument if those who are responsible for running it happen to hold different views from those of the Government and great harm can be done to this country by giving emphasis to the wrong things which need special attention. It is my view ... that to avoid this powerful instrument being used by people who may not have the interest of the country at heart, this instrument should be taken over by the Ministry of Information Services and run as one of the government departments.8

This is what precisely happened in Tanzania and other African countries where the concept of anybody outside government running a radio station was anathema or taboo.

The sweep of the wind of democratic change is inevitable and unstoppable and the demand for more participation and democracy cannot be minimized or decelerated. The sensible thing to do is to formulate rules, regulations and systems whereby the movement from oligopolitic monolithism to a liberal, open, pluralist system can be smoothened to avoid any jolts. For this, a legal framework for the establishment and operation of independent stations must be worked out with the participation of all potential beneficiaries and sponsors. Technical and engineering questions will be posed. How
do we harness the technology and prepare for regular maintenance without unanticipated hitches? The stations will have to sustain themselves, and it looks as if revenue from advertising is what will be depended upon by and large unless there is some godfather for advocacy to foot the bills. Luckily, the free, liberal, open market economic system that we are following, which is predicated upon competition and choice, creates a favourable atmosphere for the advertising business, so the free market should provide a rich source of revenue and a congenial environment for private and independent stations.

On a performance level, it is hoped that the breaking of the monopoly will stimulate GBC radio and television to improve performance, knowing very well that if their output is mediocre, listeners or viewers will tune in to competing stations. This competition may lead to an improvement in the output and performance of GBC radio and television, and the audience will be the ultimate beneficiaries. The GBC and the independent stations will be chasing after the same advertising cedis, so each will have to excel to sustain a share of the market in a healthy competition. With the development of modern communication technology and the miniaturization of equipment, setting up a small radio station will not demand heavy financial investment; the technology has become automated and simplified so that without much training the machines can be easily operated and handled, so large investments are not needed, and such sums should be within the reach of organized institutions, however small.

The radio spectrum is a natural resource and that is why its exploitation and utilization should be compensated for by an undertaking to render some public service in return by the particular radio or television station. It is also for the same reason that we should ensure that the allocation of frequencies is equitable, free and fair and that frequencies are not only allocated to favourites and political cronies of those in authority or on the frequency allocation board.

It is known that the nearer a radio station is to the people, the easier it finds it to put out programmes that reflect the concern of
the people in the area. With the establishment of private radio stations, community stations can spring up to serve the needs of the surrounding community and it can be used as an instrument for reinforcing social cohesion and harmony and promoting socio-economic development. Programming will take into consideration the basic needs of the people and deal with matters that are relevant to their concerns. Such stations can be run by church organisations, NGOs and other interest groups to promote or advocate specific causes for the general local interest. Especially with video technology, functional education can be stepped up as a contribution to overall national development. The rural areas in particular will stand to benefit immensely from the privatization of radio. Those are some of the topics that we shall be exchanging views and experiences on at this conference.

It is important to repeat and emphasize that in this context of public service broadcasting, the opposite of public is not necessarily private; it may mean commercial, profit-oriented, but it need not be so. The idea of public service, government-controlled radio broadcasting has been taken for granted over the years, and for very good reasons, especially in the case of the newly emerging countries which faced the problem of creating a sense of belonging, and creating national integration and unity with radio serving as a most appropriate instrument. But thanks to the development of communication technology and the inevitable blowing of the second wind of change, it has become necessary to challenge certain assumptions which are really revolutionary in nature and can cause serious dislocations if not well handled. It is for this reason that we need to anticipate the problems that are likely to surface and propose solutions to pre-empt any eruptions and dislocations in the body politic or the information environment.

The economic environment of a liberal, free market, competitive atmosphere and the political climate of multipartyism and pluralism are both conducive to a nurturing and flourishing of a privatized electronic media system for which we have no established models or traditions on our continent. A break is about to
be made with the past. Luckily, the national constitutions that have been drawn up most recently in African countries make provision for the operation of private radio systems. How we make the transition from a state monopoly to a pluralistic system without shocks or malaise and without creating problems for national integration, harmony and development is what we have been concerned with. It is going to be quite a novel experience, but it is worth all the possible risks that may be attendant on the experiment. Privatization of radio was an American practice which has caught on in Europe in recent times. The problems of other countries are not necessarily relevant or applicable to us so we cannot benefit directly from their experience, but how they overcame some of the initial problems may be instructive and beneficial to us.

If the march towards our second independence is to succeed, and give us access to all that modern communication technology can offer so that we can “receive and impart information by any media and regardless of frontiers,” then we should closely examine how to democratize access to the resources and possibilities offered by modern mass communication technology. It is only in this way that we can give full expression to our aspirations as free citizens having at our disposal the instruments for articulating our aspirations and feeling within an open, civilized, democratic system.

This was the Keynote address given by Prof. P.A.V. Ansah, the Director of the School of Communication Studies, at the National Conference on the “Promotion and Privatization of Radio and Television Broadcasting In Ghana,” GIMPA, Greenhill, Achimota, March 1-3, 1993. Prof. Ansah was ill but managed to participate in the Conference. He died three months later in June.
REFERENCES


5. *ibid*.


Introduction
In this paper, I shall endeavour to deal as briefly as possible with some legal matters which must be addressed before a legal framework for the establishment and operation of independent broadcasting stations can be completed. Since this is the first time that the right of individuals to establish and operate independent broadcasting services has expressly been recognized and guaranteed by the Constitution of this country, it may be useful to look at the experience of other countries to see whether there are any lessons we can learn from them. I shall, therefore, begin with a brief look at the regulation of broadcasting in the United Kingdom and the United States.

The Regulation of Broadcasting in the United Kingdom
The British Government and Parliament have power to decide the number and nature of the broadcasting services as well as who can provide them, how they should be financed and what priority should be given to them. The Government’s powers over broadcasting, and the relationship between the Minister responsible for broadcasting and the two main broadcasting authorities - The British Broadcasting Corporation (BBC) and the Independent Broadcasting Authority (IBA) - are defined by provisions of several Acts of Parliament and by the terms of the BBC’s Royal Charter and the BBC’s Licence and Agreement. Broadcasting services can operate only under a licence granted by the Home Secretary (equivalent to our Minister of the Interior). The Secretary is thus able to control the number of services and the manner in which they are provided.
The Government has some powers over the broadcasting authorities' finances. They can decide, in broad terms, how much money should be devoted to broadcasting, the amount of broadcast receiving fee, which is the main sources of BBC's income, and the levy to be paid by IBA programme contractors i.e. the companies that are permitted to provide TV programmes by the IBA.

The Government also has some direct powers over programming. Both the BBC and IBA have a duty to provide their respective radio and television services as public services for the dissemination of information, education and entertainment and to ensure that their programmes maintain a high general standard, in particular as respects quality and content, and a proper balance and wide range of subject-matter, having regard to the programmes as a whole and the days on which, and the times at which, programmes are broadcast. They are required to ensure that, so far as possible, nothing is included in their programmes which offends against good taste or decency or is likely to encourage or incite to crime or lead to disorder or to be offensive to public feelings. They must also ensure that, so far as possible, due impartiality is preserved in news programmes and programmes dealing with matters of public policy, and also in the treatment of controversial subjects generally; that their programmes do not include any expressions of their corporate opinions or those of programme contractors, their directors and officers; that there are proper proportions of programmes of British origin and British performance; and that their programmes, at certain periods of the day, are not unsuitable for children, or that their programmes comply with a code of guidance in regard to their portrayal of violence.

There are also informal or voluntary arrangements between Government and the media, such as the "D-notice" obliging the latter not to publish matters that may affect security. The Government has power to prohibit the broadcast of particular programmes, though it is rarely used. It must also be emphasized the broadcasting authorities are obliged to provide time for ministerial broadcasts but not for explaining government policies; the Opposition may reply to
political broadcasts.

It is clear that the British Government has broad formal powers over broadcasting. But because of traditions and conventions, and shared common cultural and social values, the powers are used to the minimum.

In the United States, too, broadcasting is regulated under the Communications Act, 1927. The power to do so is derived from Article I of the US Constitution, the "commerce clause," which gives Congress power to "regulate" commerce with foreign nations and among the several states.

Through the Communications Act, Congress has delegated supervisory responsibility to the Federal Communications Commission (FCC) using the broad guidelines of the "public interests, convenience or necessity" to define the powers of the FCC's discretionary powers. The FCC regulation is done through formally adopted rules, processing standards, guidelines and adjudicatory decisions. Under the Act, only US citizens, who qualify as to character, financial resources and technical ability, can receive a licence; alien control of a broadcast licence is forbidden. In order to ensure operation of the public interest, the FCC has the power to monitor station operations constantly. But it is impracticable for the Commission to monitor some 12,000 stations in detail. Instead, it is the complaints from the general public, competitors and would-be competitors which draw attention to most defaults. Direct FCC oversight tends to be concerned with matters that can easily be identified and verified such as engineering and employment practices rather than with less tangible matters like quality and variety of programmes.

Licences may be granted for only "limited periods of time" (currently five years for TV and seven years for radio). Licences (and franchises) can be sold. FCC has power to revoke or suspend licences though this is rarely used. The requirement for renewal of licences enhances the power of FCC. Licence loss is its strongest enforcement weapon although about 98 percent of licences are renewed.
Both the British and American regulatory systems have their merits and weaknesses. It is not for me to say which one is better. It is often claimed by British commentators that, because of greater control over programming, the quality of British TV is better than American. But in view of the liberal provisions of the 1992 Constitution of Ghana, the American system may, in many respects, be a more relevant model than the British.

Probably because of our national experience, the 1992 Constitution seeks to prevent the Government from interfering with the establishment and operation of independent broadcasting stations. To ensure that the constitutional guarantees do not remain mere paper declarations, a whole Chapter [Ch. 12; Articles 162-171] in the Constitution is devoted to the freedom and independence of the media. Article 162 provides that, subject to the Constitution and any other law not inconsistent with the Constitution, there should be no censorship in Ghana. Editors and publishers of newspapers and other institutions of the mass media should not be subject to control or interference by government nor should they be penalized or harassed for their editorial opinions or views or the content of their publications.

But the most relevant provision in this Chapter for our purpose is Article 162 (3) which provides:

There shall be no impediments to the establishment of private press or media; and in particular, there shall be no law requiring any person to obtain a licence as a prerequisite to the establishment or operation of a newspaper, journal or other media for mass communication or information.

It is clear no licence will be needed to establish a broadcasting station as a mass media organization. It may, however, be necessary to obtain a licence for the purposes of the Telecommunications (Frequency Registration and Control) Decree, 1977 (SMCD.71).

This statute and the regulations made thereunder (L.I.1121) make detailed provisions on licensing of telecommunication stations, installation of telecommunication apparatus, registration of
manufacturers of telecommunication apparatus etc. Among telecommunication services that must be licensed under the Decree are broadcasting services. Under Regulation 16 of L.I. 1121 a broadcasting organization must submit to International Telecommunication Union through the Ghana Frequency Registration and Control Board (The Board) seasonal schedules of its broadcasting services between 5900 and 26100 kHz.

A licence granted by the Board is subject to conditions relating to the position and nature of the station, the purpose for which and the circumstances in which the station may be used, the person by whom the station may be used and the type of telecommunication apparatus to be installed. The Board may refuse an application for a licence if it is not satisfied in respect of any of the matters stated in the application. A licence may be granted for such period as the Board may specify but it can be renewed. The Board may revoke or suspend a licence granted by it after a hearing. Any person aggrieved by a decision to refuse an application or to suspend or revoke a licence may appeal to the President (originally the Supreme Military Council). The Board also has power to prescribe the fees payable for a licence.

The Board has wide powers and some of these may have to be reviewed in the light of the new democratic constitution. But it is difficult to believe that the Constitution has abolished frequency registration and control as far as broadcasting organisations are concerned. Someone must register and control frequencies otherwise there will be confusion and intolerable interferences in telecommunication operations. Ghana as a member of the International Telecommunications Union does not have a free hand in the allocation and utilization of frequencies. Moreover, state security cannot be guaranteed if any person can get up and establish radio station and broadcasting service and transmit whatever he or she wants.

It is submitted that notwithstanding Article 162(3) of the Constitution it will still be necessary to register and control frequencies used by broadcasting and other telecommunications services.
and this can best be done by licences granted by a specialized agency of the Government.

The role and functions of the Board should be reviewed. It should cease to be regarded as part of the security apparatus whose existence and operations should be shrouded in secrecy and mystery. The criteria it uses to decide on the granting, renewal and revocation of licences should be publicised. While its proceedings need not be in public, its decisions should be published. It must give reasons for its decisions on applications for and revocations of licences. Appeals from its decisions should go to the superior courts (and no more to the President) either directly or after appeal to an appellate tribunal created under the statute setting up the frequency Board or any other statute. It should be made subject to the supervisory powers of the superior courts. (It seems even now the superior courts can exercise supervisory jurisdiction over the Board).

When it has come out of the cold, the Board can be given functions similar to those exercised by the FCC in the United States.

The membership of the Board should be broadened to include independent members familiar with the problems and requirements of the electronic media. There is always the danger that a government will use the power to register and control frequencies as a lever to interfere with the establishment and operation of broadcasting stations. So it will be necessary to critically examine existing and future regulations on the registration and control of frequencies.

The 1992 Constitution does not even require broadcasting organizations to be registered. A provision in the 1979 Constitution (Article 193(d)) that the Press Commission (now the Media Commission) should, by constitutional instrument, make Regulations for “the registration and licensing of other media for mass communication” is omitted from the 1992 Constitution. (The 1992 Constitution, like the 1979 Constitution, provides for the registration of newspapers and other publications).

The absence of a requirement for the licensing or even registration of broadcasting services must make Ghana unique among nations with independent broadcasting services. If broadcasting
organizations will not even be registered how can the nature and number of broadcasting services be monitored and their viability and financial soundness ensured? Without some form of registration and requirement of minimum standards and guidelines such as adequate capital and qualified personnel and directors of proven integrity, broadcasting organizations can become engines of fraud. The Media Commission must consider how, in the absence of licences and registration, the general public can be protected from fraud, indecency, bad taste, excessive violence, inefficiency, low standards etc.

The institutional framework within which independent broadcasting stations will have to operate is yet to be set up. Obviously, the Media Commission will have an important role to play in the establishment and development of such a framework. The measures it will take to ensure “the establishment and maintenance of the highest journalistic standards in the mass media, including the investigation, mediation and settlement made against or by the press or other mass media,” will affect the quality of services provided by the broadcasting services, the cost of their operations and the support and respect they receive from the public.

In the end, it will be the responsibility of Parliament and the Media Commission to strike a proper balance between order and licence, between the constitutional aim of non-governmental interference and the preservation of the cultural, social and moral values of the nation. Some regulation of broadcasting will, in my opinion, be necessary, even inevitable. In the absence of a system of registration or licensing, it may be necessary to pass an Act of Parliament (or make a statutory instrument) laying down standards and guidelines that broadcasting services must comply with and the penalties which should be imposed for non-compliance. These standards and conditions may include:

- rules or guidelines like the British or American rules;
- adequate financial resources;
- periodic returns on operations and financial situation;
- advertising, sponsorship, prizes, lotteries etc.;
- audit of accounts of broadcasting organizations, preferably by the Auditor-General;
- inspections and/or monitoring;
- levies and fees;
- institution of legal proceedings for non-compliance and unethical professional behaviour;
- liquidation/winding-up or receivership of bankrupt and financially unviable broadcasting organizations;
- audience research
- minimum technical equipment a broadcasting station should have.

Such a law will be in conformity with Articles 164 and 21(4) (e) of the Constitution, and, therefore, Constitutional Article 164 provides

"The provisions of Articles 162 and 163 of this Constitution are subject to laws that are reasonably required in the interest of national security, public order, public morality and for the purpose of protecting the reputations, rights and freedoms of other persons."

Article 21(4) (e) says that a law should not be held to be in contravention of Article 21 of the Constitution [or General Fundamental Rights] to the extent that it is “reasonably required for the purpose of safeguarding the people of Ghana against the teaching or propagation of a doctrine which exhibits or encourages disrespect for the nationhood of Ghana, the national symbols and emblems, or incites hatred against other members of the community.”

