

COVER SHEET

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TITLE - Policy impediments to media convergence: An exploration of case studies from South Africa and India

ABSTRACT

The discourse surrounding convergence of media sectors has been fraught with extravagant expectations and rhetoric. This article focuses on regulatory aspects of the media convergence issue. The central motivating research question of whether and why countries set an agenda to respond to the phenomenon of media convergence is one of paramount importance not only to the specific field of international telecommunications policy, but also to the broader intellectual inquiry of information and new media studies. This paper adopts an exploratory case study structure examining convergence policy initiatives in South Africa and India.

INTRODUCTION

Convergence policy can have profound and systemic regulatory and legal implications that manifest in broad and pervasive consequences for information technologies and sector development over the next several decades. The central motivating research question of whether different countries have set agendas to respond to the phenomenon of media convergence is one of paramount importance not only to the specific field of international telecommunications policy, but also to the broader intellectual inquiry of information and new media studies. This subject matter has salience in that it is endowed with the foundation, scope and depth necessary to identify the key problems or challenges surrounding the proliferation of media that is becoming increasingly integrated and digitalized. In addition this topic involves the important task of assessing the extent to which policy initiatives precipitate the phenomenon of media convergence and conversely the extent to which convergence has an impact on influencing the formulation of media policy.

This paper addresses this subject matter primarily from a regulatory perspective. This approach involves an exploration of why and how the notion of convergence is reflected in policy initiatives drafted by the South African and Indian governments and has utility in explaining the differences in the policy initiatives. In many cases the practical, on the ground, realities in terms of the regulatory environments that govern media service provision do not mirror the often idealized rhetoric on convergence voiced by policy makers and industry alike. Many scholars (Hitchens, 1997; Marsden, 1997) have acknowledged that the media convergence phenomenon has been fraught with complications as policymakers and industry struggle to reach agreement on the best way to offer converged, integrated and digitalized services.

This study offers an exploratory case study approach in order to address this motivating research question by discussing policy initiatives adopted in South Africa's and India's regulatory environments. Given the scope of the challenges that pervasive convergence faces, it is important to address the issue from a multi-faceted international perspective. As Verhulst (2002) aptly points out "in addressing the new regulatory paradigm, governments do not have the comfort of being able to consider issues simply within the confines of their four territorial walls" (p. 435). Consequently, technological advances such as innovation based on converged services transcend traditionally defined political boundaries. Therefore industry and regulators need to be cognizant of such boundary erosion in the development of their services and policy initiatives.

Dimensions Defining Media Convergence

Media convergence as a typically defined as a four - dimensional phenomenon comprising technological, organizational, market and regulatory components. While it draws on all four dimensions, it is particularly useful to delineate characteristics of the technological dimension, which permeate this paper. Specifically, on the technological dimension, media convergence is defined within two features: integration and digitalization.

While integration has many meanings in different contexts, here it will be defined as a process of transformation measured by the degree to which diverse media such as phone, data, broadcast and information technology infrastructures are combined into interoperable architectural platforms and networks. This would integrate formerly separate telecommunications, broadcasting and information technology networks. As van Dijk (1999) has observed, it involves an 'integration of transmission lines, transmission capacity and transmission and reception techniques that amalgamate digitalized media signals by cable (twisted pair phone lines and cable television) and by air (radio and television broadcasting).

Digitalization, unlike the definition of integration presented here, is not so much defined by the physical infrastructure as by the representation of information. This distinction is raised in order to offer an additional lens for conceptualizing media convergence. The term may be measured or operationally defined by the proportion of diverse analog media such as conventional voice telephony and broadcasting which can be made available in digital form. This media would be categorized in a distinct taxonomy than that which can be digitalized directly from their sources where no conversion process from analog to digital is involved. Van Dijk (1999) describes four key trends in communication and information technologies, which have established the foundation for convergence including: 'micro-electronics; digitalization; new connections and software programming'. However, digitalization will be emphasized here as it is most germane to the phenomenon, which will be subsequently discussed. Van Dijk (1999) suggests that digitalization means breaking down analog signals into bytes consisting of ones and zeros.

Paper Objectives

This paper discusses the convergence issue in South Africa and India in six sections. The process of facilitating convergence, which is manifested in this exploration, is important because it

reflects how regulatory agencies in diverse cases are influenced by transcending global media phenomena such as digitalization and integration. Consequently policy initiatives are being formulated within the context of a media environment where technologies and applications are becoming increasingly converged and distinctions between formerly separate media forms are becoming muted. The sections are organized as follows:

- The first section serves as a literature review and examines the existing research base particularly the relevant cases and salient comparative studies, which offer critical insights into the media convergence phenomenon.
- The second section provides a theoretical component synthesizing the two dominant paradigms technological determinism and social shaping theory.
- The third section poses four inter-related research questions that establish the foundation for the themes explored in the ensuing discussion, including: Has media convergence become a “guiding vision” for countries in drafting policy initiatives?; How is the notion of media convergence reflected in policy initiatives in South Africa and India?; What are the key similarities and differences in the two countries’ regulatory approaches voiced in the respective policy initiatives?; and What obstacles are visible in the policy initiatives that detract from media convergence?
- The fourth section comprises a treatment of the paper’s methodology by elaborating on the process with which the country cases and policy initiative documents were selected and examined.
- The fifth section offers exploratory case evidence based on two examples: South Africa and India. Both have recently adopted prominent policy initiatives in pursuit of convergence and are developing countries with varying level of intervention in their media sector. However South Africa serves as a case with historically a greater degree of regulatory intervention. Both are addressing a plethora of regulatory issues including cross sector entry, technology neutrality and competitive neutrality.
- The sixth section which functions as a findings section revisits the research questions posed earlier and seeks to methodically and deliberately address the issues raised in this paper’s third section.

LITERATURE REVIEW

There is a research base (Yoffie, 1997; Baldwin et. al., 1996; Noam, 2000, 2004b, Noam et. al., 2004; Bauer et. al 2003, 2005; Guillory, 2006; Shin, 2006a, 2006b) that addresses media convergence, including regulatory dimensions of the phenomenon. This literature review integrates studies that encompass two key analytical threads: case studies and comparative analyses that involve multimedia convergence in more than one country. The existing research base on the regulatory dimension of convergence is still in its formative stages and could be further developed in two respects.

The first respect is that even though the relevant literature addresses several aspects of the regulation of convergence only a relatively few studies adopt a critical stance. This paper builds on some of the few studies (Blackman, 1998; Benkler, 1998; Frieden, 2002; Noll, 2002) that offer critical perspectives on regulatory approaches to the phenomenon. The second respect is that based on a variety of factors some of the relevant studies tend not to accord a priority to the role of theory within the context of discussing the regulatory dimension of convergence. This study contributes to the research base by deliberately linking convergence to the relevant theoretical frameworks.

