Version 1.2

A working list of resources for the multi-sector paper

Industry Level

Klein, Michael, Gray, Philip (1997). Multisector Competition in Network Industries - Where and How to Introduce It. In International Forum for Utility Regulation (Corp. author) *The Private sector in infrastructure: strategy, regulation, and risk.* Washington, D.C: The International Bank for Reconstruction and Development, p. 5.

Title: Breaking the voice barrier: Does dial tone mix with kilowatt-hours?
Appears In: *Public Utilities Fortnightly*. v134n22 Dec 1996. p.38-39
Article Length: 2 p.

Abstract: According to a recent nationwide survey of more than 1,000 households, electric utilities would enjoy a strong measure of credibility with consumers should they decide to enter the telephone business. Although electric utilities entering the voice services business face considerable challenges, a large, satisfied customer base gives them an important competitive advantage. Electric utilities also enjoy substantial financial resources and experience managing large internal telecom networks. Finally, much of electric utility infrastructure already stands poised to support a telecom business. Many of the best telecom opportunities for utilities involve wireless technology, particularly digital cellular and personal communications services, which will eventually handle much of the local exchange traffic. In addition to providing fixed and mobile voice services, wireless networks can help differentiate electric services by facilitating real-time pricing and demand management.

Author: Anonymous

Title: Natural gas
Appears In: *Energy Economist*. n190 Aug 1997. p.29-30
Article Length: 2 p.

Abstract: The US is set to join the worldwide dash for gas in power generation. According to the annual energy outlook published by the US Energy Information Administration, gas is expected to capture 31% of the US generation market by 2015. Growth in gas use will lead to increasing imports of gas into the US, particularly from Canada. The US drive toward multi-utility continues apace. In Europe, battle is presently joined in Spain between electricity utilities moving into gas, and Gas Natural announcing plans to move into power generation, building 7 or 8 gas-fired CCGTs by 2004. Not to be outdone, the Nordic countries are reexamining the issue of building a gas grid between Norway, Sweden, and Finland.

Author: Robinson, Ian

Title: The benefits of multi-utility
Appears In: *Management Today*. Oct 1997. p.5
Article Length: 1 p.

Abstract: The rate of change in the utility industry since privatization has been very fast. Rationalization in the industry has produced further change, some overseas ownership and the birth of multi-utility companies selling electricity, gas, telecoms and water. Multi-utility is in its embryonic stage in the UK, though. The development of the employees within the utility industry, together with advances in IT, has produced management and staff who are much more focused on customers, efficiency, and cost. An influx of new management from outside the industry brought step changes in practice.

Author : Stahlkopf, Karl E

Title: Convergence of utility services: Technological challenges and opportunities
Appears In: *The Electricity Journal*. v10n6 Jul 1997. p.74-79
Article Length: 6 p.

Abstract: The need to reduce costs has been the key driver of the present transition in the electric utility industry, which has been furthered by a combination of market pull and technology push. The utilities that thrive in this era will be those that can adopt new technologies quickly and use them for strategic advantage. The ways technology can contribute to the convergence of gas and electricity are discussed. While electricity and gas make an attractive combination for most energy customers, advanced real-time metering and single-source billing will contribute to convergence. Adding communications services to this package then becomes a natural next step.

Author : Saunders, Barbara

Title: U.S. gas/electric megamergers may slow as new policies tested
Appears In: *Oil & Gas Journal*. v95n5 Feb 3, 1997. p.19-23
Article Length: Long (31+ col inches)

Abstract: Giant one-stop energy providers have mushroomed as US deregulation of the electric power business rapidly unfolds. The so-called BTU convergence, spawned by electric power deregulation dogging the heels of earlier gas industry deregulation, is at the heart of an unprecedented series of proposed mergers between natural gas pipelines/distribution companies and electric utilities. Gas and electric companies seeking to join forces are experiencing some growing pains along the way, as regulators take a close look at the altogether new, converged BTU business sector that is emerging. Selling energy and related services by the BTU promises to be the largest competitive US enterprise spawned by the wave of deregulation that started in the 1970s. However, despite huge profit potential down the road, making money as combined power-gas companies may prove elusive at first, insiders say. That is partly because acquiring companies are paying a premium for those they seek to acquire, and because the market is so new, nobody is sure how best to tap the profit potential.