These provisions also justify the existence of the laws relating to sedition, contempt of court, state secrets, defamation, obscenity, intellectual property, etc. They may even justify the President’s power to ban the importation and publication of books and other publications he deems offensive.

Some of these laws are too restrictive and even repressive. For instance, the State Secrets Act makes government operations too secretive and may not be compatible in all respects with the right to
President's power to ban publication should be restricted to periods of emergency or even abolished. Our law of sedition, based on English common law developed in periods of crises or a less liberal era in Britain, can be used to stifle dissenting opinions. And the law of defamation often only protects undeserved reputations and makes investigative reporting too risky. And as the law of contempt stands, journalists' sources may not be adequately protected and comments on legal or parliamentary proceedings can land a journalist in serious trouble.

There is no need for a law against rumour-mongering. Indeed, it is time all these laws were reviewed to ensure that they are compatible with the new democratic Constitution. But until that is done, the media will have to live with them and hope particular provisions will be declared unconstitutional by the Supreme Court.

One matter that should be tackled as soon as possible is the role and future of the Ghana Broadcasting Corporation (GBC). It is likely that it will not be dissolved or dismantled, and at least in the immediate future will be the only national broadcasting system in the country. But it must be made to compete fairly with the independent organization. If the GBC is going to be financed through TV licensing and government subventions, then its right to take advertisements should be taken away or curtailed because otherwise it may deprive the new independent broadcasting services of advertising their main source of income.

Also it must be made truly independent of the Government. It should not be used as a propaganda tool. It must set standards for the new broadcasting institutions to follow, including impartiality, fairness and accuracy. It should stop editorialising in favour of the Government through commentaries unless it is prepared to accord non-governmental organizations and individuals which are adversely affected by such commentaries the opportunity to reply.

The GBC is good and strong enough to exist without government favours. Whether or not it will truly become independent of the government will depend upon the calibre of its Board of
the government will depend upon the calibre of its Board of Directors, the Director-General and top management. As the Constitution stands, the President’s nominees are likely to dominate these positions (see Article 168 of the Constitution). This does not mean the Board is going to be a tool of the Government. After all, members of the Boards of the BBC and ITA are appointed by the British Government, and the FCC by the American President, but they are independent of the governments. However, the history of the media in this country should put us on our guard.

One problem the new broadcasting organizations will face is the acquisition of studios and equipment, including transmitters. Even if funds are available, it will take some time before broadcasting organizations can set up their own studios and transmission stations. There are two possible solutions:

1. Set up an Independent Broadcasting Authority with power to provide the necessary studios and transmitters and other equipment which can be used by organizations licensed by the Frequency Board.

2. Permit—some will say, enjoin—the GBC to put its surplus facilities at the disposal of the independent institutions by way of licence, rent, hire or sale. There are about 50 state-owned rediffusion stations scattered all over the country. Many of them are old but I believe most of them are serviceable though under-utilized. The independent broadcasting organizations can be allowed to use such stations at least until they can acquire their own facilities.

The potential for a vibrant, creative independent broadcasting services in Ghana is great. Already, radio reaches majority of the population and TV can be captured in all regions. The country has well-trained and talented producers, directors, actors, cameramen, and technical personnel. I believe money will become available once people realize that one can make a lucrative investment in the media. The Constitution provides a broad and liberal legal framework for the establishment of independent broadcasting stations. But many of the existing laws within which the media have to
operate are too restrictive and even repressive and should reviewed and liberalized.

Under the 1992 Ghana Constitution, one can envisage a legal framework for the establishment and operation of independent broadcasting stations like this. Any person can establish a broadcasting organization without any impediments — no licence or registration. But if he wants to operate a broadcasting station using frequencies controlled by the frequency Board, he must obtain a licence from the Board. There can be no censorship of programmes or their contents but they will be subject to the laws relating sedition, defamation, intellectual property, obscenity, contempt of court, state secrets, etc. or any guidelines laid down by Parliament or the Media Commission not inconsistent with the Constitution.
THE MANAGEMENT OF THE RADIO SPECTRUM AS A NATIONAL AND NATURAL RESOURCE

Major John R.K. Tandoh

Introduction

The radio spectrum is an important natural resource which is in the public domain. It has become an ubiquitous servant of man in twentieth century society. This phenomenon of nature, though only discovered within the last one hundred years, is the basis of technologies which support industries and applications that are integrated into modern society. Indeed, all sectors of our nation depend on this public servant for a host of services.

Continued access to this resource is vital to the Government, the public and the private sectors for the discharge of their responsibilities and fulfilment of their missions.

The spectrum stands in constant readiness to continue fulfilling man’s increasing utilization within its physical limitations. However, our appetite for this resource is growing faster than our research efforts are developing the technology to “open up” additional spectrum. Our utilization of the resource is increasing and the problem of spectrum congestion and pollution are growing. Access to the spectrum is somewhat competitive particularly when planning for market-based spectrum management, such as the introduction of private radio and television broadcasting. Not only must proposed systems be assessed along with competing systems in the light of national priorities, but continued access to this resource must be assured for future yet unforeseen requirements. By so doing, new methods for increasing the spectrum’s capacity must be fostered and implemented. It is generally conceded that the spectrum management of yesterday will be inadequate to cope with the demands of the future.
How the Spectrum is Used
The spectrum is used in a number of different ways. Perhaps the most common are the broadcasting and mobile communication services. These include for broadcasting, High Frequency (HF), Amplitude Modulation (AM) and Frequency Modulation (FM) radio stations, Ultra-high Frequency (UHF) and Very High Frequency (VHF) television stations and potential new applications using satellites for direct broadcasting.

Mobile communication services include that of the police, all forms of communications systems used by business and industry and the general public, radio amateurs, citizen band radio, maritime radios aboard commercial and pleasure vessels, cellular radio, paging systems, trunked radio systems, radios in commercial air planes used for aeronautical radio navigation and communications, and mobile satellite communications. In addition, a large amount of the spectrum is used for carrying voice, data and video signals over long distances via microwave relay and satellite systems.

Almost every agency of the Government uses the spectrum in performing mandated missions. The law enforcement agencies use it for command and control of their forces. The Forestry Department uses the spectrum every time they use their radios to report bush fires. The Volta River Authority (VRA) uses it to transmit power control data and commands for their dams and power grids. The uses of the spectrum are indeed limitless.

As a natural resource, the importance of the spectrum as catalyst to the socio-economic development of the nation cannot be overlooked. This calls for an efficient spectrum management by regulating the use of the spectrum.

Regulating the Use of the Spectrum
Electromagnetic waves propagate outwards in all directions. A transmitter generally seeks to communicate with a particular receiver; the transmitting antenna directs the majority of the signals towards that receiver and the receiving antenna is most sensitive to signals coming from the direction of the transmitter. However, an
antenna radiates signals at lower levels and can receive signals from all directions. An interfering signal will be amplified and detected just like the desired signal once it enters the receiver. If the interfering signal is sufficiently large, it can prevent the desired signal from being properly demodulated and understood.

People wishing to use radio communication devices in a given area must cooperate if they are to avoid interference problems. Most developing countries have expressed the desire to find lasting solutions to the problems of harmful interference in radio communications. Many have also expressed dismay at the lack of radio research institutions and of well-organized national radio spectrum management organizations in their countries.

Radio Spectrum Management
Radio spectrum management involves the management of that intangible natural resource that allows electromagnetic radiation to be propagated in free space with frequencies from 30 Hz to 3,000 GHz. It is rather unfortunate that the use of the radio frequency spectrum has several limitations. It is subject to congestion but is not confined by national boundaries. For efficient, reliable and effective communications, therefore, it is imperative that it be protected from misuse due to improper management and also protected against unauthorized use contrary to local or international regulations.

Good radio spectrum management depends on a large number of technical and economic factors. Member countries of the International Telecommunications Union (ITU) have many different names for their various spectrum management organizations, such as the National Frequency Registration Board, National Communication Commission, National Telecommunication Authority etc. Studies into the organizational nature of such bodies have revealed that it is not advisable to copy blindly from the national spectrum management organizations of other countries. These organizational structures are invariably tailored to suit the political, economic and socio-cultural conditions and needs prevailing in each country. This
is particularly true of the administrative procedures concerned which revolve around local rules and regulations.

While the administrative procedures and organization may vary from country to country, the technical functions of spectrum management such as the calculation of electromagnetic compatibility (EMC) and propagation path loss are similar. EMC can be defined as the ability of two or more electronic communication systems, operating in a given environment, to perform well in their intended operations without creating or receiving harmful interference to or from other radio operations within the same environment. Due consideration must be paid to these calculations in the frequency assignment process or complete chaos can result and the radio spectrum can become unusable.

Even though the administrations of some developing countries are handicapped in applying science and technology to spectrum management problems, the results of many years of research into fields such as EMC, radio propagation and spectrum engineering are available to them through the International Radio Consultative Committee (CCIR) which is the principal technical body which advises the ITU on all matters concerning radio communications.

National spectrum management organizations should contain a spectrum planning sub-committee tasked with planning both present and future communications needs. They should represent the administrations at the World Administrative Radio Conferences (WARC) in order to protect their countries’ interests in the use of radio spectrum resource.

It is also important that the national spectrum management organizations include a technical unit responsible for:

(a) EMC analysis studies  
(b) Radio research  
(c) Spectrum planning and  
(d) Standards.

The national standards sub-unit should be established to ensure that
all communications equipment manufactured locally or imported into the country satisfy rules and regulations related to the performance, operation and use of this equipment. It should be in a position to verify the degree to which any piece of equipment conforms to the standards, and must as well be able to measure the degree of electromagnetic radiation hazards posed by other types of electronic equipment.

The establishment of such a technical unit can be very expensive. The manpower requirements coupled with equipment requirements may discourage a needy developing administration from contemplating its formation despite the importance of these functions for the country. This impediment can be overcome in some cases by harnessing the existing national skilled manpower and equipment resources that are related to the field of communications in order to provide direct assistance to the national spectrum management development effort. Several institutions, such as university departments or national scientific and industrial research councils, may be capable of forming the nucleus of a technical support unit for national frequency management with the assistance of the ITU.

The International Telecommunication Union (ITU)
It is of paramount importance that the nations of the world work together from a common base of some sort to avoid total chaos in their telecommunications. This base is found in the ITU Convention, with its appended Radio Regulations evolved and produced by the ITU through a long series of international conferences dating back to 1903.

Purpose of ITU
The purpose of the ITU is to facilitate improved efficiency and understanding in the worldwide use of telecommunications, in particular to:
a) maintain and rationalize the use of telecommunications of all kinds,
b) promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, so far as possible, generally available to the public,
c) harmonize the actions of nations in the attainment of those common ends.

In particular, the Union:
(a) effects the allocation of the radio frequency spectrum and registration of radio frequency assignments in order to avoid harmful interference between radio stations of different nations;
(b) coordinates efforts to eliminate harmful interference between radio stations of different countries and improves the use of the radio spectrum;
(c) Undertakes studies, make regulations, adopts resolutions, formulates recommendations and opinions, and collects and publishes information concerning telecommunication matters for the benefit of all members and associate members.

**Structure of ITU**
The organization of the ITU consists of:
(a) The Plenipotentiary Conference – the supreme organ of the Union;
(b) Administrative conferences;
(c) The Administrative Council;
(d) The permanent organs of the Union:  
The General Secretariat  
The International Frequency Registration Board (IFRB)  
The International Telegraph and Telephone Consultative Committee (CCITT).
The Plenipotentiary Conference
The Plenipotentiary Conference, which normally meets every five years, is composed of delegations representing members and associate members. The Conference determines the general policies of the Union, reviews reports of the Administrative Council, establishes the basis for the budget of the Union, supervises the financial aspects of the Union, elects the members of the Union who are to serve on the Administrative Council, as well as the Secretary-General and Deputy Secretary-General, and revises the Convention as considered necessary. Additionally, the Plenipotentiary Conference concludes or revises as necessary agreements between the Union and other individual organizations.

The Administrative Conference
Administrative conferences may be either world administrative or regional administrative conferences. Such conferences are convened normally to consider specific telecommunication matters, i.e., revision of regulations etc. The International Radio Regulations stem from decisions of World Administrative Radio Conferences.

The Administrative Council
The Administrative Council consists of 29 members of the Union chosen with due regard for equitable representation of all parts of the world and meets annually and acts for the Plenipotentiary Conference between sessions of that body.

The Secretary-General
The Secretary-General directs the General Secretariat and is responsible to the Administrative Council for the administrative and financial aspects of the Union's activity, and coordinates the activities of the permanent organs of the Union.
The International Frequency Registration Board (IFRB)
The International Frequency Registration Board (IFRB) effects the orderly recording of frequency assignments made by the different countries so as to establish, in accordance with the procedure provided for in the Radio Regulations, the date, purpose and technical characteristics of each of these assignments, with a view to ensuring formal international recognition thereof. It furnishes advice to members and associate members as regards the operation of the maximum practicable number of radio channels in those parts of the spectrum where harmful interference may occur.

The International Consultative Committees (CCI)
The roles of the International Consultative Committees (CCIs) are essentially that,

   a) the International Radio Consultative Committee (CCIR) studies technical and operating questions relating specifically to radio communications.

   b) the International Telegraph and Telephone Consultative Committee (CCITT) studies technical, operating and tariff questions relating to telegraphy and telephony.

Recommendations of the CCI’s Plenary Assemblies when adopted by Administrative Conferences become part of the International Regulations. The CCIR Plenary Assembly consists of CCIR/CCITT Joint Study Groups with a common specialized secretariat. The Study Groups are numbered I - XI. Below are the Study Groups and their functions.

<table>
<thead>
<tr>
<th>Group Number</th>
<th>Function</th>
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<tbody>
<tr>
<td>I</td>
<td>Spectrum utilization, monitoring</td>
</tr>
<tr>
<td>II</td>
<td>Space research and radio astronomy services</td>
</tr>
<tr>
<td>III</td>
<td>Fixed services below about 30 MHz</td>
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<tr>
<td>IV</td>
<td>Fixed services using satellites</td>
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<tr>
<td>V</td>
<td>Propagation in non-ionized media</td>
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Radio Regulations

The Radio Regulations (RR) are the rules that govern the use of electromagnetic waves propagated in space. The Radio Regulations complete the International Telecommunications Convention which is an international treaty. Ratification of the Convention means acceptance of the Convention and the Telegraph, The Telephone and the Radio Regulations. Thus, any country which ratifies the Convention or adheres thereto has undertaken to observe the prescribed international rules, *inter alia*, in all radio communications matters.

It is not convenient in one short paper to go through the Radio Regulations in detail but for the purpose of this Conference I shall elaborate on frequencies almost common to Regions 1, 2 and 3 which can only be used for broadcasting radio services.

**Broadcasting Radio Services**

AM broadcasting 535 - 1605 kHz  
FM broadcasting 88 - 108 kHz

**Television Broadcasting**

54 - 72 MHz  
76 - 88 MHz  
174 - 216 MHz and  
470 - 806 MHz.

It is the responsibility of ITU member countries to allocate, allot or assign frequencies using the correct channel spacing. It will be helpful first to define the terms allocate, assign and allot as they are
used in the Radio Regulations: Frequency bands are allocated to various defined radio services; frequencies are assigned to individual radio stations; frequencies may be allotted for use in particular areas without specifying the stations to which they are assigned.

System Review Procedures
For the promotion of privatization of Radio and TV broadcasting in Ghana, there will be the need for Parliament to enact a new spectrum policy for that purpose. The following technical parameters may have to be addressed by a Technical Committee:

1. Systems are to be reviewed prior to the assignment of frequencies at four stages of their evolution, i.e.,
   a. Planning (conceptual) stage
   b. Experimental stage
   c. Developmental and
   d. Operational procurement stage.

As a basis for the review, the company must provide data on the proposed equipment characteristics, the intended area of deployment, as well as operational requirements. The objective is to assess system compliance with prevailing policy, allocations, regulations and technical standards as under the provisions of Article 9 and 9A of the ITU Radio Regulations.