Case Studies

The literature on media convergence offers a various case studies. These case studies are singularly effective in raising a host of issues that are integral to this paper. For example the relevant case studies (Just and Latzer, 2000; Koski and Majumdar, 2000; Henten et. al, 2003) address technological, organizational market and regulatory dimensions of convergence via several approaches.

The regulatory dimension will be focused on here as it is the most relevant to address the research questions posed in this study. Garcia-Murillo and MacInnes (2001) and Shelanski (2002) through case studies of the Federal Communication Commission (FCC) have recommended that the Commission should undergo significant reform in light of the convergence phenomenon. These case studies suggest that “rather than organizing the FCC into traditional industries such as common carrier, cable, and mass media, bureaus could be re-organized into functions such as oversight rates and spectrum allocation” which would cut across industries (Garcia-Murillo and MacInnes, 2001, p. 431).

On the international front there have been a few prominent case studies on regulatory agencies in developing countries (Gillwald, 2006), which raise important themes that face policymakers. Gillwald (2005) addresses the South African case specifically and argues in order to be successful in pursuing ambitious goals such as convergence, South Africa’s telecommunications markets “demand more from a regulator than simply meeting the threshold requirements of transparency and predictability via so-called international ‘best practice’ models. Such a limited

approach will not be sufficient to meet the challenges” (p. 469). Instead she argues for a strategic regulation, which she posits is necessary to enable innovative service provision such as multimedia networks and to facilitate fair competitive markets that promote the viability of the new entrants needed to build the South Africa’s information infrastructure that would support convergence.

Comparative Studies

In addition to the case studies that are uniquely relevant to each of the four mentioned dimensions, the relevant research base (Bohlin et. al., 2000, 2004; Gillett and Vogelsang, 1999; Berhin et. al., 2005) has raised the importance of comparative approaches to the media convergence issue and have offered analysis on the most salient issues facing regulators in terms of cross-national and cross-sector policymaking. For example Garcia-Murillo (2005) discusses regulatory responses to convergence in a number of developing countries including South Africa and India. Her (2005) findings reveal that “these countries moved towards a converged regulator and laws to eliminate obsolete rules that were hampering investment and slowing competition in the ICT sector” (p. 20).

In another prominent comparative study on media convergence Jussawalla (1999) explores how emerging economies in the Asia-Pacific region are addressing the convergence issue. She (1999) cites empirical evidence from China, Singapore, South Korea, Taiwan, Hong Kong, Malaysia, Indonesia, and Thailand. Her (1999) findings suggest that the Southeast Asian countries “with their open economies and export oriented investment technologies have proved that such policies have generated trade surpluses and long-term growth” (p. 217). Moreover “they still plan to continue ascribing priority in their investment patterns to converging ICTs” (p. 217).

THEORETICAL FRAMEWORK

While there is a distinction between, on one hand, legislation or policymaking which refers or a broad institutional process and, on the other hand, regulation which is a more specifically defined institutional process, this analysis largely functions at the broader policymaking level. This is because the policy initiatives included in this study are formulated by entire legislative bodies rather than more narrow legislative committees.

In order to assess the significance of this paper’s central motivating research question it is important to briefly consider how the media has been regulated in the past. Pool (1983) has explored the regulation of various analog technologies and media. He argues that a convergence of modes is upsetting what was for a while a neatly trifurcated system. This suggests that policy makers, sensing the disquieting effects of convergence, began to address the development of new digital technologies as they ventured into un-chartered territories. Consequently, in order to obtain meaningful insights it is important to understand the trajectory of the media sectors over time. Pool (1983) addresses “convergence between historically separated modes of communication” (p. 27). Specifically he explores links between the telegraph and the telephone, the telephone and the radio and print and electronics from a historical perspective going back to the early 20th century. This work has important implications for the more recent research on media convergence for a number of reasons even though in the end the media that he referred to never converged. For example, his discussion sheds light on the uneasy relationship between AT&T and RCA in the 1920s which had carved out separate but complementary domains but were exploring technologies that could integrate their networks.

Theory is useful in understanding the ramification of policy initiatives within the context of convergence among media sectors. Specifically I will be focusing on two relevant theoretical models from the established research base that are analytically useful in situating policy implications of media convergence namely: technological determinism and social shaping theory. Technological determinism serves as an apt example of a theory which explains how technological innovations, such as integration and digitalization, have deep and profound policy and societal implications. According to Chandler (1995) technological determinism may be defined as a conceptual school of thought that seeks to explain social and historical phenomena in terms of one principal or determining factor, namely technology. It is a doctrine of historical or causal primacy. Two scholarly works are particularly emblematic of the relevance of technological determinism to the thinking on new technologies such as the convergence issue, without necessarily completely subscribing to the phenomenon. The first is Thomas’s (1996) “The Long-Term Social Implications of New Information Technology”. Thomas (1996) outlines some of the major changes that are taking place in information technology and their potential social impact. Furthermore, he classifies the changes on the basis of whether: a.) they represent extrapolations of existing trends; b.) are imminent breakthroughs in new technologies; or c.) are meta-technological changes (changes in the way new technology is developed or deployed). Thomas (1996) is a proponent of technological determinism and his work posits correlations and even causal relationships between evolving technologies and their cognitive and social effects on the individual.

The second contribution worth noting, is Stefaan G. Verhulst's "About Scarcities and Intermediaries: the Regulatory Paradigm Shift of Digital Content Reviewed". His work has unique value in that he draws a distinction between "hard" and "soft" variations of technological determinism that are particularly relevant to the convergence issue. For example, hard or strong technological determinism posits "that a particular communication technology is either a sufficient condition or at least a necessary condition for determining social organization and development". Consequently, technological development is perceived to be an autonomous force independent of social constraints. Alternatively, soft or weak determinism "claims that the presence of a particular communication technology is an enabling or facilitating factor leading to potential opportunities which may or may not be taken up in particular societies or periods". However, it is important to point out that Verhulst (2002) does not particularly subscribe to the technological determinist perspective and at times is critical of its assumptions. Consequently, he describes this referenced article as taking a middle path between technological determinism and social choice. The implication for those who formulate policy initiatives in this area is that those legislators and regulators who have a more clear idea on the strength and direction of the relationship between their policy initiatives and technology and users will be more likely to draft effective initiatives that have their intended impacts. This policy outcome is less likely to happen if the initiatives blindly follow "hard" or "soft" extremes without heeding finer distinctions.