Author: Bartunek, Kenneth
Jessell, Kenneth
Madura, Jeff

Title: Are acquisitions by utility firms beneficial?
Appears In: *Applied Economics*. v25n11 Nov 1993. p.1401-1408

Abstract: Utility firms are subject to peculiar regulatory characteristics that may allow for unique wealth effects resulting from acquisitions. The wealth effects derived from acquisitions of utility firms is measured and the analysis reveals negative wealth effects for acquirers and positive wealth effects for targets. However, the wealth effects are generally less favorable for utility firm acquirers than other acquirer firms because of the regulatory barriers that prevent them from pursuing more attractive targets. In addition, the lack of experience of utility companies in acquiring companies may prevent them from negotiating a reasonable price. Utility companies also may not have sufficient experience to integrate effectively the target's operations with their own. On the positive side, the market reacted more favorably when utility companies acquired firms in a different line of business, which implies possible benefits from diversification.

Author : Stein, Larry

Title: Look twice before diversifying into telephony
Appears In: *Public Utilities Fortnightly*. v133n5 Mar 1, 1995. p.32-35
Article Length: 4 p.

Abstract: The critical question for any electric utility that would jump into telephony is: What is the source of sustainable competitive advantage? The dynamics of the telecommunications industry lie a world apart from power generation, transmission and distribution. The differences present a daunting challenge to utilities who seek to profit from potentially under-used telecommunication assets. The value proposition must be clear and must recognize both the technology and market-based challenges. A number of different technologies can support a wide range of potential service offerings to help electric utilities to ease into telecommunications. Most commonly considered technologies include fiber optics, trunked radio systems, and other wireless technologies like microwave and personal communications services. To assess which are most attractive, the utility must analyze the potential risks and rewards associated with each. A packet radio network offers a good technology mix for electric utilities to use to develop a niche telecommunications service to help customers monitor electricity use.

Author: Dukart, James R

Title: Utilities discover a new perspective
Appears In: *Utility Business*. v2n8 Aug 1999. p.56-58
Article Length: 3 p.

Abstract: Utility CEOs and chief financial officers may be forgiven if they think they are in unexplored territory. Faced with growing national deregulation and the rapidly changing economics of the electric, gas, telecom and water industries, industry leaders are faced with the daunting task of charting new financial courses, of seeking out new and different growth opportunities and previously unexplored profit pools. Although these captains of the utilities industry may not be required to chart new territory, many are going where few have dared to tread. Some are exploring energy trading, energy auditing and a range of energy services.

Others are staking claims on established territories, consolidating production and services in generation, transportation or distribution.

Author: Smith, William M

Title: DGital mobility: Toward a fluid electric infrastructure
Appears In: *Public Utilities Fortnightly*. v139n9 May 1, 2001. p.52-55
Article Length: 4 p.

Abstract: Even if California can save itself from its energy crisis, today's technology will still be unable to deliver the ultimate promise of deregulation: customer choice. The required technology will change technical operating practices for generation, transmission, and distribution. The electric utility industry must evolve into an electricity infrastructure that supports free-flowing transactions between suppliers and purchasers. This Electrinet (an electric power analogue to the Internet) should offer the transparency and flexibility needed to avoid repeating the last few years experiences with deregulation. The Electrinet will effectively handle the challenges of the digital society and add technologies to take advantage of the convergence of various electronic media and networks to facilitate across-the-meter interactions through sophisticated, two-way communications/control/monitoring systems.

Author : Schuler, Joseph F Jr

Title: Diversification, round two: Telecom act has electrics at it again
Appears In: *Public Utilities Fortnightly*. v134n22 Dec 1996. p.33-37
Article Length: 5 p.

Abstract: Under the Telecommunications Act of 1996, the Securities and Exchange Commission can no longer prevent utility companies registered under the Public Utility Holding Company Act from diversifying into the telephone business. However, this latest diversification could prove foolhardy because: 1. Telecommunications markets can destroy any entrant, let alone a company fighting for market share within its deregulating core business. 2. Previous attempts at diversification have not been exemplary for utilities. 3. State regulators, as mandated by the 1996 Telecommunications Act, might move to prevent cross-subsidization. What utilities have going for them is the infrastructure, size and finances to enter capital-intensive markets. They also have the communications assets. What they do not have, according to Bernice K. McIntyre, a utilities-telecom consultant, is the right corporate culture, and the chance to take a breather from the coming upheaval in deregulating electric markets.

Author: Zalud, Bill

Title: Utility-security convergence: Lots of gas and a little electricity?
Appears In: *Security Distributing & Marketing*. v27n8 Aug 1997. p.101-104
Article Length: 3 p.