2. Prototype Electromagnetic Compatibility tests may be required as an input to the determination of spectrum availability and electromagnetic compatibility, namely will it interfere with the public telephone system or any other vital communication equipment?

Granting of Licences
Broadcasting services are unique in several respects. Broadcasting reaches into practically every home, workplace and every automobile.
The electronic media, unlike the print media, also know no international boundaries. Radio and TV broadcasts meant for a small community can also be received by millions of listeners/viewers even across international boundaries. In this regard, governments all over the world, be they from advanced or developing countries, are very prudent with regard to granting of licences to prospective applicants. As a safety catch, private electronic media practitioners are subjected to periodic renewal of licences.

In Ghana, the Ghana Frequency and Control Board (GFRCB) is responsible for the allocation, allotment and assignment of frequencies on behalf of the President of Ghana.

Ghana Frequency and Control Board (GFRCB)
The Board was established by the Telecommunication (Frequency Registration and Control Board) Decree 1977. Section 2 of the said decree enumerates the functions of GFRCB as follows:

a) To allocate and control the use of radio frequencies in conformity with the laws of Ghana and international requirements.
b) To approve and issue licences to commercial and amateur radio operators.
c) To monitor the training of commercial radio operators.
d) To approve and issue licences for the sale, manufacture or assembling of telecommunications apparatus.
e) To do such things as may appear to the Board to be incidental or conducive to the exercise of its functions.

Frequency Management
In some respects, frequency management can be likened to building highways. The planning and development of invisible communication lanes, however, is much more complicated than road building. There is still a wide choice of land highway routes but radio paths are limited in number and many are crowded. And, unlike land traffic, radio transmission cannot be routed by under passes and
overhead passes. Neither can they obey traffic signal lights to allow other traffic to pass or to stop at any given point, for radio waves spread out in all directions, crossing districts, regional as well as international boundaries.

As land traffic increases, highways are widened and alternative routes provided. Radio highways too can handle only a certain amount of traffic (or transmissions) before additional lanes are needed and more exacting operating controls employed.

Not all radio paths are of the same width. Some types of transmissions require wider lanes than others. For example, an FM broadcast needs a channel 20 times wider than that used by an AM station, while a TV station’s combination of picture and sound requires 600 times the spectrum space occupied by an AM station. Any extensive rerouting of traffic over the invisible radio paths requires complex planning and execution. A mass of facts and figures relating to the use of the radio spectrum must be studied, plotted and applied.

The lowest frequency normally used for radio communication is about 10,000 hertz (10 kilohertz). The spectrum is arranged progressively upwards according to the respective wavelengths, graduating upward from long waves and short waves to microwaves above 1,000 megahertz.

For convenience, the radio spectrum below 30 kilohertz

\[
\begin{array}{ccc}
\text{i.e. } & 0 - 30 \text{ kHz} & \text{is known as the } VLF \text{ (Very Low Frequency)} \\
30 - 300 \text{ KHz} & \text{LF (Low Frequency)} \\
300 - 3 \text{ MHz} & \text{MF (Medium Frequency)} \\
30 - 300 \text{ MHz} & \text{HF (High Frequency)} \\
300 - 3000 \text{ MHz} & \text{VHF (Very High Frequency)} \\
3000 - 30 \text{ GHz} & \text{UHF (Ultra High Frequency)} \\
30 - 300 \text{ GHz} & \text{SHF (Super High Frequency)} \\
\end{array}
\]
FM and TV broadcasting, as well as various safety and special services, are individually provided for in the segment between 25 and 890 MHz.

Conclusion
The radio spectrum is part of the electromagnetic spectrum which is a continuum of an infinite set of frequencies part of which are radiowaves, microwaves, visible lights and X-rays.

Member countries of the ITU regard the radio frequency spectrum as both national and world resource; consequently, as with any natural resource like minerals, forestry, etc., they adopt policies and measures to ensure that this resource is used in the best interests of the nations. The supervision and administration of the government use of the spectrum have the objective of ensuring that such use is efficient, effective and prudent.

If trade is the lifeblood of the economy, then the radio spectrum can truly be regarded as the nervous system of both the economy and society. Any industrial development involves coordination of a series of operations and provision of services which are essentially dependent on adequate telecommunication facilities. Commerce, trade and professional services are heavily reliant on the radio spectrum in arranging supplies, sales, transactions, appointments and communicating data.

Tourism, which is of increasing importance in Ghana, is almost wholly dependent on telecommunications using the radio spectrum as a medium of transmission for bookings and effective use of hotel and transport facilities.

The development of agriculture, while relatively simple in concept, requires adequate telecommunications to arrange for supplies of seeds and fertilizers, coordinate irrigation, provide for collection of produce wastage and facilitate sales. Not only do services such as the Electricity Corporation of Ghana, the Ghana Water and Sewerage Corporation and the Ghana Railways, use the radio spectrum in their business activities, they are operationally dependent on them for signalling, remote switching etc.
The radio spectrum is the principal transmission medium for Radio and Television whose reach and influence are enormous. It is the main medium on which the government relies to communicate its message to the public, especially to rural areas where the print media cannot penetrate effectively. It is, therefore, not surprising that governments all over the world, whether in the advanced or developing countries, enact regulations to ensure the judicious use of the spectrum. Any rights of users to operate on any radio frequency, be they from amateur radio to commercial broadcasting, are rights held by the government. Such rights may be transferred by the government from one user to another as required in the overall national interest.

REFERENCES

TECHNICAL AND ENGINEERING QUESTIONS IN
ESTABLISHING AND MAINTAINING SMALL
BROADCAST STATIONS

T.N.L. Bonso-Bruce

Introduction
Broadcasting is a very powerful tool for dissemination of information, be it off-the-air or closed circuit. It is a mode of communication which is instantaneous and where the transmission is intended for direct reception by the general public. In other words, to a large audience depending upon the coverage area. Establishing, operating and maintaining a radio station is capital intensive, but the gains are positive if the operations are commercially biased.

Broadcasting operations use a worldwide natural resource as the “carrier” of their information, or of the signals, or of the intelligence in the signals. This worldwide natural resource is Electromagnetic Wave Frequency. It is not unlimited and, therefore, it is expected to be judiciously used.

Since broadcasting is instantaneous to a large audience both its establishment and operations need to be regulated and protected. It must be emphasized here that no government in this world has given absolute autonomy for the establishment and especially operations of broadcasting activity on its territory. In the light of this assertion, it is obvious that governments, especially in third world countries, have always been cautious towards privatization of broadcasting in their countries. It follows, therefore, that any government interested in privatization would obviously be interested in protection of its establishment and regulation of its operations.

Broadcasting in the general sense includes radio, television (audio visuals) and teletex. I have included audio visual because we are witnesses to the type of video information being communicated to our children, the unemployed youth and, unfortunately, to some
young housewives by the video houses dotted all over our cities and towns. There should be regulations of some sort as to the type of material these video houses show, for we need to protect the future of our children and therefore the direction of the destiny of our dear nation.

Infrastructure
I have earlier made reference to the capital intensive nature of establishing and operating a broadcast station. The amount involved is relative to whether the station is expected to offer high quality service to its audience, or just a service tainted by avoidable shortcomings.

The infrastructure is extensive. Again it is relative, though the requirements are comprehensive even if it is a small broadcast station, which is the subject of this presentation. Some primary items in the infrastructure include:

(i) Land for the studios and the transmitters,
(ii) Reliable electricity power supply,
(iii) The broadcast equipment.
(iv) Frequency for the service.

Land for the Studios and the Transmitters
However small the station shall be, land is needed to put up the studios and the transmitting system. If it is decided to keep the two activities on one premises, then great caution is needed to avoid mutual interference of one from the other. Usually the studios are separately sited from the transmitters but in the case of a small station both the studios and the transmitters can be arranged to be on the same premises with little interference to each other.

Land acquisition can be involving: Meetings with the owners of the land (families or chiefs or custodians) several times over before acquisition; registering the land and acquiring the relevant documents. Some people decide that the easier way, therefore, is to acquire a property with structures already on it and then modify the structures to suit the project.
Reliable Electricity Power Supply
The broadcasting equipment as well as the premises for the studios and transmitters need reliable electricity power supply for both the operations and security.

Fluctuations in the Central Electricity System (CES) are sometimes out of range and, therefore, detrimental to the primary broadcasting equipment. It is, therefore, recommended that even if the CES is available, there should be a second power source which usually is provided from a standby electricity generating set.

Fluctuations in power supply are reduced considerably through regulation which is usually effected by the provision of an Automatic Voltage Regulation (AVR) equipment.

The capacity of the power supply and, therefore, the rating of the transformer for the CES, the AVR and the generating set is dependent upon the various loads on the premises.

The Broadcasting Equipment
The broadcasting equipment comprises basic items or groups of items such as the studio equipment, the transmitting equipment and the ancillary equipment.

The studio equipment ranges from the microphone for radio, the camera for television, and the typewriter keyboard for teletex, through various processing equipment to an amplifying equipment which gives out an electronic replica of the sound or picture or characters at a prescribed power level for relaying through a link equipment to the transmitting equipment.

The link equipment can be an ordinary audio cable, a waveguide or a radio link (VHF, UHF or microwave).

The transmitting equipment is the sole item without which broadcasting activity cannot be realized. It is the item of equipment which receives the electronic replica of the information, magnifies it several times and then puts it on or modulates a carrier frequency. This carrier frequency is then brought up to a prescribed power level by the transmitter before being dispersed through the transmitting antenna into the air for reception by our receiving sets.
Broadcasting equipment is capital intensive and varied in its sophistication as well as rate of its obsolescence. The market is lucrative and there is high proliferation of manufacturers, all eager to sell something.

We in the third world countries stand at a disadvantage if we shun expert advice. In Ghana, we have experts who are better qualified than most of those foreign salesmen who walk the corridors and throng the offices of some of our decision makers just to sell them broadcasting equipment, some of which are rejects and, therefore, of lower efficiency in operation.

There are specifications on any item of equipment and any ordinary sensible purchaser looks for the required specifications on the equipment he/she wants to purchase. To procure any broadcasting equipment which is normally a specialized item, therefore, one needs specifications and especially those specifications related to local conditions.

The harsh climatic conditions here in the tropics resulting in high temperatures, very high humidity and dust contribute largely to the operating efficiency and life of any broadcast equipment.

Factors such as voltage and frequency which a lot of people take for granted and therefore ignore are very vital specifications for any electrical/electronic equipment. Our colleagues in the Electricity Corporation of Ghana (ECG) and Volta River Authority (VRA) will tell you that standards for electricity with respect to the two factors are 415VAC, 3 phase, 4 wire, or 240VAC single phase, 50Hz. Then some salesmen from Europe introduce equipment with 220VAC and expect it not to have frequent blow-ups when 240VAC is fed into these items of equipment.

First of all, before procuring equipment for establishing a broadcast station one needs to consider the optimum number of the various items, the facilities on the equipment, the quality of its service and the sophistication of its design. Other factors for consideration include the nominal power needed to give out, through an appropriate antenna system, the required signal level at the point of reception.
There are cases where certain types of equipment are purchased with facilities which are never used but yet are paid for at purchase. Also there are cases where very high quality equipment is purchased into a chain of less high quality. Purchase of any sophisticated item of equipment needs careful thought because there are situations where maintenance becomes a headache and if that item should develop a fault the entire equipment is rendered inoperative. If there is no alternative then a quick training on the equipment is considered for the personnel who will be responsible for its maintenance.

**Frequency for the Service**

Frequencies make up the Radio Frequency Spectrum. This spectrum has been grouped into bands by the International Telecommunications Union (ITU) for various radio usages, one of which is broadcasting. The broadcasting bands have been allocated for different types of broadcasting, e.g. AM-broadcasting, tropical shortwave broadcasting, international shortwave broadcasting, Television broadcasting, and FM-Radio broadcasting. Frequencies in these bands are further assigned for broadcasting usage in all the countries of the world.

Because of the peculiar characteristics of radio frequencies, the assignments extend, in certain cases, to locations in the countries. There are, therefore, international regulations for usage of frequencies by countries. These regulations are expected to be observed in all the countries which are signatories to the convention of the ITU. For the observance of the regulations, therefore, bodies have been formed in all the ITU-member countries to allocate, register and control the usage of frequencies for broadcasting. In Ghana, it is the Ghana Frequency Registration and Control Board which has been charged with this responsibility.

It is obvious from the above, therefore, that frequencies assigned to countries for broadcasting are not unlimited and, therefore, judicious use is expected while hoarding and monopoly are abhorred. For the judicious usage of frequencies there are few techniques that can be applied to enable one single frequency to be
allocated to more than one broadcasting establishment. Some of these are:

(i) Polarization (Vertical, Horizontal, Circular)
(ii) Directivity
(iii) Sharing of transmission time
(iv) Location of station.

However, with the techniques of location any other two do not offer satisfactory usage in even the developed countries. Some countries attempted using Vertical and Horizontal polarization of a single frequency at almost the same location for broadcasting but it was observed that isolation between the two modes of polarization was not enough for good reception at the receiving points. It follows that it is only the technique of location that is reliable when allocating frequencies for broadcasting establishments and that if frequencies are assigned to a location by the ITU it is expected that their usage in accordance with international regulations be respected to avoid mutual interferences to other users of radio frequencies.

Let us take, for instance, the VHF-FM Radio Band II which covers 87.5-108MHz. Until about 15 years ago, this band stretched only to 100MHz and there were only three assignments per location within about 40 kilometres radius. The 100-108MHz extension gives additional two frequencies per location making a total of five frequencies per location within 24 kilometres radius. We see, therefore, that the number of frequencies assigned to a location is limited.

Let us now consider the television bands III, IV and V. Band III comprises Channels 5-12 i.e. 8 channels, and GBC has used almost all, i.e.

Channel 5 - Jamasi Ashanti/Parts of Brong Ahafo
Channel 6 - Akatsi
Channel 7 - Sunyani
Channel 8 - Tamale
Channel 9 - Adjankote
Channel 10 - Amedzofe and Bolgatanga
For very technical reasons it is advisable that new private broadcasting stations operate in bands IV and V where the frequency dependent items or components are smaller in size and therefore less cumbersome in installation. However, the frequency, which in relation to a transmitting equipment is referred to as the “carrier,” needs more power for transmission since attenuation is higher than in Band III.

Band IV/V stretches from 470 MHz to 890 MHz and comprises, in the PAL System, Channels 23-83 of 8 MHz bandwidth. A few of the channels have, however, been allocated for other users.

Siting of Broadcasting Infrastructure

There are technical considerations for siting broadcasting infrastructure, viz. the studios and the transmitting equipment. To avoid external noise, studios are normally sited away from vehicular highways, electricity power lines, industrial areas, high ignition equipment and airports. If some of these interference sources cannot be avoided, then the studios will need heavy acoustics to prevent the interfering effects of these sources from entering.

The studio can also be located in basements with the administration block above it. Consideration will need to be given to air-conditioning and air-circulation.

Broadcast transmitting equipment usually carries high radio frequency power which is many times greater than that for telecommunications. One of the first considerations for siting a broadcast transmitting equipment is, therefore, to avoid being close to telecommunication installations, especially satellite earth stations and microwave links. The coverage of a transmitter depends upon the height of its antenna when using frequencies in the VHF and above.

It is, therefore, recommended that, to cut down on costs, masts and transmitters are sited on higher grounds, i.e. on hills and mountains for height advantage.
Common Use of Facilities and Infrastructure

I have made mention earlier on that the establishment and running of a broadcasting station is capital intensive. However, management of initial resources such as infrastructure and facilities can be commonly used and costs shared. Common use of facilities is, therefore, recommended where possible but the resultant implications need to be studied (technical, legal, financial, human, etc.) before embarking on such a corporate business. The financial returns are positive when one thinks of the high profit margins of some commercial broadcasting establishments in the world.

An entire station can be commonly used by sharing transmission time. In such a situation all the infrastructure and facilities change hands during the times of the various transmissions.

There are situations where only limited facilities such as the transmitter buildings, the masts and the antenna systems are commonly used. In these situations

(i) a building can house two or three transmitters of different frequencies.