Social shaping theory (SST) functions as a countervailing theoretical paradigm that offers an alternative perspective on how policy initiatives on convergence are socially constructed and framed. Studies of SST emerged in the 1980s through a critique of the prevailing "technological determinism" tradition, which limited its scope of inquiry to monitoring the social adjustments required by technological progress (Williams and Edge, 1996). From the outset, the theory was influenced by a desire to democratize technological decision making so as to subject it to forms of social accountability and control (Winner, 1977, 1985). Much of the research on technology policy within the SST paradigm (Garnham, 1996a; 1996b) highlights the role of the state in the regulation and promotion of specific innovations. For example, the analysis of technological convergence focuses on "how the wider social system can limit choice and technological change" (Williams and Edge, 1996). SST is framed on the assumption that technological change "is patterned by the conditions of its creation and use, rather than developing solely according to inner technical logic" (Williams and Edge, 1996, p. 91).

The scholarship (MacKenzie and Wajcman, 1985; Bijker and Law, 1992; Russell and Williams, 1988) thus far has focused on at least two key socio-economic factors that pertain to new communication technologies – the medium associated with the technology and the processes of innovation. The implication for framers of policy is that the formulation of the initiatives needs to be deliberate and conscious of a variety of variables aside from narrowly defined technological developments. In addition the policy makers cannot merely rely in technology before instituting initiatives but must be proactive in the way that these documents are drafted and implemented in order for the initiatives to be relevant.

Ultimately while technological determinism and social shaping theory are useful in addressing the heretofore specified research questions, it is important to clarify their applicability to the subject matter at hand. The theoretical frameworks are admittedly limited in scope in that they are intended to apply specifically to media convergence as drafted in the policy initiatives and not to broader outcomes or conceptual variables such as the respective countries' political system of government or broad indicators of media infrastructure development. Including these factors would cause the problem of over determination. As an exploratory case study the primary objective here is to offer a largely descriptive treatment of the cases that is specific to the text provided in the respective high level policy initiatives.

RESEARCH QUESTIONS

The research questions are framed within the context of a transition from a dated model to a new regulatory paradigm. The old model was organized into discrete sectors including telecommunications, broadcasting and information systems / technology where separate regulatory agencies functioned as stand alone entities designed specifically for each sector and there were only weak and desultory links between the sectors designed for narrow or specific application or services on a piecemeal basis. Many nations including South Africa and India seem to be moving to a new model where one single regulatory agency not only co-exists with the pre-existing regulators but also has a role that subsumes telecommunications, broadcasting and information technology sectors. In a model, exemplified by convergence, there would be pervasive and systematic links between the sectors across multiple platforms, networks, services, players and applications on a systemic basis. The four research questions are as follows:

- (1) Has media convergence become a “guiding vision” for South Africa and India in drafting policy initiatives?
- (2) How is the notion of media convergence reflected in policy initiatives in the two countries?
- (3) What are the key similarities and differences in the South African and Indian regulatory approaches expressed in the respective policy initiatives?
- (4) What obstacles are visible in the policy initiatives that detract from media convergence?

METHOD

The relevant literature (Yin, 2003) has pointed out that there are a number of advantages and disadvantages to case studies as a method of intellectual inquiry. One often cited advantage is that this design allows for insights into policy texts that would not be possible with most quantitative survey and experimental methods. Nevertheless, a commonly referred to drawback of the method is that it lacks the measures for generalizability or external validity that accompany quantitative methods. Consequently the observations of policy initiatives in the South African and Indian models are not necessarily generalizable to or representative of a broader population, but have intrinsic value in their own right.

Policy analysis that focuses on case studies (Rist, 2000) provides an apt methodological basis that is useful in addressing this paper’s central motivating research question of whether the two countries have set an agenda to respond to the phenomenon of media convergence. In methodological terms, the main research data sources were obtained from primary policy documents within the context of a case study design. So the method falls under the rubric of an exploratory case study, but the technique primarily utilizes document analysis of primary texts. The method involved selecting data from two basic taxonomies: the country cases; and the actual policy initiatives. In addition in order to establish the replicability of the procedures adopted in this research, two specific procedures are explicated here.

Selecting the Country Cases

The two national cases were selected as convenient choices for an exploratory study. However, while India presents an example of a country with a relatively low level of regulatory intervention in its media sector based on its relatively recent track record, South Africa offers an example of a model with relatively high intervention. Both countries also provide analytically interesting parallels in three central ways. One both have recently instituted policy initiatives that establish new regulatory agencies to oversee the telecommunications and broadcast sectors, which subsume some of the administrative authority of the institutions that preceded them. Two, largely as a result of the new initiatives and agencies, both face a plethora of regulatory issues including cross sector entry, technology neutrality, competitive neutrality and transformations in the role of regulatory oversight. Three both countries, South Africa and India, represent developing economies that are addressing the digitalization and integration of their electronic mass media sectors.

Selecting the Policy Initiatives

There were a number of narrowly drafted or short range and more substantial or long range policy initiatives on media convergence within both of the countries included in this paper and consequently not every initiative for every case could be selected for inclusion. The policy initiatives included in this study were selected based on four specifically defined parameters. Moreover these parameters were specifically designed to yield a range of current policy initiatives that would have utility in answering the heretofore specified research questions. With respect to the first parameter the policy initiatives have to be substantive or high – level in nature rather than more minor memoranda and prospective policy position papers. The second parameter limits the scope of policy initiatives to select from to the most recent document from the broadcast sector; the most recent from the telecommunications sector; the most recent from the information technology sector (if available); and the most recent document relevant to the newly established regulatory authority assigned to transcend sector boundaries. The third parameter is that the initiatives should contain language that transcends at least one media form such as voice, video, audio or data. The fourth provision is that the policy initiative should contain text relevant to either digitalization or integration or ideally both.

Two Procedures to Establish Replicability

In order to establish a methodology with a sound measure of objectivity, it is necessary to demonstrate specific methodological steps or procedures that are replicable. This is because it is important to clearly “articulate what the procedures are so that others can repeat the research if they so choose” to and have a reliable methodical and systematic primer with which to do so (Berg, 2001, p. 232). Two specific procedures are operationalized here. The first entails a rudimentary form of a content analysis that involves counting specific terms that appear in the respective policy initiatives in the two country cases. While this is a useful technique it is important to point out a key limitation of this approach. Specifically the absence of terms affiliated with media convergence may or may not

reflect the importance or the lack thereof that the respective documents accord to the phenomenon of convergence. Consequently a second procedure has been added which rather than counting specific words in the respective policy initiatives offers a more substantive policy analysis or interpretation of the policy initiatives in the respective cases.

Frequency Count Procedure

The modified content analysis or more specifically the textual frequency count procedure involves a word search for the terms: “convergence”; “broadcast”; “telecommunication”; “information technology”; “voice”; “video”; “data”; and “multimedia”; performed using the find function of a word processor on the scanned documents. Please see the accompanying Table for a synopsis of this data. The rationale for this modified content analysis procedure is based on the assumption that the relative quantities of the number of references to convergence allows for insight on the relevant importance or significance that the policy initiatives attribute to the phenomenon in the two cases.