Abstract: Facing deregulation, electric and gas utilities - big and small, urban and rural - are acquiring or partnering with security firms, starting up unregulated businesses that offer a variety of home services, including security systems monitoring. Change has hit US gas and electric utilities hard, and many utility executives view security monitoring as a way to transform themselves, leverage expenses, increase cash flow and hold onto customers. The pressure on these utilities, in a stalling US industry with $270 to $310 billion in revenue, comes primarily from approaching energy deregulation. The security side of this

convergence is also set for partnering: a handful of the largest firms have national coverage with local offices; mid-sized firms, eager to grow, are eager to partner.

Author: English, Erin

Title: US utilities join comms sector
Appears In: *Communications International*. v21n10 Oct 1994. p.17-18
Article Length: 2 p.

Abstract: Telephone, cable, and computer companies fighting it out for lanes on the putative US information superhighway may experience competition from an unexpected quarter. Slowly gaining market share and, they hope, acceptance, are the US gas and electricity utility companies. These new players are looking to expand existing services for their customers, and to eventually provide a wide variety of services unrelated to operating a stove, or taking a shower. With wiring to, and in, virtually every home, utility companies believe that they have a natural advantage, and while they plan to start small and grow slowly, they have big aspirations. They say their services will lower costs for consumers, as well as lowering costs for themselves. While the utilities are nudging their way into telephone and cable territory, there is the likelihood that multiple partnerships will be formed, analysts say.

Author: Monroe, Ann

Title: The looming fusion of power and energy
Appears In: *The Investment Dealers' Digest : IDD*. v62n31 Jul 29, 1996. p.16-17
Article Length: 1 p.

Abstract: When it comes to the convergence between gas companies and electric utilities, the question is not will it happen, but when. According to Robert Munch of CIBC Wood Gundy, the energy business is clearly drawing itself closer and closer together. It is difficult to find a utility company that is not in the power or E&P business, and it is hard to find a gas company that is not well-versed in marketing and hedging, which lend themselves to looking at the electric business. So far, there have been only 2 major electric-gas mergers - Texas Utilities/Ensearch and Puget Sound Power & Light/Washington Energy - but the logic for more is compelling.

Author: O Shea, Dan

Title: Utilities step away from tradition
Appears In: *Telephony*. v230n17 Apr 22, 1996. p.26
Article Length: 1 p.

Abstract: Electric utilities and telephone companies both have futures as full service broadband network providers. Now, with new deregulation taking hold in the utility industry, a handful of network-based interactive energy management trials by utility companies are currently under way. Also, utility companies have begun to take stock of their fiber investments and plan their futures as multiservice providers. As the market develops, alliances between telcos and utilities will not be out of the question, though alliances between utilities and cable TV operators may be more likely.

Firm Level

Author: Kufahl, Pam

Title: Telecom ignites a gas empire
Appears In: *Utility Business*. v3n5 May 2000. p.22-26
Article Length: 4 p.

Abstract: Little has changed during the 100-year history of the energy industry to create stock market excitement on the same scale as the dot.com companies. For Williams Cos., a Tulsa, Oklahoma-based energy company with a long line of executives that encouraged out-of-the-box thinking, the answer to how to change that is to turn unused pipelines into a winning asset and then go public with it. Challenged to develop creative ways to use assets, the pipeline group in the mid-1980s developed a plan to use decommissioned gas pipelines to house a fiber network. Williams is now building its second telecom business. For Williams, however, the pipeline business has always been the heart of the company.

Author: Pitcher, George

Title: Centrica's L1.1bn deal with AA leads way to multi-utility future
Appears In: *Marketing Week*. v22n23 Jul 8, 1999. p.21
Article Length: 1 p.

Abstract: Centrica is exploiting the potential of cross-selling in its bid for the Automobile Association, which will allow it to branch out into financial services. Since the breakup of British Gas, Centrica has developed into a fine business, exploiting its customer base well. It has now branched out into electricity supply, credit cards, household insurance, plumbing and home-appliance maintenance.