(ii) a single mast can be structurally designed to take a number of antenna systems and be able to withstand the highest predictable wind velocity in the area. e.g. in the UHF bands for television, the VHF-FM Band II for FM-Radio and also the microwave bands for links and communications.

(iii) a simple antenna system can also be designed to accommodate a number of transmitting frequencies in the same band.

(iv) again a single antenna system can be so designed as to handle a high radio frequency power. This situation calls for the handling power capacity of the antenna elements, the feeders (main and branch) and the combining unit into which the transmitters’ outputs are fed to avoid intermodulation of the different frequencies. A number of transmitters can, therefore, use this single antenna system.

It is, therefore, absolutely possible for common usage of facilities and infrastructure. The next factor is trust among the business
concerns.

Where there are no security risks, the Ghana Broadcasting Corporation (GBC) should be able to share its infrastructure and some of its facilities for a fee. The engineers and management of the GBC should be able to determine which facilities can effectively be shared without losing the identity of the organization and without any risk whatsoever to the organization.

Operation of a Small Broadcasting Station

First of all, I will consider a small radio broadcast station as an FM-Radio Station having two small disk-jockey type studios and a transmitter station either on the same premises or remotely sited. I have considered two studios because of reliability of the service so that should one develop a fault during transmission the other one takes over immediately while the faulty studio undergoes maintenance.

With this station there shall be only four programme officers or disk-jockeys and three technicians. Two of the disk-jockeys shall be on-duty at any one time while the third is off-duty. The fourth shall be chasing programme materials outside the studio premise. Most of the programmes shall be on recorded tapes and shall be programmed to come on the air at specified times.

The transmitter shall be unattended and remotely controlled. All the three technicians shall be trained for both maintenance and recording or dubbing and shall be responsible for the maintenance of the studios as well as the transmitter equipment.

A vehicle shall be made available for maintenance of the remotely sited transmitter as well as for other assignments away from the studio premises. We can consider a reporting-van for newsreel and manned by any of the programme officers.

We know that Britain is a pioneer in television. We know also that the weather in Britain is very unpredictable. Earlier television programming had, therefore, featured mainly indoors with artificial stages and lighting. Whenever there is good weather outside,
preference is given to open-air for programming.

Unfortunately, those of us in the part of the world where the weather is bright and the rains less unpredictable have blindly stuck to the early practice which depended on the unpredictable local weather of Britain.

If, therefore, a small television station shall adopt open-air studio programming it can cut down costs for lighting, air-conditioning and artificial stage set-ups. The transmitting equipment shall be of such power as to give enough signal through its antenna system for coverage of the area needed and not for coverage of areas where there will be no population, for this is a commercial venture.

Maintenance

Maintenance falls into two main categories: Preventive and Curative.

Preventive maintenance is an activity which many in responsible positions frown upon as it is thought to be too expensive. But have you ever compared costs arising out of lack of preventive maintenance? Preventive maintenance follows schedules. There is the tendency of some responsible people over-using an equipment and ignoring these schedules of maintenance which are normally less time-consuming and cost relatively less.

Maintenance schedules span the designed life of the equipment and they are usually grouped into weekly, monthly, quarterly, half-yearly, yearly, three-yearly and five-yearly cycles. Maintenance should be undertaken on all items between input and output of the entire chain. Some people often forget the remotely located items which are as vital as those items with which daily contact is made.

Take, for instance, the maintenance on a transmitting mast: tightening of bolts and nuts and painting of the mast, that is all! These may be scheduled for a yearly or a two-yearly maintenance cycle. Failure to follow the schedule could lead to continual loosening of these bolts and nuts as a result of winds blowing over the face of the masts and introducing bending moments into the structure. Cracks would then be introduced into the members, allowing rust
formation here and there, and eventually bringing down the entire mast and antenna system. Your whole business comes to an abrupt end! What a cost!

Another example: neglecting the cleaning of dust particles on a high power radio frequency component, e.g. the tank circuit of a radio frequency power amplifier through lack of maintenance, the result can be a flash-over of a radio frequency power through the dust particles and the tank circuit is burnt. If you are lucky, replacement of some parts will be what you need. If you are unlucky, replacement of the entire tank circuit will stare you in the face.

The costs of these two situations are between almost nothing (i.e. cleaning the dust particles with soft or chamois cloth) and thousands of dollars (i.e. procuring a new tank circuit). Of course, there must be available the right tools and the appropriate technical personnel who must be motivated to give of their best.

A general example: a small component (resistor, capacitor or a piece of wire) partially disconnects from its position and therefore results in intermittent breaks in the system. Some people tend to ignore the situation because they feel the effect is not so annoying. Before they realize what is happening, this partial disconnection has precipitated arcing around the area and therefore causing:

(i) insulation breakdown of the mounting board on which those components are mounted and hence replacement of the entire board; or
(ii) complete burn of the points of contact of probably an expensive item (e.g. switch) and hence replacement. High cost involved!

Training
Training in every respect is very vital to efficiency and therefore to high output. Some decision makers and chief executives consider training as waste of funds. But I wish they had also computed how much funds are wasted by not considering training for their personnel. In this day and age, training of personnel or development of
human resources is placed on a high priority consideration in any serious business organization.

Any business which takes training of its personnel seriously needs only few personnel to sustain the business at a high productivity level when such vital factors as availability of right tools, consideration for motivation and attention to personnel welfare are not overlooked.

Equipment Designing and Academic Institutions
Equipment designing in general starts from academic institutions or from laboratories of establishments. For broadcast equipment design or equipment assembly, I can safely say that it can start from our Polytechnics and the University of Science and Technology, (UST), Kumasi, as an academic exercise even in the early years of the engineering course.

In the latter years, however, practical designs can be encouraged. Some of us are aware of designs which past undergraduates from the UST had turned out as practical material and used for satisfactory purposes on the campus. One sad thing is that the business community is yet to show interest in some of the very practical designs from our academic institutions.

There was a small power FM-Transmitter designed and built at the UST sometime ago. This was a prototype and it could only be developed by a business concern. It is a challenge, therefore, to the business community in this country to liaise with the UST, take interest in the prototypes of the engineering designs including this transmitter, provide funds for their further development and manufacture them for marketing.

This will be an encouragement to undergraduates in our universities and may start an engineering revolution in this country.
PROGRAMMING FOR SMALL INDEPENDENT RADIO AND TV STATIONS

David Ghartey-Tagoe

Introduction
In this paper, as in others in this seminar, there is an attempt to highlight the prospects of private broadcasting in Ghana, encouraging potential investors and proposing policy guidelines for promoting the industry in a democratic and pluralistic environment. I am particularly charged to focus on: “Programming for small independent Radio and TV stations.” In doing this, I shall try, among other things, to:

- examine the real and potential market for programmes;
- look at the cultural and ethical issues that have to be grappled with in a pluralistic broadcasting environment;
- identify human resource requirements for a start and development;
- determine the different and varying proportions in which audiences need to be educated, informed, entertained or motivated through programming and finally, propose some broad policy guidelines on public service requirements on private stations e.g. provision of news and other public affairs programmes.

To ensure that our perspectives are in place, it is useful to call into play a fundamental educational principle, to wit: to begin from the known to the unknown.

So we begin from the Ghana Broadcasting Corporation (GBC) which we know, with a view to having some idea of what the private independent radio and television station in Ghana could be.
Ghana Broadcasting Corporation

**Historical Perspectives**

By July 31, 1935, when Sir Arnold Hodson was governor of the Gold Coast, the British Engineer, F.A.W. Byron, had got the first radio equipment installed in Accra for commissioning. At six o’clock that evening, overcome with excitement, Sir Arnold made the historic maiden broadcast to a keenly expectant audience of some 300 subscribers in Accra. So on that day, a new vista of life had been opened in the Gold Coast. Now, with 10 kW transmitters, Radio Ghana’s signals are available to the country’s entire population of about 15 million.

What about Television? In modesty and humility, I recall that moment on 31st July, 1965, when, with a good deal of historic ecstasy, after a successful newscast at 7:45 p.m., Ghana’s premier newscaster signed off the bulletin thus: Ghartey-Tagoe for Ghana Television News, goodnight”. Nostalgic, isn’t it? The advent of TV in Ghana on July 31, 1965, 30 years after Radio, was a stupendous complementary achievement.

So far so good for historical perspectives. Now, geographical perspectives which will give a better market idea.

**Geographical Perspectives**

GBC, christened station ZOY in 1935, now broadcasts on Radio One and Radio Two for 105 hours a week each, on Accra FM 72 hours a week and on GBC-TV 50 hours a week. There is also the FM station at Bolga and lesser ones at Apam and Dormaa Ahenkro. The External Service of Radio Ghana serves West Africa.

Programmes through the National Service are available across the whole country through an estimated 3 million radio sets of all types in households, institutions, farms etc.

The estimated 300,000 TV sets of 50 cycles Pal System B specification in the country can be used in three categories of areas: Those served by 10 kW transmitters within the effective 80 km radius from Adjangote near Accra, Kissi near Cape-Coast, Jamasi
near Kumasi, Amedzofe, Tamale and Sunyani; areas served by 5kW transmitters within the effective 40km radius from Akatsi, Han and Bologatanga; areas in and immediately around where there are translators installed: Berekum, Awaso, Sefwi Wiawso, Tarkwa, Prestea and Akosombo.

A superimposition of the map showing the distribution of TV signals in the country (Fig. 2) over the map showing the population densities (Fig. 1) clearly indicates that about 75 per cent of the population of Ghana can receive TV programmes.

In sum, therefore, it is safe to assume that 100 per cent of Ghana's population are real or potential beneficiaries of radio programmes, while about 75 per cent of the population can receive TV programmes. Independent stations need transmitters of equal or inferior strengths for the same or pro-rata results.

Traditionally in Africa, a major constraint on the establishment and development of broadcast stations is the narrow base of financial resources. Broadcast institutions have, therefore, been established as public service organizations primarily to serve as media of informing and educating, rather than generating funds as independent stations would naturally have to do. The public service broadcasting organizations are financed through direct government subvention. Less than 10 per cent of GBC's budget was being realized from commercials by 1990, for instance; more than 90 per cent was all subvention.

For any viable enterprise, men, money and materials are prime necessities: qualified human resources, enough money for maintenance and other recurrent expenditure, as well as materials in the form of infrastructural equipment and spares, must be assured.

In passing, let us take a brief look at the equipment. For small independent stations, it would be ideal to have transmitters of reasonable strengths, though much smaller; for example, 0.05-1.5 kWt. transmitters installed in the densely-populated areas - the regional capitals - in order to capture a sizeable market.
One dot represents 500 inhabitants.

Source: Ghana Population Census, 1984

Fig. 1 Ghana: Distribution of Population, 1984
Fig. 2 Distribution of Television Signals (TXS) in Ghana
The Market Size

So far we have tried to present a picture of the potential market for programmes - to indicate where in Ghana radio and TV signals are available. Now, let us attempt the story of what is the real market. Here, an examination of listening and viewing trends will be of help.

The latest GBC Survey Report, published in September, 1992, showed the following details from 137 responding panel members:

- Greater Accra had 55, i.e., 40 per cent respondents, Central Region 16 per cent, Brong Ahafo 14 per cent, Eastern Region 13 per cent and Ashanti 13 per cent. While results from Western, Volta and Northern Regions were insignificant, the two Upper Regions each had none. The situation was unfortunate for the two Upper Regions since they have population concentrations and both radio and TV signals are available in nearly all parts. Without doubt, the Greater Accra Region has the most articulate and the largest audience and market.

- There were 130 male respondents and 7 female, indicating that women were usually apathetic on such issues.

- 119 representing 86 per cent of the respondents were between 21 and 60 who constituted nearly all the market. This group, incidentally, constitutes the working population and "real" market.

- While 19 were single 115 were married, indicating that married people form a better market.

- Again, 119 of the respondents (86 per cent) had good education, secondary and above. 40 per cent of these were educators/teachers; 85 per cent understand Akan, 50 per cent Ga and Dangbe and 15 per cent Ewe. The composition of the market was reasonably clear - the educated, Akan, Ga or Ewe.

Another Report, a BBC International Broadcasting and Audience Research Report for October, 1991, the latest of such reports, stated that in Ghana, foreign radio stations, led by the BBC, "tend to be somewhat more important for news about Ghana and are clearly more popular than GBC." This is an important revelation which should help private stations to evolve useful strategies for
competition, bearing in mind credibility, reliability and marketability. Fairness, objectivity, speed etc. in a convincing presentation of the news, are some of the criteria to be borne in mind in formulating such strategies.

The same BBC survey carried out with 2142 respondents reports on the following findings which give useful information on real market situations:

- Broadcast media, especially radio, are more popular than print media.
- Daily listening is twice as high among men (45 per cent) as among women (21 per cent).
- Daily listening is higher in rural (40 per cent) than in urban (29 per cent) areas.
- Daily listening is higher in the morning with a peak between 0600 and 0630 hours followed by a small lunch time peak between 1300 and 1330 hours and an evening peak between 1800 and 1830 hours. Thereafter, listening declines in favour of TV and video viewing.
- It is important to note that all three peaks coincide with News programmes in English.
- Women, presumably housewives at home, rather than men (most of whom are at work), listen to Radio between 0730 and 1030 hours and in the afternoon between 1200 and 1700 hours.
- Listening in rural Ghana tends to be higher than in the urban areas between 0530 and 0800, possibly before they go to their farms, and between 1700 and 2100 hours on return from the farm.
- TV viewing is less common than radio listening. TV signals are not available everywhere as Radio signals. Besides, most rural areas do not have electricity as the urban areas.
- Viewing is highest in the evenings with peaks at news time 1900-1930 and 2130-2200 hours.

The September, 1992, GBC survey also reports on the following programmes which command peak viewing: TV Theatre,
Akan Drama, Sports Highlights and Talking Point. Premium is thus placed on Entertainment and Current/Public Affairs programmes, pointing out market trends and their environment.

Still in search of programme/commercial markets, I must state that a gradually developing phenomenon is emerging even outside the scientific survey findings. There is an avalanche of cars in the Greater Accra Region with FM radios. Drivers and passengers are building up a listening habit during Drive Time at 0930-1415 and 1700-2130 hours when the station is in operation.

Cultural and Ethical Questions
Culture and ethics offer some suggestions for programming and advertising. In both of these endeavours, the best in our Ghanaian culture should be upheld. Ghanaian ethnographic considerations: knowledge, belief, art, morals, law, custom and habits acquired; or Ghanaian refined feelings, thoughts, tastes, manners etc. or even the ideas, values, norms, and attitudes which distinguish us. The import of the whole gamut of our culture—ethnographic, sociological or literary, should be upheld.

This should influence programmes and advertisements alike. It may be observed that the two major roles of commercials, namely to stimulate the economy and build up revenue may not always be compatible. The encouragement of consumption could undermine the overall aim of social development and responsibilities. Efforts to maximize revenue should not override ultimate development objectives. A clearly-defined code of practice and ethics should restrict, if not forbid, the advertising of alcohol, tobacco, patent medical products, narcotics, etc.

The independent Radio and TV station will be heard and seen by all types of Ghanaian audiences with varying backgrounds, religions, ages, etc. Programming should, therefore, be presented without undue emphasis on sex and violence. Crime should be presented with its clear inevitable retribution. The suffering and disadvantaged should not be ridiculed.
To sum up, programming should promote norms and ideals characteristic of Ghanaian life and practices, such as respect for parents and the elderly, good behaviour especially in public. By listening and viewing, children, for instance, should be afforded opportunities for cultural growth and wholesome entertainment.

Cultural and ethical standards achieved and portrayed by a country’s Radio and Television — they say — are rough indices of the country’s level of development.

**Human Resource Requirements for Small Stations**

To meet and exceed its objectives in a competitive situation, an independent station must have personnel with professional knowledge and skills. To ensure this requires identifying future needs and developing plans to meet those needs. There should be job analysis, job description and job specifications, all with a view to closely monitoring staff performance and conduct for optimum production and maximum revenue attraction.

Constant training to update knowledge and skills and measures to ensure progress, job satisfaction and high morale, should be put in place.