Policy Issues Analysis

There are four principle dimensions that apply to the convergence issue and play a pivotal role in driving the debate over international telecommunications policy that transcends a diversity of countries including South Africa and India. These dimensions, which are referred to in the relevant literature (Garcia-Murrillo and MacInnes, 2001; Garcia-Murrillo, 2005; Dixon, 2006; European Commission, 1997; Latzer, 1998) include: cross sector entry; technology neutrality; competitive neutrality; the role of regulatory agencies. Each of these dimensions, which are explicated in the accompanying Appendix, may be supported by a wealth of evidence from the policy initiatives from the two cases. This evidence could include specific or explicit text such as the issuance of tangible rights, licenses or precise rules from the policy initiatives along each of the four dimensions which would have implications for media convergence. The presence or absence of this direct evidence would establish the basis for responding to the issues raised in the Appendix with either a “yes” or “no”. The evidence would also be reflected in chapter headings or section titles from the respective policy initiatives which by implication would seem to speak to any of the four dimensions but the actual text under those headings or titles may not contain specific evidence on a dimension that would adequately respond to the issues raised in the Appendix one way or another. Consequently there may be evidence which may be presented in the form of implication, rather than explicit text, which will also be noted with a “yes” or “no”.

With respect to cross sector entry it is necessary to explore provisions in the initiatives which grant exclusive general communications or multimedia service provision rights across sectors such as telecommunications, broadcasting and information technology. In addition it is useful to ascertain whether service providers from any particular sector receive preferential access to these multimedia licenses compared to service providers from another sector. Technology neutrality involves a legal and regulatory framework that treats technologies or services on the same basis regardless of the platform (e.g. wireless, wireline, cable, dsl and satellite) that they are provided on. Here textual evidence could manifest in either sector specific or general communication or multimedia licenses that let service providers offer services across platforms. Competitive neutrality concerns different regulatory regimes for different industry players such as the telecommunication companies (local and long distance), cable operators, broadcast networks and Internet Service Providers (ISP)s. Here evidence could materialize in the form of regulatory rules that discriminate between how incumbents and new comers are treated as well as different rules for those in the private sector relative to those in the public sector. In terms of the transformations in the role of the regulatory authority textual evidence might manifest in text that accords the regulator specific powers or authority to proactively intervene on the convergence issue which bind service providers and platform operators.

CASE EVIDENCE

South African Case

Introduction to South African Policy Initiatives

In the South African case policy formulation, regulation, and operations fell under the auspices of the Postal and Telecommunications Services Department which were later moved to the Post-Master General (PMG) under the Ministry of Posts and Telecommunications. The separation between the post and telecommunication responsibilities did not happen until 1999 when Telekom, the state telecommunications operator, was corporatized and put under the supervision of the PMG and the Minister, which determined tariffs and fees. Soon after the operator was separated from the policy and regulatory functions, the government sold 30% of the company and still retains 70 per cent ownership.

The Independent Broadcasting Authority (IBA) Act of 1993 and the Broadcasting Act of 1999 regulated the radio and television industries. The 1993 law created the IBA and constitutionally protected the new regulator’s independence, in contrast with the South Africa Telecommunications

Authority (SATRA). The primary functions of the IBA were to issue licenses for the provision of radio and television broadcasting services as well as the supervision of content. In its efforts to foster participation of the black population, licensing requirements included a percentage of black ownership. The IBA regulated the South Africa Broadcasting Corporation, the public radio station.

At the time South Africa decided to merge the functions of the SATRA and of the IBA the government had not yet opened its market to other competitors. The new agency, called the Independent Communications Authority of South Africa (ICASA), was created in 2000. The license of the second fixed line operator nonetheless did not happen until 2002. Surprisingly, in spite of the late privatization and liberalization in South Africa, convergence was beginning to happen as well but it has taken place primarily in the broadcasting industry. In the telecommunications market there was only one fixed line telecommunications operator and two mobile operators. The license for the third cellular operator was in the process of being granted at the same time that the merger of SATRA and IBA was happening.

The merger of the two regulatory bodies had been planned since 1997. At that time there was great controversy because the IBA had greater independence than SATRA. The South African Constitution contains provisions that call for the broadcasting authority to be free from political influence. The new regulatory body would thus enjoy the same independence. The actual merger of the two organizations did not happen until 2000. The law that brings together these two organizations is the Independent Communications Authority of South Africa (ICASA) Act, which does not abolish the Telecommunications or Broadcasting Acts. However the Telecommunications Act of 1996, which called for the establishment of an independent regulatory authority called the South Africa Telecommunications Authority (SATRA), made provision for the Ministry of Communication to intervene in legislative and regulatory processes in order to fulfill the short-term objective of making the incumbent attractive for investment. The law had important social objectives that aimed at increasing the extent of the network to allow access to the traditionally disadvantaged black settlements.

Cross Sector Entry Dimension

In order to ascertain whether there was any textual evidence in any of the three relevant South African policy initiatives concerning cross sector entry issues it is important to address whether the policy initiatives contain text on the issuance of general communication or multimedia licenses that would have implications for service provision that transcends sector boundaries as well as the issue of whether these policy initiatives contain explicit text that privileges or limits access to general communication or multimedia licenses to firms from specific sectors. The South African Telecommunications Act of 1996 contains some evidence of multimedia licenses that pertain to transcending sector boundaries. For example, Chapter 5, Article 32C (1) stipulates “with effect from 7 May 2002, Sentech Limited (a South African telecommunications firm), shall be granted a licence to provide multimedia services to any person who requests such service” (Republic of South Africa, 1996). Moreover subsection three states “in respect of the granting of other multimedia services licences the Minister shall invite applications on a date to be fixed by the Minister by notice in the *Gazette*” (Republic of South Africa, 1996). There is some non explicit evidence that prohibits any one sector from applying for a multimedia license. The initiative does provide some privilege to Sentech, which has its license provided for in the document, but there is no specific text that blocks others’ access to these licenses.

In terms of the South Africa Broadcasting Act of 1999 there is no evidence of multimedia or general communication licenses and all licenses are limited to those service providers in the broadcast sector. The initiative offers no evidence that this licensing system privileges broadcasters and deliberately precludes firms from other sectors thereby giving broadcasters a comparative advantage. In the case of the Independent Communications Authority of South Africa Act of 2000, the document does not contain any evidence that makes any mention of multimedia or media specific licenses or service provision rights in terms of cross sector entry or otherwise or that limits or privileges access. Rather the document is drafted for the primary purpose of specifying organizational and administrative roles for employees of the new agency.