As the station will be operating in a competitive situation, it should be able to attract the best workers, look after them well and therefore retain them.

In the small independent station, the Head of Programmes who may be responsible for the day-to-day running of the station, may be charged among other things, with

- Updating the station’s music playlist with auditioned new releases, and supervising their execution.
- Production and control of quality local material for broadcast.
- Ensuring that announcers or deejays are knowledgeable, articulate, witty, intelligent, decorum-conscious and attractive.
The responsibilities of the Head of News may include:

- Determination and execution of policies for news and public affairs programmes.
- Decision on what to cover and how to cover it.
- Performance as host, reporter, newscaster, etc.

In the case of Television, the Head of Production may be in charge of all production, film/video as well as design and graphics.
- Scheduling and monitoring of programmes for content and technical suitability.

The Chief Executive of the small independent station may also be referred to as the Director. He may be responsible for:

- Programme planning; developing and implementing of short, medium and long-range plans with a view to attaining its programming and financial objectives.
- Diligently pursuing procedures of high standards and excellence for the building up of an enviable image for the station. The Director should be knowledgeable and possess high, professional, personal and administrative qualities. To be able to do this, he should also know the community in which he operates intimately - its demographic composition, its economy, work and leisure patterns, music and information preferences, other programme preferences, social problems and needs. He must be cooperative, creative, friendly, ethical, flexible and understanding.

- In a small station, it is only important to keep good quality staff to size, highly motivating them for the best results. Only the best should be good enough for recruitment, viz. only a few Producers for Radio and Television, Cameraman, Soundman, Designer and Graphic Artist. Adhoc free lancers and part-time workers from GBC may be considered if necessary.
Types and Purposes of Small Stations - Audience Varieties for Educational, Informational and Entertainment Programmes

Because small independent stations are not subvented and must support themselves, they must, of necessity, have an appeal for the variety of audiences. It would appear, therefore, that the selection of a broadcast format is the first important step in the development of a station’s programming strategy. If wisely determined and effectively executed, it will attract audience and with it, advertisers.

Broadcast Formats

But first, what are some of these formats, determined by the socio-economic characteristics of audiences? They fall under three main categories: Music/Entertainment, Information and Specialty.

The Music Format is the most frequently prescribed. Varieties of this may include:

(i) The Traditional, catering for different ethnic groups, e.g. the Adowa for the Akan, Agbekor for the Ewe and the Takai for the Dagbon.
(ii) The Highlife - which has a general appeal in Ghana.
(iii) Contemporary Hits (pop music) targeted to the 15-35 age group.
(iv) Nostalgia - the format which draws its audience from people 35+ who like to recall “the good old days.”

The Information Format deals with News, public affairs, views and interviews on burning issues editorially adjudged to be worthy of coverage by the station-ownership-announcements, market reports, sports, ceremonials, features, etc.

Specialty Formats may be targeted to ethnic groups, religious groups etc. (compare Oral Robert’s religious services on GBC in the 1970s for foreign exchange).
Broadcast Format Selection

Some factors that may influence format selection may be, first, the size of the market and, second, the location and composition of the community under review - its demographic characteristics and trends, lifestyles and other characteristics.

There is no doubt, judging from the several recent survey findings, that a judicious blend of music/entertainment/information formats would be ideal for Ghanaian audiences and markets. Direct, didactic education programmes are likely to be tuned off.

It may be stated at this stage that since the announcer is the link between the station and the audience, announcers may be encouraged to project their personality with the expectation that it will provide another competitive weapon.

This presupposes that the announcer is good, if not ace. John Hammond and Kwame Amamoo left the GBC more than a decade ago. Yet memories about them are still evergreen and refreshing. Announcers can make or mar a station.

As announcers or deejays the GBC October 1992 Survey Report mentions the following in order: Tommy Annan Forson (65), Kwesi Kyei Darkwa (47) and Charlie Sam (46). The others have abysmally low scores. Are these three, indeed, good?

In this age of computers, the use of automation in operations may be considered. This may offer the advantages of consistency and professionalism, eliminating personnel problems and saving costs. Nonetheless, it removes the element of personality and deprives the station of spontaneity and flexibility. A station certainly has a competitive advantage through on-air and off-air promotion of image and carefully-planned programming. A well-selected, trained and talented personnel constitute an enormous asset.

One other important word. Since a music/entertainment/information format is advocated, it may be noted that many Ghanaian listeners and viewers have limited tolerance for interruptions in programmes to which they may be paying rapt attention. They may tune off or seek another station if this happens. Commercial operation should, therefore, be carefully handled.
Programming Strategy

Again it should be observed that programming for a private TV station is markedly different from a private radio station. While a radio station identifies a specific audience and broadcasts to it TV targets a general audience and attempts to respond to the preferences of those who are available at a given time. Programmes of strong appeal could have other programmes and adverts built around them to compose a schedule that encourages viewers to tune in and remain with the station from one programme to the other till close-down.

Programme stocks and sources of programmes may include local productions, syndicators, network or affiliates, first-runs produced for sale directly, features, cartoons, series, serials, packages, some of which can be obtained through barter arrangements.

Scheduling strategies to capture large markets should consider: strengths and weaknesses of competing stations, building audiences, building audience habit. In time, all planning and scheduling should aim at maximizing the advantages of advertising, namely stimulating the economy by encouraging people to work harder and to buy goods and services. This way, commerce and industry are boosted and revenue generated through three main sources: Spot advertising, programme sponsorship and paid-for announcements.

Policy Guidelines

A major objective of the small independent station which does not depend on any government subvention is to be able to sustain itself by maximizing revenue. It must therefore capture the largest audiences for the biggest business.

It must put a high premium on quality. Personnel, controlled and kept to size, must be trained and qualified, efficient and effective. The production of programmes and commercials, their scheduling and transmission, coordination and announcing, must all conform to a tried code of practice and ethics, impeccable and sensitive to the tastes and needs of varied audiences. The hiring of proven resource
persons and hardware facilities from GBC and other stations may be considered.

Some of the best of Public Affairs programmes - news bulletins, ceremonials, sports and some other entertainment programmes, may be negotiated for and taken during network operations.

Here, extra judicious scheduling is called for. Care should be taken to transmit popular programmes just before network operations begin. This will ensure that the large audiences captured for such preceding programmes are passed on and retained as market.

Furthermore, it will be necessary to originate and put out a few news bulletins, not oblivious of speed, fairness, and objectivity. This will be taking full advantage of any established weaknesses of the Public Service Station, GBC.

In conclusion, it is recommended that, to survive in a competitive environment, it is imperative for the small independent station to systematically build up for itself an acceptable stature through expert programming, advertising, announcing and general operations. Excellence should not be compromised.
Introduction
This seminar has as its theme the promotion of private radio and television broadcasting. It has come at a most opportune time in the history of this country. Ghana, like many countries, has embarked on a journey of constitutional rule in accordance with the wind of democracy currently blowing worldwide. The present orientation of donor agencies and Western countries, which favours the development of a vibrant private sector in key sectors of our national life, particularly economic, is another reason for the timeliness of the seminar.

The objective of this paper is to make a case for the restoration of localism in radio and television in Ghana and discuss some of the problems and challenges to be encountered, as well as the policy options necessary for their establishment, particularly in the rural areas. Since one of the goals of the seminar is to make available to participants information on the feasibility of small-audience broadcasting stations, I will also attempt to touch on the various new technologies available for local broadcasting.

Ever since transistors reduced the size and price of the electronic media and made radio the medium that goes everywhere, broadcasting has become a vital, if not indispensable, tool for mass communicating to isolated communities and predominantly rural areas. Radio and television are also known for their unparalleled ability to transcend the illiteracy barrier. However, it is doubted whether the centralized nature of the broadcasting system in Ghana, since the pre-independence era, has significantly permitted the full use of
broadcasting in the development of this country.

It may be recalled that broadcasting was introduced into this country primarily to serve the needs of colonial rule or the settler communities. Basically, it was designed to inform the colonial administrators about news from the metropolis, to sustain cultural links with the imperial centre and thereby re-affirm colonial authority in pre-independence Ghana.

On achieving independence, broadcasting continued its role as the major channel of top-down communication. This time, however, the focus moved into the area of nation-building. As pointed out by Ansah, one of the achievements of broadcasting in Ghana has been the forging of a sense of a common national identity. Thus, broadcasting is said to have successfully projected and diffused a set of ethnic dances, namely *agbadza*, *adowa*, and *kpanlogo* as national norms or symbols.

However, our current understanding of development as a process that places emphasis on local participation, inspired by horizontal and bottom-up communication, as well as local community initiative, makes it vital that we take a second look at the structure and role of broadcasting in modern Ghana. Indeed, framers of Ghana’s 1992 Fourth Republican Constitution appear to have anticipated the inadequate role played by broadcasting in our past development efforts, and accordingly have sought to provide Ghanaians with the constitutional protection necessary to operate. I am referring to the concept of press freedom and, more importantly, independence of the media enshrined in Article 162 of the Constitution. Article 162 (3) is worth quoting in full:

There shall be no impediments to the establishment of *private press or media*; and in particular, there shall be no law requiring any person to obtain a *license* as a prerequisite to the establishment or operation of a newspaper, journal or other *media* for mass communication or information. (emphasis added).

In plain and simple language, it is unlawful for anybody, including the government, to demand a licence for the establishment of a
radio station or television. Such a move will be a violation of your and my constitutional rights. However, let me immediately add that the constitutional protection granted to the establishment or the operation of a news organization does not preclude the institution of laws or regulations to govern the functioning of the mass media—a role wisely granted to the Media Commission, the only watchdog of our press freedom rights.

I would like to believe that the constitutional protection, in terms of media ownership and control, provided in the supreme law of the land, is intended to dismantle the national structure and character of our broadcasting system, inherited from the colonial era. Let me recall again that the operating broadcasting system is invariably a derivate of the BBC, a highly centralized model. It is the opposite of the US model, which is less centralized and commercially driven.

This simple fact of the colonial origin of Ghana’s broadcasting system has enormous implications for analyzing the structure and role of small independent radio and television stations in Ghana. For example, the Ghana Broadcasting Corporation was set up as a public corporation, with an independent board of directors, to operate independently. It is to be guided by public interest and professional dictates. However, the unfortunate truth is that the GBC has operated as a “government agency” rather than as a “public agency.” How often has it not succumbed to direct government control and interference? And past governments appeared to have encouraged this practice by making senior appointments to the professional staff. To survive the political game, professionalism becomes the first victim. This and other concerns make the privatization of broadcasting in Ghana an idea whose time, indeed, has come.

The Case for Localizing Broadcasting

There is no denying that our centralized broadcasting system has attempted, within the available resources and constraints, to serve this nation. Against all odds, the national radio and television
stations have tried hard not to ignore the wider sections of the Ghanaian community, who are scattered mostly in the rural areas. Through six major local language programmes, GBC 1, for example, has sought to inform Ghanaians who cannot speak English about national events. These include news events, educational programmes and entertainment. Furthermore, the station has extended coverage to many communities and thereby relayed their needs to central authority.

However, the reality of the Ghanaian situation today is that a culture of a true two-way communication between the centre and the marginalized is non-existing. Nor has the GBC been very successful in promoting horizontal communication among the people themselves. The 56 wired stations, established in the regional and district capitals to provide cable radio to homes, were not as successful as envisaged. The corporation’s inability to meet the demand for the supply of more rediffusion boxes, or to replace old ones, as well as poor local programming initiatives, killed an experiment that held much prospect for public-service community radio.

At the moment, the Ghana Broadcasting Corporation operates an additional national radio service in English (GBC-2), an external service (resumed in March 1987) and the only national television service (GBC-TV). GBC-2 is basically a commercial station, which broadcasts in English, except occasional ads in some local languages. Altogether, the programme schedules hardly meet the information and entertainment needs of a fast-growing population.

Another reason often offered for the promotion of a small-audience broadcasting system in Ghana is the polylingual nature of the Ghanaian society. It has been said that meeting the needs of a linguistically diverse population, such as Ghana, brings with it difficult professional tasks for broadcasters. It is estimated that Ghana has about 50 different languages. An issue always confronting professionals is how to determine which language is more “important” than the others. The six languages currently being used for local programming, namely Akan, Ewe, Ga, Dagbani, Nzema,
and Hausa, still fall short of the ideal. Charges of insensitivity to minority and diversity characteristics may be justified.

Apart from insensitivity, there is also the problem of insufficient air-time on only one service, should all languages be used. Scheduling of local programmes is difficult, as it is, especially in the allocation of primetime or peak hours to certain language programmes. The worse alternative is to fragment peak hours into several local programming, which will invariably rob the GBC of its major assets as a mass medium of continuous and timely services.

Although premature, yet there are some indications that small-size broadcasting or community radio stations, if properly operated, can be used to aid in the development process. Thus, in 1978, the first community radio was established in Bolgatanga. Known as URA Radio, (from the acronym URADEP for the Upper Regional Agricultural Development Programme which the station was to serve) this local broadcasting station was intended to serve the agricultural communities of the Upper-East/West Regions with information in Kusaal, Dagaari and Gurene (or Frafra) initially, and three others later. Its programmes included new farm and harvesting practices, sanitation, nutrition and family planning.

Again in 1983, the School of Communication Studies began a similar rural community broadcasting project at Swedru. It was supported by UNESCO. Using a similar FM transmitter with a coverage of 30 km radius, the School produces material on agriculture, health care, environment, sanitation, culture and women. These are broadcast at a targeted audience who have formed listening groups.

Then in 1988, the Ghana Government established the Apam FM radio station to broadcast development-oriented programmes as a supplement to the face-to-face non-formal functional literacy project.

Preliminary studies undertaken to assess all these attempts in community broadcasting give evidence of local support and goodwill. Besides, the data suggest that some moderate progress can be
made in the target audience's knowledge level of agricultural innovativeness, personal health and family planning awareness. Indeed, a study in 1992 attests that a majority of the local population in Winneba and Bolgatanga depended on the FM Radio for news, information and entertainment.

Ansah's suggestion that the establishment of local media be accompanied with a system of interpersonal communication is worth serious consideration, given the success of the Swedru radio.

One more reason for exploring an alternative for a small-audience broadcasting arises not so much from the limitations of a large-audience broadcasting as from the comparative advantages a small-audience radio or television has.

First, small-audience mass media have the advantage of "being with the audience" in the sense that they operate from and within the local environment. Under such conditions, programmes can be adapted to local tastes and immediate needs. For example, the incidence of local motor accidents or bushfires can be the subject of a local documentary, if it is to generate effective local public opinion. Whereas the mass-audience broadcasting tends not to make an effective use of folk personalities, folk forms and folk drama, the same materials offer high appeals because of the local specificity.

Furthermore, small-audience broadcasting always creates the opportunity for developing local talents.

Finally, the use of local resource persons, such as known herbalists or traditional birth attendants (TBA) in locally produced programmes, is known to elicit a high sense of identity for such programmes. Indeed, the success of the rural radio fora project in the Volta Region, as well as the new listening clubs in Swedru, is due in part to the extent listeners are able to identify with the local-specific programmes.

Challenges of Small-audience Broadcasting Stations
Small independent radio and television stations, it has been said, pose a threat to national unity by their tendency to promote
safeguards that can be developed in the form of a broadcasting code to guide small or independent broadcasters. Such a code in the Ghanaian context may consider the following:

- the upholding of professional standards
- the need for broadcasters to exercise constant professional care in the selection and treatment of entertainment output
- the obligation to uphold community standards in the best interest of their listening public
- an undertaking to serve the locality with honesty, given the unique position of broadcasters
- an undertaking to guarantee the reliability of programmes.

The institution of such a code is justified on the grounds that the electromagnetic wave is a limited or exhaustible natural resource, unlike newsprint. A broadcasting code is not a license, and, therefore, cannot be seen as a violation of our constitutional protection against breaches of press freedom or media independence.

Another suggestion which this seminar may consider is that, before a franchise is granted to operate an independent station, a prospective entrepreneur be made to relay a certain proportion of national programmes from the national services (radio and television). The news in English and other entertainment or sporting events have been singled out. In fact, it is further suggested that a franchise be granted on a periodic, as well as competitive basis, to make independent operators accountable to the public they serve. This suggestion, which is practised in the US, is certainly in accord with the fundamental principle that broadcasting stations operate in the public interest.

The greatest of the challenges facing an entrepreneur wishing to go in for small-audience broadcasting, in my opinion, may be the following:
• cost
• funding and sustaining a local organization as a structure for its operation
• maintenance of an optimum level of professional skills in ways that will not kill local involvement
• the existence of a real economic and political atmosphere conducive for the expression of views
• maintaining a balance between public service programming and pure entertainment, particularly music.

In establishing local or independent broadcasting stations, the scary issue is not so much how to guide their operations as how to identify local structures for their operation. In China and Samoa, where local and horizontal communication have been tried with relative success, this was the most challenging problem: the creation of local organizational structures and finding leadership for it. In the quest for independent broadcasting stations, if we maintain that the local people must create and lead their own organizations, then it will be inconceivable that such a responsibility be given to local influentials. This is because, wherever influentials have been asked to create and lead, authority tends to recycle around the same local influentials, with remuneration and reward going to the same pockets.

If rural broadcasting is to become a reality, one problem to tackle will be how to tap a wider network of groups hitherto unrecognized. How does one go about it? It is certainly not by announcing it on the radio, beating a gong, or appointing a government official and charging him (or her) with that responsibility. Rather, the solution lies in creating an enabling and friendly local environment. For example, there must be the assurance:

• that whoever constitutes the organizational structure for the station (in the case of public service radio) will have actual
authority to run the station independently.

- that the local people will truly be allowed to set station policies as deemed sufficient and within established regulations.
- that ultimately they, the people, are responsible for their own destiny.

Given this environment, the next task is to find a staff to mobilize the organizational structure. If I should offer some criteria, individuals who qualify for membership must:

- demonstrate the ability to communicate with rather than to people;
- have the capacity to be trained; and
- have the capacity and demonstrate evidence of taking on community responsibility.

The other challenge has to do with maintaining an appropriate balance between entertainment programming and public interest programming. Indeed, the current trend in broadcasting is an increasing preference for entertainment programmes by listeners. This is aggravated by audience competition from video and other special radio/television services, such as the all-news, music or cinema channels. It may well be that entertainment will become the major way in which broadcasting in general will serve the Ghanaian public. In a 1977 study, undertaken by this author, the attraction of a predominantly rural community to GBC-2 musical programmes was first established.

Entertainment, particularly music, as the most popular broadcasting fare, providing relaxation and escape from the tedium of life, has similarly been confirmed by Ansah and others. Indeed, it is a tricky dilemma whether to give listeners and viewers what they want to hear and see, or what they ought to hear and view.

Regrettable as it may be, the irony of the trend is that the very growth of broadcasting, especially radio as a medium of entertain-
ment, education and information is due in part to its commercial underpinning. Any broadcasting station, backed by a strong commercial outreach, will be on a firm path to growth and establishing itself as a free medium. And so the search for an ideal balance between pure entertainment and public service information will not be easy.

It is appropriate to turn now to the issue of funding. It has been argued that the cost of setting up local broadcasting stations may be above the means of a developing country, such as Ghana. This argument falls flat on its face if it is realized that, although the call for the privatization of the broadcasting media is addressed to the government, the financial outlay for any such investment belongs to private individuals or groups of people.

For the entrepreneur eager to invest in local broadcasting, the real question should not be so much the cost as the revenue base to support independent private broadcasting. The current free-market economic environment, fuelled by high consumption behaviour in Ghana, is bound to sustain an ad revenue for private broadcasting. Other known sources of funding to sustain independent broadcasting stations include sponsorship and syndication. Syndication is a cost-saving practice, which requires programme directors of a station to subscribe to syndicated services, instead of relying exclusively on self-produced programmes.

Feasibility of Small Independent Broadcasting Stations

The new broadcasting technology available for small-audience stations includes the well-known FM Radio, the less-known AM Radio, Satellite Media and Cable Media.

FM Radio

Frequency Modulation (FM) Radio consists of radio transmitters that generate radio frequencies (RF) normally assigned in the VHF band between 88 and 108 MHz. Since the FM radio operates on a wider bandwidth than the AM radio, the circuit design of FM receivers enjoys what is known in the trade as "capture effect," a characteristic which enables a receiver, tuned to a station, to "lock
onto” the signal and not drift, as happens to AM receivers.

**AM Radio**
Amplitude Modulation transmitters are used to generate radio frequencies which are assigned generally in the MF band between 540 and 1605 kHz. AM radio signals follow the earth’s curvature and can penetrate obstacles. Hence they have an advantage in long-range coverage and stability. However, AM radio requires antennae that are tall (several hundred feet). Finally, since static objects affect amplitude rather than frequency, the AM radio tends to be influenced by atmospheric interference.

**Cable Media**
Cable media are available in the form of television (satellite master antenna television). The cable technology works by an operator (cable owner) selecting from the air or satellite a specific radio or television signal, which has greatest appeal to a community. The signals are converted to frequencies specifically allocated to a TV or radio channel and sent by cable separately to subscribers in their homes. The wired rediffusion boxes of the GBC’s relay services are an approximate equivalence of this technology.

Basically, every cable system consists of three major components. They are:

**Headend:**
A site for the receiving antennae, which pick up or receive the signals from a television/radio station, satellite or a microwave transmitter.

**Cable Plant:**
This is a network of coaxial cable, wired throughout the homes of a community of subscribers, a hotel complex, or an entire city.
Subscriber Terminal:
It consists of cable-ready sets or any radio or television, with a built-in converter unit to convert the signals coming from the cables.

Satellite Media
A satellite, as is well-known, is but an orbiting space station about 35,200 kilometres away from the earth. Its basic function is to serve as a platform to receive signals beamed from the earth. In turn, the satellite relays those signals back to the earth, this time over a wide area (1/3 of the earth’s surface). A parabolic disk (an umbrella-like antenna), usually placed in an individual’s backyard, gathers in the signals from a satellite and feeds them to a television or radio in a living room through an adjoining cable.

Satellites are the current leading edge in telecommunication technology. They have overcome the many short-distance relay boosters required in terrestrial microwave links. Advances in satellite technology have also made possible direct-to-home communication (DBS), as opposed to direct-to-earth station communication.

Conclusion
The appropriate response to Schumacher’s Small is Beautiful idea of development appears to have been fulfilled, if small-audience broadcasting can be used to end rural isolation and serve as a vehicle and bridge for horizontal communication. The current mass-audience national broadcasting services are proving to be inadequate to stimulate the social transformation that true development calls for. As indicated above, national broadcasting services, by their very nature, do not encourage community-specific programming. In this way, many people tend to be excluded from having a say in what goes into national programming.

In contrast, the advantages to be derived from the establishment of private and independent local radio or television stations in Ghana, thanks to the 1992 Constitution, are many. They include
the creation of drama programmes suited to local tastes and imperatives, the bringing of hi-tech broadcasting facilities within the reach of localities and the encouragement of innovative and diverse programming, among others.

For us in Ghana, the privatization of broadcasting stations will not only extend the current media ownership beyond the print media. A small-audience medium, such as local radio and local television, will also serve as a living symbol of true democracy for the rural people. After all, the private independent broadcasting stations do have a vital role to play in so far as they constitute a necessary instrument for free expression and a convenient forum for a free and fair discussion on matters of interest to them. When people in neighbouring villages or districts do not know what goes on in the other village/district, we can hardly ignore the problem of rural isolation. In the final analysis, any means to increase rural access to modern broadcasting is but a benefit.

Where independent broadcasting stations are able to influence decision-making in the various local communities through factual reporting of community events, true democracy will have come a step closer to the doorsteps of Ghanaians. Given the increased availability of electricity in many rural areas, and given the constitutional protection of Ghana’s Fourth Republic, perhaps what need to be added are the political will and an enabling environment in the form of appealing policy options, such as tax rebates and concessions on import duties for independent community stations.

Constitutional guarantees may permit private ownership of both the print and the electronic media. However, it is the establishment of a structural machinery that can translate the dream of private ownership into a practical reality.

This seminar rightly recognizes the importance of increased dialogue and understanding between private enterprise and government agencies in the trend toward a certain amount of decentralisation in the structure of broadcasting in Ghana. The presence of both parties here is but a living testimony that private ownership of broadcasting is but a short distance away.
REFERENCES


CONSIDERING INVESTMENTS IN INDEPENDENT BROADCAST STATIONS

K.D. Frimpong

Introduction
Privatization of Television and Radio broadcast is with us now, though in other third world countries the concept is not new. Indeed, in the 1950s, Thailand opened up to private Television.

Reasons for setting up a private broadcast station are many but the main ones are:

(a) An organization setting up a station to disseminate information, to educate and give entertainment to a community. An example is the Apam FM radio station by UNESCO, and the URADEP Radio by GBC, the World Bank and the Ministry of Agriculture.

(b) Religious bodies setting up stations, both TV and Radio, in order to reach as many people as possible.

(c) A group of individuals forming a company to operate a commercial station for profit.

The last category is what may probably dominate in the privatization in Ghana. Let us now consider the outlay involved in setting up a private commercial Television or Radio station.

Television
Technology has made possible various methods by which the TV operator can reach viewers. These systems have their advantages and disadvantages. The systems mostly used these days are Direct Satellite Broadcast, Cable TV, and Terrestrial.

Direct Satellite Broadcast
Direct Satellite Broadcast (DSB) method is employed when an operator wants to reach as many viewers as possible without using
the conventional terrestrial television transmitter. Television programmes are sent to a geostationary satellite via an earth station. These programmes are processed and re-broadcast back to earth by the satellite which has its footprint directed to an area where the operator has his viewers. The signals are strong enough to be received by TVRO (Television Receive Only) dishes not larger than 0.30m in diameter. These dishes are installed in individual homes, and are in fact the antennas for TV sets as far as the satellite signals are concerned.

However, the satellite signals from the dish first go to a satellite receiver for processing before they go to the domestic TV set for general viewing. The commercial operator who uses satellite transmission usually encrypts the signals so the viewer will have to purchase a decoder from the operator before one can view the programme.

The source of revenue for the commercial operator will be the sale of decoders in addition to monthly hiring fees and payments by advertisers. This method is convenient and eliminates the installation of TV transmitters in wider area. It also eliminates the installation of microwave system to carry programmes from programme studio centres to the various transmitters.

In countries with scattered populations and rugged terrain, DBS lends itself. One reason why many developing countries have not availed themselves of this method is the high investment involved as against the income. Perhaps no one country in Africa can launch a satellite of her own. One can, however, lease a transponder but a commercial operator in Ghana may not get enough viewers to make his investment worthwhile. Leasing a transponder may cost $2 million per year. Then one will also have to invest in a class B or C earth station which may cost several million dollars. The viewer will have to pay about $2000 for the satellite receiver and its dish. The decoder will cost about $100, and then a monthly rental of $10 will be out of reach of many people in Ghana.
**Cable Television**

Cable Television (CATV) method is used mostly in industrialized countries with high density urban populations. Television programmes for viewers are passed through video cables to various homes instead of transmitters or direct satellite broadcast. The houses must be well laid out to avoid cables obstructing paths. In Ghana where cable thefts are rampant it will be expensive for the cable TV operator to replace cables in order to keep his viewers. All subscribers are recorded by the operator and therefore any defaulter will be disconnected.

**Terrestrial Broadcasting**

Before the advent of CTV and DSB, Terrestrial Broadcast had been the traditional way of sending TV programmes to viewers at homes. To set up terrestrial broadcasting, one needs a TV studio to make programmes, a microwave link to send the programmes to the transmitting station for the transmitter to transmit to viewers. The reason for the microwave is that the transmitter is usually some distance from the studio and, therefore, the medium for carrying the programme to the transmitter is the microwave link.

One may ask why the studio and the transmitter are not co-sited to eliminate the microwave which is another cost. The answer is that a studio must be sited at a place accessible to artistes, and the transmitter must be sited on a hill to reduce the height of the mast or tower which will carry the transmitting antenna. Usually a suitable transmitting site may not be suitable for a studio, and vice-versa. The difference between terrestrial broadcasting and the other two is that, in the case of DSB the signal is coming from outer space, and in the case of CATV the signal originates from a studio through cable (wire) to viewers. In the last case the signal is distributed terrestrially.

An example is that a 10kW transmitter in the VHF range can cover an area of about 80 kilometres or more radius from the transmitter. Television broadcast by GBC on the national network consists of six 10kW transmitters situated at Adjangote for Greater
Accra and parts of Eastern Region; Kissi for Central and Western Regions and Jamasi for Ashanti Region, part of Brong Ahafo Region and part of Eastern Region. Bolga for Upper East Region, Tamale for Northern Region and Amedzofe for Volta Region. Another 10kW transmitter for Brong Ahafo Region will be completed this year. This will be sited at Sunyani. Two 5kW transmitters are located at Han for Upper West Region and Akatsi for Volta Region.

In addition to these transmitters there are translators located in grey areas where reception from national transmitters are weak. The translators are low-power transmitters of about 10W. They are not connected to the national microwave distribution system but rather receive their signals off air from the high-powered national transmitters and re-broadcast. The translators are situated in the following areas: Akim Oda, Dunkwa, Prestea, Berekum, Fosu, Aduanoma, Afram Plains, Tarkwa, Awaso, Sefwi Wiaso.

System Suitable for Ghana

Direct Satellite Broadcast is relatively expensive and, therefore, a commercial operator may not find it profitable to invest in this field. Cable TV can be economical to operate but, considering the layouts of our cities and the rampant cable thefts, a potential investor is discouraged. This leaves us with terrestrial broadcasting.

Before setting up a private TV station, one will have to consider the objective. Is the station going to use imported materials only, or will some programmes be originated in Ghana? There is a world of difference between operating a private TV station which receives satellite programmes from CNN, BOP TV, C Span and the rest and are re-broadcast to viewers, and another where at least 50 per cent of programmes are originated locally either by the station's own resources or by independent producers. Since companies and individuals have not geared themselves up for independent TV production it can be assumed that any private station will consider its own production. In this case the following investment areas will have to be considered:
A small studio 9.14 cm x 9.14 cm.

Lighting system

Two studio cameras

Studio control room for both video and audio

Audio system comprising one record player, one reel-to-reel audio tape recorder, cassette cart system

Vision mixer with effects

Audio mixer (12 channel)

10 microphones (various)

Two Betacam VTR machines

Colour monitors

Two audio monitors with built-in amplifiers

Technical equipment control room with waveform monitors and vectorscope.

Editing facility.

In addition to the above, consideration must be given to outdoor production. In this regard, a two-camera Electronic Field Production (EFP) Unit must be considered. To cut down cost, the EFP equipment can be housed in flight cases to be assembled on location. This will free the station vehicle for other assignments.

Transmission System

After making your programmes, the ultimate is to get them to viewers. This is where an investment in transmitters comes in. It is assumed here that any future privatization will be based on regional basis rather than national the reason being the cost of distribution nationally. In future, using digital compression broadcasters may be able to transmit about 5 CH within the spectrum now used for one. If we take Greater Accra as an example, it is quite feasible to put up a 1kW transmitter which will serve Accra and Tema. One need not go as far as Adjangote but a suitable site can be found to locate the transmitter to cover both Accra and Tema. In that case, the studio can be sited near the transmitter to avoid the need to use microwave link.
**Investment Cost**

With latest technology, broadcast equipment have become less expensive. Cameras use Charge Coupled Devices (CCD) instead of tubes thus making them less expensive to maintain.

1. **Studio Building:** Must be custom built with proper acoustic, lighting grids, camera points, audio and video points, cycorama curtains, central airconditioning.

2. **Lighting System:** The following equipment will be required:

<table>
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<th>Equipment</th>
<th>Quantity</th>
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<tr>
<td>Main Switch board</td>
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<td>Portable dimmer unit</td>
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<td>Isolating transformer</td>
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<td>800W lower horizon light</td>
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</tr>
<tr>
<td>Estimated cost*</td>
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*All estimated prices are approximations for 1993.
3. **Studio Cameras:** Lightweight CCD cameras with resolution of 700 TV lines will be recommended. They will include the following:

- Camera Control Unit: 2
- View finder 7": 2
- Remote control panel: 2
- Triax camera cable: 2
- Tripod system: 2
- Zoom lens with servo: 2
- Communication system: 1 set

Estimated cost: £100,000.