Technology Neutrality Dimension

In order to explore whether there was any evidence in any of the three relevant South African policy initiatives concerning technology neutrality issues it is important to address whether the policy initiatives contain text on the issuance of either sector specific or general communication / multimedia licenses that let firms offer services across platforms on an equal basis. The South African Telecommunications Act of 1996 does offer some evidence of telecommunication sector licenses that let service providers offer services across platforms. Chapter 5, Article 36B (1) of this document states:

A 'public switched telecommunication networks' shall be the telecommunication systems which are installed or otherwise provided, maintained and operated by a public switched telecommunication service licensee for the purpose of providing public switched telecommunication services and fixed-mobile services such as - (a) a local access network; (b) a national long-distance network; and (c) an international network; by whatever means such as copper cables, wireless loops, microwave links, optic fibre cables, satellite earth stations, space segments and satellite systems (Republic of South Africa, 1996).

Moreover licenses are endowed to:

signals (that) can be conveyed between all or any of - (i) two or more terminal connection points; (ii) two or more network connection points; (iii) a terminal connection point. and a network connection point; (iv) a terminal connection point or a network connection point, as the case may be, and a corresponding point in another country; (v) a public pay-telephone and the terminal connection point, a network connection point or a corresponding point in another country (Republic of South Africa, 1996).

The South Africa Broadcasting Act of 1999 does offer some textual evidence that indicates that broadcast sector licenses have been designed to let service providers offer services across platforms. For example, Chapter 3, Part 1, Section 4 states "Any person who intends to provide a broadcasting service, including distribution services whether satellite or terrestrial, or any other form of distribution which offer programming to the public is required to obtain a licence in accordance with the conditions which the Authority may determine from time to time" (Republic of South Africa, 1999, p. 10). The Independent Communications Authority of South Africa Act of 2000, does not contain any evidence that makes any mention of multimedia or media specific licenses or service provision rights in terms of multiple platform issues or otherwise.

Competitive Neutrality Dimension

In order to find out whether there was any evidence in any of the three relevant South African policy initiatives concerning competitive neutrality issues it is important to address whether the policy initiatives contain text that would have implications for differences or similarities in regulatory rules for service providers who are incumbents and for those who are new comers. This inquiry also explores implications for differences or similarities in regulatory rules for service providers in the private sector and for those in the public sector. The greater the evidence of similarities and the less evidence of differences in the rules would suggest that the government is interested in a level playing field among service providers which could ultimately encourage more pervasive convergence. There is no textual evidence that the South African Telecommunications Act of 1996 treats incumbent and new service providers under different rules. The Act does contain some evidence that suggests similar rules for incumbent and new service providers. For example Chapter 4, Article 30B, offers rules on competitors offering new third generation telecommunications services. License holders for these emerging services are required to "avoid harmful interference among licensees, ensure efficient use of any applicable frequency band, and allow for the provision of cost-efficient services" which would also pertain to the incumbent, Telkom (Republic of South Africa, 1996).

However the 1996 Act does contain a few articles of evidence that there are different rules for competition among public and private service providers. For instance private telecommunication licensees are not permitted to "resell spare capacity on such facilities or to cede or assign his or her rights to use such facilities or to sublet or otherwise part with control thereof", while Telkom or other publicly owned entities do not have such restrictions on leasing or reselling excess capacity (Republic of South Africa, 1996). Consequently there is less explicit evidence of similarities in the rules, but no specific text on these similarities. As an example Chapter 5, Section 41, states that private firms are "not be restricted to the carrying of voice only or data only or to any other such limited use", the indirect assumption is that these rules would also apply to publicly owned firms (Republic of South Africa, 1996),

The rules provided for in the South Africa Broadcasting Act of 1999 offer no evidence on whether there are disparate or similar rules for competition between incumbent and new service providers. There is no textual evidence of similarities in the rules or objectives. However the Act does offer some evidence that there are different objectives for competition among privately and publicly owned service providers. For example according to Chapter 4 of this Act the public broadcaster is mandated with the objective "to make its services available throughout the Republic; to provide sound and television broadcasting services, whether by analogue or digital means; and to

provide sound and television programmes of information, education and entertainment funded by advertisements, subscription, sponsorship, licence fees or any other means of finance” (Republic of South Africa, 1999, p. 12).

Alternatively according to Chapter 5 of the Act commercial services “must as a whole provide a diverse range of programming addressing a wide section of the South African public and must provide, as a whole, programming in all South African official languages” (Republic of South Africa, 1999, p. 19). Also according to the rules for commercial services “subscription broadcasting services may draw their revenues from subscriptions, advertising and sponsorships. In no case may advertising or sponsorships, or a combination thereof, be the largest source of revenue” (Republic of South Africa, 1999, p. 19). The Independent Communications Authority of South Africa Act of 2000, contains no evidence on whether there are divergent or similar rules governing competition among incumbent and new service providers and among publicly and privately owned service providers.

Role of Media Regulators Dimension

This discussion addresses whether the new policy initiative, namely the ICASA Act, drafted by the ICASA contains textual evidence that accords it with relatively more concrete articles of power or authority to oversee service provision from firms that are based in multiple media sectors or from firms that provide service in a range of media forms including voice, video, data and audio compared to the authority that other policy initiatives accord to sector specific regulators. This is based on the hypothesis that, since the ICASA was established with the mandate to promote convergence among media sectors, the Act would give the regulator a relatively greater role to intervene in the sectors to pursue convergence. The Telecommunications Act of 1996 cites the South African Telecommunications Regulatory Authority (SATRA) as one of the primary relevant regulatory authorities. The Act contains some evidence that empowers this authority with concrete articles of power over services based in the broadcasting sector in addition to those in the telecommunications sector. Chapter 8, Section 128, states:

The Authority may, if requested thereto in writing by the [Postmaster General], South African Telecommunications Regulatory Authority established by section 5 of the Telecommunications Act, 1996, make any of the broadcasting services frequency bands available to [the Postmaster General] that Authority for use by telecommunications users in terms of [the Radio Act, 1952,] that Act, which request shall not be unreasonably refused” (SATRA, 1996). Moreover, “the Authority has made any broadcasting services frequency bands available for use by telecommunications users, the administration, management, (and) planning (Republic of South Africa, 1996).

Neither the South Africa Broadcasting Act of 1999 nor the Independent Communications Authority of South Africa Act of 2000, contain any textual evidence that endows any regulatory authority with concrete articles of power to oversee services based in more than one sector or that provide a range of media forms. In the case of the Independent Communications Authority of South Africa Act this may seem counter intuitive since the Act was largely established with the mandate to oversee the transition toward media convergence between the broadcast and telecommunication sectors. However the initiative’s lack of evidence is due to its focus on administrative, personnel and organizational issues and consequently little if anything is said that is relevant to service provision concerns.

Indian Case

Introduction to Indian Policy Initiatives

The Indian government has adopted an asymmetric approach to deregulating its broadcast industries (specifically television) compared to the telecommunications sector. On the broadcast side, the focus of the Indian Broadcasting Bill of 1997 demonstrates a willingness to encourage private sector participation at the expense of not stimulating direct market competition within the sector. On the telecommunications side, The New Telecommunications Policy 1999 was released in March 1999. The text reflected a commitment to direct competition as well as an anti-private sector agenda. Aside from the policy initiatives from the broadcast and telecommunications sectors the Indian Parliament passed the Information Technology Act in 2000. The focus of this document is on electronic commerce and computer crime. As Garcia-Murillo (2005) states “this law gives legal status to digital signatures and electronic records (and) specifies the penalties for computer crimes” (p. 35).

More recently in early 2001 the Indian government recognized the need to reform and modernize the regulatory framework concerning its communication sector in the form of a seminal article of legislation. Policymakers were in part responding to the emerging phenomenon of

integration and digitalization among its information technology and mass media industries. Consequently, on January 17th 2001, the Indian Group of Ministers (GoM), chaired by Finance Minister Yashwant Sinha, formally approved the draft of the nation's Communication Convergence Bill (CCB). Perhaps the most significant component of the Bill was its creation of the Communications Commission of India (CCI), which theoretically would oversee telecommunications, broadcast and information technology.

The drafting of the CCB suggests the urgency and primacy of the issue of convergence within the context of an increasingly dynamic, deregulated mass media environment. Key leaders of various Indian Ministries recognized that the trend towards integration and digitalization was inevitable. For example, the former Central Vigilance Commissioner, N. Vittal, noted "today with the availability of the Internet, satellite communication, digital technology, a whole lot of alternative (ways) of reaching remote areas can be thought out" (Press Information Bureau, 2001, p.1). He added that "perhaps in the Indian context where computers are 4 million and cable TV reaches 35 million homes, the TV may become the mode of accessing the Internet" (Press Information Bureau, 2001, p. 1). This suggests that the expectations for the efficacy of the CCB's and the CCI's role in communication policy were high. It was anticipated that the regulatory Bill and Commission would facilitate an inclusive and stable institutional framework, sensitive to the most current needs of a dynamic and highly volatile mass media and information technology market. In addition, the policy approach of combining formerly distinct communication sectors under a united administrative structure was expected to provide for increased transparency.

Cross Sector Entry Dimension

In order to draw insights into whether there was any textual evidence in any of the four relevant Indian policy initiatives concerning cross sector entry issues it is important to address whether the policy initiatives contain text on the issuance of general communication or multimedia licenses that would have implications for service provision that transcends sector boundaries as well as the issue of whether these policy initiatives contain explicit text that privileges or limits access to general communication or multimedia licenses to firms from specific sectors. The New Telecommunications Policy of 1999 (NTP99) does not offer any evidence on the issuance of general communication or multimedia licenses designed to transcend sector boundaries. Since there is no mention of multimedia licenses in this policy initiative therefore there is no explicit evidence as to whether firms from any particular sector receive privileged access to these types of licenses, but there is less explicit evidence in that it may be inferred from the government would not be amenable to such privileges or limits as they would be antithetical to the ground realities. Section 1.3 of the text states "Convergence of both markets and technologies is a reality that is forcing realignment of the industry. At one level, telephone and broadcasting industries are entering each other's markets, while at another level, technology is blurring the difference between different conduit systems such as wireline and wireless" (Telecommunications Regulatory Authority of India, 1999, p.1).

The Indian Broadcast Bill of 1997 does not contain textual evidence of multimedia or general communication licenses, but there are provisions for separate licenses for: "Terrestrial radio broadcasting; Terrestrial television broadcasting; Satellite radio broadcasting; Satellite television broadcasting; Direct-to-home broadcasting; Local delivery services (such as cable television)" (Ministry of Information and Broadcasting, 1997, p.1). This Bill does not have any evidence as to whether firms from any particular sector receive privileged access to multimedia licenses, since general communication licenses are not mentioned. The Information Technology Act of 2000 does not contain textual evidence of multimedia or general communication licenses, since general communication licenses are not mentioned. The only licenses referred to are those for Digital Signature Certificates and other media sectors such as telecommunications or broadcasting are rarely mentioned at all in the Act. The 2000 Act does not have any evidence as to whether firms from any particular sector receive privileged access to multimedia licenses, since general communication licenses are not mentioned. The Communication Convergence Bill does not offer textual evidence on the issuance of general communication or multimedia licenses designed to transcend sector boundaries. In addition, the Bill does not have any evidence as to whether firms from any particular sector receives privileged access to multimedia licenses, since general communication licenses are not mentioned.

Technology Neutrality Dimension

In order to explore whether there was any textual evidence in any of the four relevant Indian policy initiatives concerning technology neutrality issues it is important to address whether the policy initiatives contain text on the issuance of either sector specific or general communication / multimedia licenses that let firms offer services across platforms on an equal basis. The New

Telecommunications Policy of 1999 offers some evidence of sector specific licenses being issued across platforms. For example, according to the document:

licenses were awarded to 8 Cellular Mobile Telephone Services (CMTS) operators in the four metros, 14 CMTS operators in 18 states, 6 BTS operators in 6 states and to paging operators in 27 cities and 18 states. VSAT services were liberalised for providing data services to closed user groups. Licences were issued to 14 operators in the private sector out of which only nine licencees are operational. The Government has recently announced the policy for Internet Service Provision (ISP) by private operators and has commenced licensing of the same. The Government has also announced opening up of Global Mobile Personal Communications by Satellite (GMPCS) and has issued one provisional license (Telecommunications Regulatory Authority of India, 1999, p.1).

Most of these platforms including wireless, VSAT and GMPCS were primarily offered as services based in the telecommunications sector.

The Indian Broadcast Bill of 1997 contains a few articles of evidence of sector specific licenses that let firms offer services across platforms. There is specific text on cable television, satellite broadcasting and wireless platforms. With respect to the cable platform the document specifies two conditions for licensees:

1. The licensee will have to provide a tier basic service which may include a number and type of terrestrial broadcasting for every permitted service and also of the public service broadcaster;
2. The licensee will include only licensed services or permitted services in his delivery package for the purpose of distribution and also he will not use more than that number of channels as determined by the authority out of the total channel capacity of the system for providing his own programming (Ministry of Information and Broadcasting, 1997, p.2).

With respect to the satellite platform according to the conditions the licensee must have “acquired a transponder on an Indian satellite system or on a foreign satellite system; b) obtained technical clearance for transponders from the wireless adviser” (Ministry of Information and Broadcasting, 1997, p.2). With regards to the wireless platform “The wireless adviser will give technical clearance for licensing (the clearance can be refused on technical or security reasons). The wireless adviser shall assign frequencies for MMDS for providing local delivery service, wherever it is required.” (Ministry of Information and Broadcasting, 1997, p.3). Individual owners are able to carry licenses across all three platforms as long as they obey cross-media ownership rules and foreign satellite broadcast service limits.