4. **Audio:** If one is not contemplating producing large musical shows in the studio, then cost effective equipment may be procured. The following equipment should be considered:

- 12 Channel audio mixer: 1
- Record player: 1
- Reel to Reel audio tape recorder: 1
- Cassette cart system: 1
- Assorted microphones including wireless mics: 12
- Microphone stands: 12
- Audio monitors: 2

Estimated cost: £10,000.

5. **Vision Mixer:** Another example of technology bringing down costs is in the field of vision mixers. They range from simple mixers to very sophisticated ones. They are in the price range of from £2,000 to £50,000. A cost-effective vision mixer which performs all the necessary functions can be obtained for £10,000.

6. **Video Tape Recording (VTR):** Video signals from cameras are not always transmitted live. Video recording technique is in
a state of flux with many manufacturers promising new technology. At the moment, most broadcasters use analogue composite recording system. It is likely that by the turn of the century most installations will be component digital.

One may ask, what constitutes Digital? Simply put, Digital means expressed as a number and when applied to video, it means that the signal has gone through an analogue to digital converter that turns the signal typically into an 8-bit number. This 8-bit number is usually carried internally on eight separate pieces of wire as an ON or OFF voltage. The advantage of doing this is that noise has little effect on signal and the signal can have a great deal of processing without corrupting it.

The processing of digital signal may appear complex but the irony is that the technology of integrated circuit chip has made it easier to design and fabricate a digital device than an analogue one. For example, ASICS (Application Specific Integrated Circuits) are widely used in new broadcast equipment. Currently we have Low Band U-Matic, High Band U-Matic, Sony Component Betacam, Sony Digital Betacam, Ampex DCT digital and Panasonic D-5 digital. They are non-compatible in terms of tape exchange. Sony, however, is producing a machine which will be able to play both analogue and digital Betacam. This allows users to phase into digital Betacam from analogue Betacam if the need arises.

We have also the VHS format. These include ordinary VHS, Super VHS and D-8. My advice is that the private broadcaster should play safe and invest in Betacam SP.

**Equipment requirement:**

- Betacam SP VTR - 2
- Tape Bulk erasor - 1
- Estimated cost - £25,000.

7. **Colour Monitors:** In a typical TV studio setup, key personnel performing certain functions during programme production
are not groups in the same room. They perform their tasks in different locations but all the same they must see what is happening at the studio floor. Apart from the artiste performing at the studio, the Cameraman and the Studio Manager must also be there. The producer controlling the show is in a separate room. So are the VTR personnel and technical equipment control personnel. But of necessity they must all see what is happening at the studio floor to enable them to perform their tasks. For these reasons, they must all be provided with video monitors. Total number of video monitor equipment required is 10. Estimated cost — £5,000.

8. **Technical Room**: This room can best be described as the heartbeat of any TV station. The Sync Pulse Generator (SPG) is located in this area. The sync pulse generator supplies the synchronizing pulses to the cameras, the VTRs and vision mixers so that their timings are in unison.

**Equipment requirement:**
- Sync Pulse Generator - 1
- Audio/Video switcher - 1
- Waveform monitor - 1
- Vectorscope - 1
- Estimated cost - £10,000.

9. **Editing Facility**: Editing facilities come in all forms depending on how much one is prepared to invest. They range from simple two-machine editing suite to production editing suite consisting of six VTRS, rostrum camera, paint box, character generator, DVE, vision mixer, audio mixer and computerised edit controller. The two-machine editing suite can perform, insert and assemble editing. This is adequate for News editing, documentaries editing, drama editing, interviews and discussion programmes editing. It is, however, inadequate for TV commercials or musical programmes where special effects are required.
In some countries there are private facilities companies and they hire out their equipment to TV companies. This will free TV companies from the heavy investment required to set up post-production suites. The following equipment will be required for two machines editing facility.

**Equipment Requirement**

- Play back VTR - 1
- Record VTR - 1
- Edit controller - 1
- Video monitors - 2
- Estimated cost - £20,000.

The approximate cost excluding studio building is £200,000.

**Radio**

Setting up a private radio station is relatively cheaper than setting up a private Television Station. This is because the equipment requirements in Television are much greater than those in Radio. It is assumed that the setup will be localized or on regional basis, and therefore FM will be considered. FM transmitters are cheaper and the sound quality is better than shortwave.

**Equipment Requirement**

- 500 W Transmitter - 2
- Standby generator - 1
- Automatic Voltage Regulator - 1
- Reel to reel audio tape recorder - 2
- Digital audio recorder - 2
- Cassette cart - 1
- Microphones - various - 6
- Turn table - 2.
Introduction
Ideally, a discussion of the role of advertising in sustaining independent broadcasting should be chuck full of hard facts and figures. Unfortunately, this will not be the case for several reasons:
- there is very little reliable data available,
- the time was so short for this presentation, that it was quite impossible to mount a survey which would give us generalisable information, or even to process one’s application for data from Ghana Broadcasting Corporation or the relevant Ministry.
- and as an advertising practitioner myself, I would hardly be the person to obtain freely, details of other agencies’ billings and incomes for any year.

I will be flying by the seat of my pants here with the abiding hope that one of the results of this conference will be an undertaking by the School of Communication Studies to begin an in-depth study of advertising in broadcasting, as part of a general study of broadcasting effects in Ghana.

At the inauguration of Ghana’s television service, Dr. Kwame Nkrumah categorically rejected the concept of commercial broadcasting¹, thus echoing the misgivings of the Broadcasting Commission’s report of 1953², misgivings that exist today: that commercialism could lead to a misuse of the electronic media totally controlled by buyers and sellers, with no regard for the educational and cultural roles the electronic media have to play.

In February, 1967, however, the government of the National Liberation Council established the commercial service of GBC to
afford “[the] business community and other individuals the chance of selling their goods and services through...radio and television”. Even so, until the recent murmuring about a self-sustaining broadcasting service, the concept of commercially run television or radio stations had been given extremely short shrift. The Ghana Broadcasting Corporation in its fifty-eighth year of existence is still supported by government, and still enjoys absolute monopoly of these two media.

Now, Article 162 of the 1992 Constitution states inter alia, that “there shall be no impediments to the establishment of private press or media; and in particular, there shall be no law requiring any person to obtain a licence as a prerequisite to the establishment or operation of ... media for mass communication or information”. Although the Constitution is uncomfortably silent on issues such as frequency allocation, by this provision privately owned broadcasting stations have become a reality, or at least a possibility in Ghana. For any broadcast entrepreneur, however, for whom there can be no subvention or subsidies, the question uppermost in his mind must be how to sustain a station. Of the possible sources open to a private broadcasting station (sales of airtime, sales of programmes to other networks, internal and external, and advertising) advertising seems the most viable source of sustainable income.

As at 1985, government subvention constituted 95 per cent of GBC’s income, the remaining 5 per cent being from Relay Services, TV license fees, advertisements etc. In the eight years since then the ratios are bound to have altered considerably in favour of advertisement. Although there are no official statistics to that effect, a constant monitoring of GBC television and radio advertisements carried out for 1992 suggests that GBC earned something in excess of 950 million cedis from television and radio advertising, announcements and sponsorships. Radio was favoured over television as a medium for announcements (by some 20 million cedis) whereas television was favoured for advertising (by almost 100 million cedis).
To put these figures in perspective we must remember that the monopoly that GBC enjoys, and the fact that its existence does not hinge on its revenues from advertising, have led to so much arbitrariness that tends to shortchange the advertiser. Access to state-of-the-art production facilities, for example, is an on-and-off proposition; the rates for these facilities, when they are available, are changed without consultation or discussion, and are often by startling leaps and bounds. In less than six months the charge for post-production facilities was raised from 50,000 cedis per day to 100,000 cedis an hour! Placement costs for radio and television rose by 20 per cent in the first quarter, then by 20 per cent in the second and this figure was finally raised by another 20 per cent by the end of 1992. All this with little or no prior consultation with advertising agencies or clients. Even more unnerving is the practice of grouping all TV adverts in a block, which often includes repeats of the same ads, simply because clients have asked for “two spots a day.” The effect of all this is the creation of an ‘advertising programme’ which provides dubious entertainment for a bored viewing audience. In spite of all this, we are looking at almost one billion cedis a year in advertising revenues.

The way GBC is structured, though, means that this revenue cannot be considered revenue for GBC, but earnings that are paid into government chest. The scarcity of essential spare parts for machinery, and maintenance suggest that subventions made independently to GBC have no direct relation to the income from advertising or commercial activity. Policy changes which will require the allocation of a proportion of commercial earnings to the production of programmes, especially in television, are written on the wall if GBC is to compete effectively with leaner, hungrier competitors.

The increase in advertising revenue over the last ten years has mirrored to a large extent the growth in commercial activity within the same period of time. With the removal of trade and currency restrictions, and the expansion of the small business sector of private industry and commerce, advertising has been recognized as
a significant contributor to the marketing of an increasing variety of products of every kind now on the market. To be sure, this belief has been fuelled by some quite interesting success stories. But more about that later.

Any competition the private broadcasting companies may be able to give GBC must necessarily centre around three factors:

- the provision of more challenging programming
- the provision of a more effective advertising spread over the period of transmission, and
- cheaper advertising rates.

The challenge will be to create high quality productions, institute strict and regular maintenance programme and still turn a profit.

The potential for growth in advertising is immense provided it is packaged to give maximum satisfaction to the viewer and maximum exposure to the advertiser, without slipping into the crass commercialism observed in other countries that has been used to justify the state-owned monopoly to date.

So, then, how does one go about using advertising as a sustaining force for private stations without losing the crucial balance?

The answers lie in how we incorporate new technology, and a new appreciation of who our audience is, (and its preferences) into new concepts of broadcasting.

The Nature of the Demand
From the inception of commercial advertising on radio and television, the content of advertising was by and large determined by the larger agencies started by the multinational companies. Their advertising for cinema, and later television, was largely regional in orientation, and considering the cost of production, rightly so. Companies like LINTAS would develop advertising concepts meant for the whole West African region, and their branches in these countries would then run the adverts on agreed schedules. It was in the medium of radio that the local creative talent began to flourish.
From the beginning of radio broadcasting in Ghana broadcasts were made in a number of local languages, and thus reached a very large receptive audience. A 1985 report by GBC claimed a 100 per cent penetration for radio. Much more leeway thus existed for the development of locally developed and produced radio advertising.

The wit and skill that Ghanaian advertisers used in creating advertising for radio listeners were based greatly on indigenous advertising practices, including some of the more curious barker styles peculiar to the Fante trader. In any case, it created an appreciation for advertising as a medium of entertainment that has been carried forward to the present.

The nature of demand is such that the businessman in Ghana sees advertising more and more as a marketing tool, and especially advertising on television as a social symbol of his business success. Thus, the demand for advertising from the small-scale businessman is not only commercial in orientation, it has other sociological factors that need to be studied by the broadcasting entrepreneurs for purposes of marketing their air time.

The audience perceives advertising as entertainment, and a study of the phenomenon is likely to point to a correlation between appreciation of an advert and the ‘reward’ given to the product by way of increased purchases. From informal observation and direct feedback it is fair to say that viewers tend to see their purchase of a product more in terms of rewarding the product for an advert they have enjoyed than because of any message that the advert might actually carry. I would like to submit this assertion to the eminent research effort for verification. We may not have the statistics to show it now, but we do have a few interesting cases to report.

Four adverts that my company produced have been instructive to our creative efforts: NACO LOUVRE FRAMES, ELECTRICITY CORPORATION’S ILLEGAL CONNECTION AD; KING SOAP and PIONEER NAILS. Public reaction to these adverts was initially quite startling, positive but startling in its intensity. Happily they all exceeded their marketing targets by substantial margins. The interesting phenomenon was that when we asked
people who increased their purchases of the products or services why they had done so, their response was overwhelmingly “because we liked the advert”\(^\text{10}\). In the case of King Soap and Pioneer Nails, people went on to define their specific preferences as “local” (which had been a defining factor of the briefs), and increased the market share of both products more than three hundred per cent beyond target.

Slogans that have come out of the ‘Pioneer Nails’ ad, such as “no nails!”, “dadwa papa” and “no curve, no bend” have since been used widely without any reference to the product which we must remember is NAILS. “Humour” and “music” were two other factors that were clearly identified especially in the Electricity and Naco ads. The number of respondents who mentioned the quality claims of the products was negligible.

This is not, as it were, to shout “Eureka! I have found it! I have found it!” It is to point out that for advertising to be effective, practitioners may need to look more closely at what our audiences really look for in an advert; and also to engender a study into audience preferences. I am sure the data would be of interest to station owners and agencies alike.

**Programming**

Straight advertising revenue need not be the be-all and end-all of a private station. The cost of production of most of the programmes a station will air can be covered by sponsorship arrangements from advertisers. In addition to placing adverts strategically, stations can encourage the would-be advertisers to take up the production costs of programmes in return for reduced air-time costs, and a programme advertising package which would allow maximum exposure to a captive audience. The content of the programmes need not be determined by the sponsor, although he would have a say in the final form. Once again, the Constitution is silent on what kind of regulatory body would be in charge of ensuring that programme content is within certain acceptable limits. Although the Constitution is quite clear on proscribing censorship in Ghana, it would be
politic for private broadcasters to submit guidelines to an impartial and independent body which would in good faith uphold them to maintain the balance on which the whole privatization effort depends.

The sponsorship arrangements allow for an important factor in determining programme content-audience reaction. The success or longevity of a programme would not be determined by a few élite with direct access to GBC but by market forces. The more successful a programme, the more advertising revenue it would generate. This is a built-in element that will more than likely encourage sponsors to put in their maximum for maximum benefit.

How do we monitor the audience reaction? Needless to say, the cost of installing Nielsen or Arbitron audience measuring devices is beyond us now, but it should be possible to create an effective audience research system supported by all broadcasting stations and protected by the aforementioned regulatory body. This unit would be the impartial arbiter of a station’s success or failure. A regular published report would be a measuring tool for agencies, clients and the public for determining which station to do business with, which programmes to watch or listen to. The seeds of such an effort lie within the comfortable reach of the School of Communication Studies, Legon.

The level of competition this will engender is likely to lead to more reasonable rates and charges than a monopoly will allow. As a corollary, costs of production would drop, more productions could be made by more producers, greater competition would lead to better programming, more employment would be generated etc., etc. Significantly, advertising would become a viable option for even more businesses, and an even more viable source of sustained income for the stations, depending on their performance.

Technology
All these possibilities are being discussed within the context of current concepts of broadcasting, and the use of established technology. Should we look beyond this purview ‘new scenes of endless science [would] rise’.
The word ‘broadcasting’ throws up certain associative dissonances for many development communicators. It connotes concepts like ‘scatter-shot’ distribution of ‘top-down’ information beamed from a centralized production unit, controlled by a central authority. Radio and television, being mass media, have all these associations. Messages are essentially sent from a central broadcasting house to no one in particular, with the hope that the target audience will be listening to or watching that particular programme at that particular time. Even more difficult is the establishment of a quick, responsible feedback channel for audiences of these media. Development communicators have developed innovative techniques for countering some of the negative effects of these factors, but it is an ongoing process.

Now new technology is beginning to change the nature of broadcasting. To a large extent, affordable and effective FM technology now allows radio to be far more immediate to specific target areas than the shortwave channels allowed in the past. Video properly harnessed can be a new mass medium refreshingly free of the bonds of the traditional. Consider this:
- it is mobile and can, therefore, be focussed on to a specific target area, town or village;
- it allows for an interactive horizontal communication approach which involves a representative target audience, especially in the rural areas, to be involved in discussions about its own problems;
- it is relatively inexpensive to produce in the video format;
- capital outlay is relatively low;
- distribution need not be by ‘air waves’ alone. It is possible to deliver cassettes to video stations spread in the rural areas or to distribute material through itinerant exhibitors;
- and even more germane to our topic, create a medium for development oriented advertising.