The Information Technology Act of 2000 does not contain any evidence of either sector specific or general communication / multimedia licenses being issued that let firms offer services across platforms. There is no mention of any of the relevant media platforms at all. The Communication Convergence Bill offers some evidence of sector specific licenses that let firms offer services across four broadly defined platforms. Appendix 1 of the text states:

The licensing structure has hence been broken into its different elements which leads to a four layered hierarchical structure where each layer is dependent on one or more of the earlier layers for the provision of services. The structure results in four different service providers namely: Network infrastructure facility provider; Network service provider; Application service provider (ASP), and Content ASP (Communications Commission of India, 2001, p. 74).

Network infrastructure facilities refer to “the provision of physical infrastructure which would be utilised by other licences for providing various services” (Communications Commission of India, 2001, p. 74). The network service provider would have the flexibility to carry the application/content of various application service providers and also be flexible to utilize the infrastructure set up by one or more network facility providers. The application services provider (ASP) / content providers’ services to the end consumer use the services of one or more network service providers.

Competitive Neutrality Dimension

In order to find out whether there was any evidence in any of the four relevant Indian policy initiatives concerning competitive neutrality issues it is important to address whether the policy initiatives contain text that would have implications for differences or similarities in regulatory rules for service providers who are incumbents and for those who are new comers. This inquiry also explores implications for differences or similarities in regulatory rules for service providers in the private sector and for those in the public sector. The greater the evidence of similarities and the less evidence of differences in the rules would suggest that the government is interested in a level playing field among service providers which could ultimately encourage more pervasive convergence. The New

Telecommunications Policy (NTP99) of 1999 does not offer evidence on differences in regulatory rules for service providers who are incumbents and for those who are new comers. However there is some evidence that the regulatory agency, specifically the Telecommunications Regulatory Authority of India (TRAI), may treat incumbents and new comers under similar regimes. According to Section 3.1.2 of the document, the “availability of appropriate frequency spectrum as required is essential not only for providing optimal bandwidth to every operator but also for entry of additional operators. It is proposed to review the spectrum utilisation from time to time keeping in view the emerging scenario of spectrum availability, optimal use of spectrum, requirements of market, competition and other interest of public” (Telecommunications Regulatory Authority of India, 1999, p.4).

In addition, the NTP99 does not offer textual evidence on differences in regulatory rules for service providers who are in the public sector and for those who are in the private sector. However there is some evidence that the TRAI may treat private firms and public sector firms under similar regimes. According to Section 3.5 of the text:

National long distance service beyond service area to the private operators will be opened for competition with effect from January 1, 2000. To promote setting up long distance bandwidth capacity in the country, provide a choice to consumers and promote competition, all National Long Distance Operators (NLDOs) should be able to access subscribers. With a view to achieve the above, all access providers shall be mandatorily required to provide interconnection to the NLDOs resulting in choice for subscribers to make long distance calls through any operator (Telecommunications Regulatory Authority of India, 1999, p.6).

The Indian Broadcast Bill of 1997 does not offer evidence on differences or similarities in regulatory rules for service providers who are incumbents and for those who are new comers. The 1997 Bill does contain some evidence of provisions that differentiate between private and public service providers. For example, according to the Bill the Ministry of Information and Broadcasting “may exempt the non-commercial establishments under common ownership from obtaining a licence for the purpose of providing cable television services for the exclusive use of their members” (Ministry of Information and Broadcasting, 1997, p.3). The Bill does not contain evidence on similarities in the rules for private and public service providers. The Information Technology Act of 2000 does not contain any textual evidence of differences or similarities in regulatory rules for service providers for either, incumbent and new comers or for privately and publicly owned service providers. The Communication Convergence Bill does not offer evidence on differences or similarities in regulatory rules for service providers who are incumbents and for those who are new comers or for similarities and difference between publicly and privately owned firms.

Role of Media Regulators Dimension

This discussion addresses whether the new policy initiative, namely the CCB, drafted by the CCI contains evidence that accords it with relatively more concrete articles of power or authority to oversee service provision from firms that are based in multiple media sectors or from firms that provide service in a range of media forms including voice, video, data and audio compared to the authority that other policy initiatives accord to sector specific regulators. This is based on the hypothesis that, since the CCI was established with the mandate to promote convergence among media sectors, the Bill would give the regulator a relatively greater role to intervene in the sectors to pursue convergence. The New Telecommunications Policy (NTP99) of 1999 does not offer textual evidence that accords concrete articles of power or authority to the new regulatory agency, the Telecommunication Regulatory Authority of India (TRAI), overseeing service provision from firms based in multiple media sectors or from firms that offer diverse media forms.

The Indian Broadcast Bill of 1997 contains some textual evidence that accords concrete articles of power to the Ministry of Information and Broadcasting (MIB) to oversee service provision from firms that are based in multiple media sectors or that offer disparate media forms. For example on the issue of satellite broadcasting and direct – to – home services the MIB grants two licenses for local delivery service for each telecommunications circle as identified by the central government (Ministry of Information and Broadcasting, 1997, p. 2). The implication is that the MIB would have authority over both the satellite broadcasting services as well as the telecommunications traffic that is routed through these circles, but there is no specific text to conclusively confirm this implication. While the document does contain numerous section headings such as: “Procedure and powers of the authority”; “Powers of the authority to seek information conduct enquires, take evidence, etc.”; “Power to make rules”; and “Power to make regulations”, there is no text under these headings that contains information on the MIB’s role over service provision that represent multiple sectors or media forms.

The Information Technology Act of 2000 does not contain any evidence of the regulator's, namely the Ministry of Law, Justice and Company Affairs, oversight of services that represent multiple sectors or media forms. Surprisingly the Communication Convergence Bill not does contain textual evidence of the regulatory authority's, namely the Communications Commission of India's (CCI's), concrete articles of power over service provision that represent multiple sectors or media forms.

FINDINGS / CONCLUSION

With respect to this paper's findings, a number of conclusions were raised in response to the research questions.

Research Question 1

The first of the four research questions posed earlier in this paper asked: Has media convergence become a "guiding vision" for countries in drafting policy initiatives? There is relatively more evidence in the Indian policy initiatives, particularly the CCB, that media convergence has become a guiding vision compared to the South African documents. For example Appendix one of the CCB states:

One of the basic objectives of this (Bill) is to provide for a regulatory mechanism, which facilitates convergence and therefore, remains valid over a period of time. Convergence in this context means convergence of mediums or technologies facilitating provision of all services by using a given facility or network and vice versa. It also means convergence of services at the provider's end as well as the consumer's end, meaning, thereby, a service provider should be able to provide a whole range of technologically feasible services and a consumer should be able to receive all services through a given terminal at any time and place of his choice. The continuous development of new technologies results in an inability to predict the future evolution of convergence viz. the development of new services like web-casting, Internet Telephony etc. resulting in the need for regulations which does not aim to predict the future, but aspires to be flexible enough to accommodate and propagate any permutation and combination of technologies and services.