The same strategies used for urban-centred advertising could be employed to encourage health, aid and even some commercial agencies to sponsor relevant programmes, send important messages
to targeted audiences, allow for low-cost advertising of rural pro-
duce to urban centres, and some conventional advertising for prod-
ucts aimed at the rural markets. The opening into the rural areas
could fuel real growth of commerce, health delivery and education.
The possibilities are endless.

As Ghana is ushered into a new era of broadcasting, it is essential
that new challenges be met with new approaches. More important,
the framework for making the move into private broadcasting must
be put into place, but more with an eye on harnessing the possibilities
of the future than consolidating the errors of the past. In whatever
form it may come the sustenance of a viable network of private
broadcasting stations will largely depend on an innovative and
daring approach to advertising. Properly used, advertising can be a
fuel for the growth of this endeavour.

Innovatively harnessed it can be a tool for development.

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RECOMMENDATIONS OF THE NATIONAL CONFERENCE ON PROMOTION OF PRIVATIZATION OF RADIO AND TELEVISION BROADCASTING IN GHANA

Introduction
On March 1-3, 1993, the School of Communication Studies organized a national conference on the above subject at GIMPA, Greenhill.

Next to multipartyism and human rights, the issue most strongly advocated in the movement for democratic change raging across Africa is, perhaps, press freedom, media pluralism, or concretely private ownership and operation of media of mass communication and an end to state monopoly and/or interference.

In this regard, the growth and development of the private, independent print media have tended to receive greater international attention than has privatization of radio and television broadcasting. Between 1990 and 1992, a number of international conferences on the promotion of the private press were organized by various organizations. Most prominent of these was the UN-sponsored 'Seminar on Promoting an Independent and Pluralistic African Press' held in Windhoek, Namibia, on April 29-May 3, 1991.

While supporting the above efforts, it is suggested here that radio and television privatization (or pluralism) also requires as much, if not more, and urgent attention and support. This urgency is justified by well-known practical questions some of which may be reiterated here:

- Radio is the most popular medium of mass communication for the overwhelmingly illiterate and rural peoples;
- Because of its accessibility (in terms of content, language use, etc.), radio is so far the more accessible mass medium for development purposes;
- State monopoly of radio and TV has been more pervasive, with well-known retrogressive consequences for democratization
and development;

- Radio and TV pluralism would tend to have greater impact on cultural development. Indeed, localization of radio and TV in provinces and districts promotes development of the varying linguistic and cultural characteristics in multi-lingual and multi-ethnic societies. Many languages have more air-time than they do in the prevailing centrally-controlled, state-monopolized broadcasting systems;

- Electronic media pluralism exposes hitherto hidden artistic talents and creativity, and enriches the educational, entertainment and cultural resources of the society. The production of these resources for mass consumption also generates incomes;

- Pluralism in broadcasting promotes greater specialization in programming, and provides greater opportunities for the use of radio and TV for broadcasting developmental messages such as literacy, schools broadcast, health or agriculture. Specific social groups also satisfy their specific mass media needs by better access to programmes specially targeted at them;

- Radio as well as TV is media appropriate for audience participation. Used this way in a situation of pluralism, they could make immense contribution to open discussion of issues of popular and community concerns;

- Additionally, these media are best placed to promote public education on constitutional matters to sensitize public opinion on issues of democracy and human rights;

- Radio and TV have always been the preserve of the state. It is important that private initiative is encouraged now to establish the experience and expertise needed to face the challenges of an industry with one of the fastest changing technologies and operational methods.

Moreover, the time is ripe as the political atmosphere has become relatively more conducive. Officials as well as private citizens would tend to be more receptive towards a consideration of the question of privatization of radio and TV in Ghana.

First, on the economic side, developments in technology are
making broadcasting investments more and more feasible for private individuals with modest capital, or groups and organizations with access to credit facilities. Second, the growing simplification of the technology makes more and more modest capital outlays and running costs for private entrepreneurs. Third, the fourth Republican Constitution of 1992 guarantees the right to undertake broadcasting without any governmental or other obstruction.

This is why the School of Communication Studies decided to organize on March 1-3, 1993, a National Conference to highlight the urgent demand for Radio and TV privatization; to mobilize public opinion and support for the enactment of laws to support it; and to create awareness of the potential benefits of a private Radio/TV system for socio-economic development and democracy.

State monopoly of broadcasting seemed a logical media policy to a prevalent philosophy of state monopoly and centrally-planned economic activity. Both were protected by absolute state control of political discourse, decision-making and institutions.

In the last decade, however, state monopoly of “the economic heights” has given way to free enterprise and economic liberalism. It is now promoting and encouraging private initiative and involvement. It is not inconsequential that, at the same time, demands for political pluralism have heightened and resulted in processes for rebuilding and strengthening a constitutional multiparty political system of government.

Efforts to restore press freedom and establish pluralism in broadcasting and telecommunications have made significant progress. Concretely, a new liberal and progressive media policy proposal premised on pluralism was drafted at a special national conference sponsored by the Ministry of Information and the Ministry of Transport and Communication in July, 1992. The School of Communication Studies was actively involved in it, as well as in an earlier one in 1987.

The School’s Conference on Privatization of Radio and TV elaborated and detailed those aspects of the Ministries’ conference pertaining to broadcasting. In a number of key areas, however, the
School's Conference proposed fundamentally different approaches.

Indeed, there also exist private agencies and companies which, according to the Ministry of Information, have expressed interest in investing in cable television networks, FM radio stations and other broadcasting facilities.

In summary, there exist today in Ghana financial resources, technical know-how, advertising market, human resource management, favourable public opinion, and the political condition for the promotion and establishment of independent, private radio and TV broadcasting stations.

It is this condition and opportunity which the School of Communication Studies wants to encourage and build upon to promote pluralism in broadcasting.

Accordingly, the Conference attracted over 100 participants. Academia; media; political parties; trade unions; business; advertising agencies; financial, religious, development, donor, NGO, chieftaincy institutions; Government agencies; actors and musicians unions; the copyright administration agency; and the film industry, were all well-represented throughout the three days. In short, participants represented a cross-section of potential investors, as well as of audiences and contributors to the broadcast industry.

The breadth of participation is an eloquent testimony to the depth and breadth of discussion and viewpoints informing the recommendations in this report.

The discussions were guided by - but not limited to or restricted by - highly received background studies presented by resource persons, all experts in their respective fields (these papers form the first section of this publication). These included researchers, consultants, and respected broadcast engineers and administrators.

This report otherwise contains the full text of recommendations and proposals from the Conference to Parliament for consideration for a comprehensive legislation to eliminate from the statutes legal and institutional impediments to the establishment and operation of independent Radio/TV stations.
It is hoped that Parliament will, for instance, establish openly appropriate guidelines and criteria for frequency allocation, as well as enact instruments protecting the public from arbitrary use of the airwaves to abuse the rights and freedoms of others, and to guard against the monopoly of broadcasting by individuals or groups, all in line with those progressive provisions in the Constitution.

It is also hoped that individuals and organizations concerned about the strengthening of a pluralistic mass media culture will take this report and contribute to helping Parliament come out with the appropriate legislation to promote independent Radio/TV broadcasting in Ghana.

The Recommendations
At the end of the presentation of papers in plenary, the Conference broke into three working groups to discuss further specific topics and make recommendations where possible. The topics for the three workshops were:

GROUP I: Regulatory Policy for Private Independent Radio and TV Stations.

GROUP II: Programming and Ethics

GROUP III: Conditions for Viability.

The authors of the Conference background papers were distributed among the three working groups as resource persons to facilitate discussion.
A. Issues Discussed
1. Ownership guidelines.
2. Constitutionality of SMCD 71 vis a vis Article 162(3) of the 1992 Constitution.
3. Deregulation of GBC to merit the proper status of a public broadcasting station,
   - such as how to become independent of government control;
   - new working relations with the Ministries of Information, Finance and Transport and Communications.
4. Copyright issues - obligation of private stations to artistic material.
5. How to monitor the operations of private stations - logging system.
7. Foreign ownership or partnership.
8. Criteria for application and allocation of radio frequencies for operation.
10. The Ghana Frequency Board:
    - Its role.
    - Its relationship with certain principal branches of government: Ministries of Information and Transport and Communications.
    - Nature of its composition (how to broaden representation).

B. Recommendations

I. Ownership Guideline
1. The Media Commission should draw up a code of ethics for professionals.
2. The Media Commission should establish qualification
guidelines for ownership. This should include the financial standing of prospective operators, proof of technical and professional competence, and evidence of good character.

3. Majority of shareholders (in the event of foreign partnership) must be Ghanaians.

4. Day-to-day management of a station be reserved only to Ghanaians.

II. Frequency Allocation

5. The setting up of a National Communication Commission.

6. The Ghana Frequency Registration and Control Board (GFRCB) be set up as a sub-unit of the Media Commission.

7. Members of the Board should be appointed by the President on the advice of the Media Commission and no more by the National Security Council as in SMCD 71, 1(3).

8. Procedures for applying for and allocation of radio spectrum be made transparent.

9. Right of appeal and the setting up of a special tribunal to hear and review cases of denials, unfair allocation and public complaints.

III. Deregulation of GBC To Merit the Proper Status of a Public Broadcasting Station

10. GBC should remain a public service, funded through government subventions, levying of TV licences and advertising.

11. To ensure its independence, government subvention to the GBC be routed through the Mass Media Commission and no more through a sector Ministry.

12. Future dealings of the Ministry of Information be done through the Mass Media Commission.

13. The Act and Legislative Instrument setting up the GBC be reviewed and brought into consonance with the 1992 Constitution.

14. GBC should engage in effective commercial activities to wean itself from excessive dependence on the government.
15. GBC should encourage the common use of its facilities, where possible, by private broadcasting companies.

IV. Copyright Issues
16. Broadcasting operators must register with the Copyright Office set up under PNDC Law 110 in order to pay negotiated royalties.

V. Monitoring of Programmes
17. The Media Commission must develop a code of ethics for programming that takes into consideration cultural and social values.
18. Broadcasting stations must be equipped with an electronic logging system to be made available for inspection by the Media Commission.

GROUP TWO
Programming and Ethics

A. Issues Discussed
   Ethical Guidelines for programming
   Public service role for private stations
   Promotion of Ghanaian/African culture in programming
   Ethical standards for advertisers and advertising material
   Self-regulation: Ethical code for broadcasters
   Copyright concerns
   Training of professional broadcasters.

B. Recommendations
I. Ethical Guidelines for Programming
   Radio listening and television viewing should be a pleasurable and edifying experience to all Ghanaians. Accordingly,
   1. Stations must be sensitive to diversity and minorities, and especially to women, religious groups and ethnic or racial differences.
2. Children's programmes must avoid sex and violence.
3. The disadvantaged must not be ridiculed.
4. Crime programmes should be presented with their inevitable retribution.

II. Public Service Programming
5. Every station must offer a certain minimum amount of public service programmes
   - home and foreign
   - emergency alerts
   - family planning and public health
   - environment
   - civic responsibilities.
6. Tax deductible incentives should be given to stations which offer considerable public service.
7. Stations located in rural areas be given special incentives, such as tax rebates.

III. Ethical Standards for Advertisers, Advertising Material
8. A Broadcasting Council to enforce conformity to advertising content and scheduling be set up as a sub-committee of the Media Commission.
9. Tobacco and alcoholic beverage advertisement be banned on Radio and TV.
10. An association of independent stations be formed to protect their interests.
11. Every station to establish its own in-house regulations and code of ethics.

IV. Copyright Matters
12. The Copyright Board be charged with the responsibility of monitoring the use of creative works and payment of royalties.
13. All radio and TV stations install accurate logging systems.
V. Training of Broadcasters

14. The existing media institutions:
   - the GBC Training School
   - the School of Communication Studies, University of Ghana, Legon
   - the Ghana Institute of Journalism
   - the National Film and Television Institute
   - the School of Performing Arts, University of Ghana, should open their doors to train the staff of prospective stations.

15. Facilities in the existing institutions be improved for such training.

16. Independent stations and individuals be encouraged to set up their own training institutions.

17. Independent stations should explore opportunities outside Ghana for training.

18. Periodic in-service training, workshops and seminars be organised for station staff, especially because of the rapid development in telecommunication technology.

GROUP THREE

Conditions for Viability
A. Issues Discussed

1. Investment climate for privatization in Ghana.
2. Political conditions for privatization.
3. Partnership options for privatization include:
   - limited liability type
   - sole proprietorship type
   - company limited by guarantee - for religious groups
   - ordinary partnership
   - cooperative system.
4. Possible sources of funding/revenue
- Sale of air-time
- Advertisement
- Announcements
- Programme sponsorship
- Scandinavian type of state sponsorship - grants given through Media Commission.
- Donations and grants
- Rental of equipment
- Personals
- Financial institutions - bank loans.

5. Economic incentives

6. Special incentives for - rural stations
   - specialised stations
   - special audience stations (adult education, etc.).

7. Possible partnership links with the GBC.
   - Use of GBC facilities for programme production.
   - Renting of GBC transmission facilities.
   - Leasing of GBC equipment.
   - Sale or lease of GBC rediffusion stations.

B. Recommendations

Preamble: We, the members of Group III, considering:
That the establishment of private Radio and TV stations is a concrete expression of Article 162(3) of the Fourth Republican Constitution;

That the existence of private Radio and TV stations is a credible demonstration to the outside world of the country’s commitment to pluralistic democracy;

Aware that the GBC alone cannot fulfil all the information and entertainment needs of the diverse communities in Ghana;
Concerned about the possible proliferation of underground broadcasting (because of the advancement and availability of new telecommunications);

Conscious of the high cost to the state of information dissemination, of the need to spread this cost and finally of the prospect for job opportunities and unearthing of talents, now therefore recommend:

I. Investment Climate
1. That the Investment Centre should include Radio and Television as priority investment areas.
2. That investment in broadcast production facilities be opened to foreign participation.
3. Requisite permission be granted for the importation of essential plant, machinery, equipment and accessories required for Radio and Television establishment.
4. Exemptions be considered from payment of customs and import duties on plant, machinery, equipment and accessories.
5. A favourable corporate import tax rate be instituted.
6. Tax holidays be considered.

II. Political Conditions
7. That the establishment and operation of Radio and Television stations be restricted to Ghanaians.
8. That the establishment of consultancy services for Radio and Television be encouraged.
9. That the relevant training institutions should include Radio and Television management courses in their programmes.
10. That special incentives be given to stations located in rural areas in order that they provide specialized community programmes - agriculture, family, health, environment.
III. Media Commission

11. The Media Commission, together with the Frequency Board, come out with guidelines concerning the allocation of radio frequencies.

12. That since the constitutional protection for media ownership supercedes certain provisions of SMCD 71, the Media Commission, when established, should take the initiative through an Act of Parliament, to resolve existing inconsistencies in that law.

IV. Partnership Options

13. That given the limited facilities now available for production at the GBC, private facilities for production be encouraged.
THIS book puts together a series of papers on the need for independent broadcasting in Ghana. The papers were delivered at a National Conference on the “Promotion and Privatization of Radio and Television Broadcasting in Ghana” organized by the School of Communication Studies, University of Ghana, Legon with support from the West Africa Regional office of the International Development Research Centre (IDRC), Dakar.

The contributors observed that independent broadcasting stations must complement the national ones by providing community-specific or special-audience needs, which the latter cannot and does not provide, to satisfy larger and wider interests than the state has so far provided by its monopoly of broadcasting. The book explains why the electronic media should not be the sole preserve of one entity, arguing that pluralism in broadcasting is of paramount importance in every society just as are political, ideological and religious pluralism. This pluralism must go with responsibility. Regulations that must exist to guide the operations of the electronic media, the absence of which will encourage avoidable problems, are also discussed in the book.

No doubt, this book is a necessary reading not only for students and professionals in broadcasting but also all those who want to see the institution of independent broadcasting in Ghana.

KWAME KARIKARI is the Acting Director of the School of Communication Studies, University of Ghana, Legon. He is also a Lecturer at the School. He was the Principal Co-ordinator of the Conference.

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