There is no equivalent documentation for such a guiding vision in the South African initiatives, even the ICASA Act, even though the merging of broadcasting and telecommunication sectors is a prominent objective of that document.

The policy initiatives raised in both cases have also been influenced by real world phenomena and in particular integration and digitalization. Consequently these technology affiliated forces have been conducive in forging a "guiding vision" for these countries in drafting their policy initiatives. While integration and digitalization of media forms play a profound part in framing media convergence policy, this is not to assume that these two technological forces have been solely responsible for directly determining the drafting of the policy initiatives or that the policy initiatives played a direct causal role in shaping the prevalence and proliferation of the technology. Rather these technological developments are phenomena that permeate today's media environment and policy initiatives inevitably must be cognizant of these technological developments in order to formulate initiatives that are practical.

Research Question 2

The second main research question poses the query: How is the notion of media convergence reflected in policy initiatives in different countries, particularly in terms of regulatory approaches that embody either technological determinism or social shaping theory? To answer this general research question, the paucity of textual evidence from the policy initiatives, which is reflected in the preceding "Case Evidence" section tends to suggest that the regulatory approaches in the South African and Indian cases embody social shaping theory more than technological determinism. However the evidence from the policy initiatives does not offer a definitive answer. Nevertheless it is useful to consult the Appendix. For the seven documents (three for the South African case and four for the Indian) listed in the Appendix there were a total of 42 responses to the questions posed on the four dimensions. Out of those 42 responses only 16 of them suggested evidence of policy instruments or mechanisms being used on behalf of media convergence. A reading of 16 positive responses out of a total of 42 is a proportionately low to moderate number in absolute terms and would suggest an answer of no to the research question due to an absence of specific evidence in the policy initiatives.

Research Question 3

The third research question was as follows: What are the key similarities and differences in the two countries' regulatory approaches expressed in the respective policy initiatives? A number of similarities and differences have been stated thus far. The textual data from the "Case Evidence"

section is schematically represented in the Appendix, which is useful in drawing direct comparisons between the most recent documents from the respective sectors and comparing them side by side. The Appendix demonstrates that the textual evidence from each policy initiatives from the respective cases have scattered similarities, however there are two main differences worth pointing out. One South Africa's 1996 Telecommunications Act offered evidence on the cross sector entry dimension (for both 1A and 1B) while in the Indian case neither the NTP99, the 1997 IBB, the 2000 Information Technology Act or the 2001 CCB offer textual evidence on either 1A or 1B. Two, with respect to the newest documents that were intended to facilitate convergence in both cases, South Africa's ICASA Act of 2000, did not offer evidence on the technology neutrality dimension, while the corresponding document in the Indian case, the CCB of 2001, did offer evidence on this dimension.

Research Question 4

The fourth research question asked: What are the possible obstacles in the policy initiatives that detract from media convergence? As the "Case Evidence" section reflects there are at least three main regulatory obstacles to pursuing convergence that pervade the South African and Indian cases. The first is that, with the exception of South Africa's Telecommunication Act, all the relevant initiatives lack multimedia or general communication licenses, which can potentially play an influential role in fomenting media convergence, particularly along the cross sector entry dimension. The second is that, for the most part, the initiative (the ICASA and the CBB) drafted in each case with the express purpose of implementing convergence does not endow the new regulator with substantially more concrete authority on behalf of convergence compared to the authority that the media sector specific initiatives accord to media sector specific regulators. A third obstacle is a lack of textual evidence on regulatory rules that would help create a level playing field between incumbents and newcomers to the provision of converged services. This dearth of evidence can manifest in barriers to entry to new and private service providers of converged media services.

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POLICY INITIATIVES

FREQUENCY COUNT OF TERMS

	convergence	broadcast	telecom.	info. tech.	voice	video	data	multimedia
South Africa								
South African Telecommunication Act of 1996	1	48	not counted	1	8	0	6	8
Broadcasting Act of 1999	1	not counted	10	0	0	3	3	0
Independent Communications Authority of South Africa (ICASA) Act, 2000	1	19	17	0	0	0	0	0
TOTAL	3	67	27	1	8	3	9	8
TOTAL OF ALL TERMS								126

India

New Telecommunications Policy 1999 (NTP99)	4	1	not counted	2	9	0	10	2
Indian Broadcasting Bill (IBB), 1997	0	not counted	1	0	0	0	0	0
The Information Technology Act, 2000	0	0	1	not counted	1	1	46	0
Communication Convergence Bill (CCB), 2001	15	30	3	4	0	0	4	0
TOTAL	19	31	5	6	10	1	60	2
TOTAL OF ALL TERMS								134

APPENDIX

POLICY ISSUES ANALYSIS

QUESTION

ANSWER

	<u>SOUTH AFRICA</u>			<u>INDIA</u>			
	1996	1999	2000	1999 New	1997	2000	2001
	Telecom. Act	Broadcast Act	ICASA Act	Telecoms. Policy 99	Broadcast Bill	Info. Tech. Act	Comm. Conv. Bill
	Textual Evidence	Textual Evidence	Textual Evidence	Textual Evidence	Textual Evidence	Textual Evidence	Textual Evidence

CROSS SECTOR ENTRY

1A. Do the policy initiatives contain direct or indirect evidence on the issuance of general communication or multimedia licenses that would have implications for service provision that transcends sector boundaries?

YES NO NO NO NO NO NO

1B. Do these general communication or multimedia licenses contain direct or indirect evidence that privileges or limits access to firms from specific sectors?

YES NO NO YES NO NO NO

TECHNOLOGY NEUTRALITY

1. Do the policy initiatives contain direct or indirect evidence on either sector specific or general communication / multimedia licenses that let service providers offer

YES YES NO YES YES NO YES

services across
platforms?

COMPETITIVE NEUTRALITY

1. Do the policy initiatives contain direct or indirect evidence that would have implications for differences or similarities in regulatory rules for service providers who are incumbents and for those who are new comers?

YES	NO	NO	YES	NO	NO	NO
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1B. Do the policy initiatives contain direct or indirect evidence that would have implications for differences or similarities in regulatory rules for service providers in the private sector and for those in the public sector?

YES	YES	NO	YES	YES	NO	NO
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ROLE OF MEDIA REGULATORS

1. Do the new policy initiatives (the ICASA Act and CBB) provided by the new regulatory authorities (the ICASA and the CCI) contain relatively more direct or indirect evidence within the context of their respective countries that accords them with more concrete articles of power or authority to oversee service provision from firms that are based in multiple media sectors or from firms that provide service in a range of media forms including voice, video, data and audio relative to the authority that other policy initiatives accord to sector specific regulators?

YES	NO	NO	NO	YES	NO	NO
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