Author: Buttorff, Leslie

Title: Cyberspace economics: New math for utilities
Appears In*:* *Electrical World*. v209n7 Jul 1995. p.53

Abstract: Today's typical, vertically integrated electric utility will change drastically over the next few years, and innovative tools and methods will be needed to build the new structure. For example, retail wheeling at the residential level will be challenging and complicated, requiring new communication services. To prepare for the future, electric utilities should identify the telecommunications and information technologies required to support their core business strategies, and align their generation, telecommunications, and information technology planning accordingly. Electric utilities must begin to think of their core business as a product, and then think of ways to expand their product line. Current regulation ensures that the electric utility's "brand name" is known by all of its customers. Therefore, companies must take advantage of name recognition to expand their product line, and thereby gain a larger share of profit margins.

Author Grzanka, Len

Title: Utility diversification: Munis find cable TV a costly business
Appears In:*Public Utilities Fortnightly*. v136n17 Sep 15, 1998. p.34-42
Article Length: 8 p.

Abstract: More than 70 municipal utilities have either built or plan to build telecommunications systems with fiber-optic and coaxial cable to compete against local cable television, data communications or telephony providers. Profitability for these ventures has been abysmal, but their customers and regulators are happy. The recent merger of AT&T and TCI will bring an unprecedented level of competition to the cable business, making such ventures even more risky. The AT&T/TCI merger will also bring new issues to the regulatory arena. Without regulation of cable rates, price wars can create a new class of stranded assets in CATV networks lacking enough subscribers to cover costs. Problems encountered by RCN Data Corp. and Boston Edison, the Bureau of Electricity in Alameda, California, Tacoma Power, and the Glasgow Electric Power Board in implementing CATV systems are discussed.

Author: Carter, Wayne

Title: Utilities on the move
Appears In: *Telephony*. v233n22 Dec 1, 1997. p.6
Article Length: 1 p.

Abstract: The Williams Cos. is building and acquiring new fiber runs on several major runs. The company's impending resurgence in the long-haul fiber business is indicative of utility companies' growing interest in capitalizing on existing rights of way and network infrastructure to break into telecommunications. The onset of competition in the utility industry is driving utilities to consider diversification.

Author : Canning, Gordon

Title: Survey of energy utility new business development
Appears In: *The Electricity Journal*. v10n10 Dec 1997. p.94-101
Article Length: 8 p.

Abstract: Energy utilities are applying several different strategies to develop new businesses. The approach being pursued by strategic developers promises to be the most successful because it is fueled by proper goals and sufficient resources, and is uninhibited by ties to the core business. Energy utilities are venturing into a wide range of new markets: energy brokering, residential appliance service, commercial building energy management and many others. Industrial companies with years of experience in new-business development consider it one of their most difficult tasks, while utilities for whom it is a new activity find it particularly challenging. Unlike the acquisition programs of the 1980s, which sought diversification, many new-business development efforts in the 1990s seek to utilize assets and capabilities that reside within the utility. A consultant's survey of electric, gas, and dual-service companies is presented.

Author: Liu, Ernest S

Title: Diversification: Extending the core business
Appears In: *Institutional Investor*. v31n10 Oct 1997. p.E9
Article Length: 1 p.

Abstract: Concerned about increased competitive pressures that may threaten future earnings growth or make such growth more volatile, many utility managements have diversified outside the regulated utility business. The focus of most utility managements now is electricity generation, transmission, and distribution as well as power marketing or brokering. In addition, an increasing number of companies have formed joint ventures with telecommunications companies as part of a bundled retail energy and related services marketing push.

Author : McRae, Don

Title: Asset management system ties it together
Appears In: *Transmission & Distribution World*. v50n9 Sep 1998. p.58-66
Article Length: 5 p.

Abstract: To deliver increasing expectations for supply quality and cost reduction, information technology has become an essential component of transmission and distribution networks. The integration of the system into a corporate IT infrastructure requires delicate management along with a willingness to dismantle some old taboos. Scottish Power is a UK multi-utility operation in the electricity, gas, water and telecommunications sectors. In 1994, the company completed a strategic study to determine the organization and business systems that would successfully carry the company into the new millennium. A major initiative from this study was the development of a business change program branded AM2000, which has become successful through implementing new processes and integrated IT systems across the power systems business.

Author: Anonymous

Title: Call handling is key to the multi-utility power battle
Appears In*:* *Management Today*. Jul 1998. p.60
Article Length: 1 p.

Abstract: The creation of a centralized call center, serving both gas and electricity customers across the UK, is an integral part of Scottish Power's plans to establish itself as a leader in the emerging multi-utility business.

Author: Schuler, Joseph F Jr

Title: Electric/gas convergence, meter-to-meter
Appears In*:* *Public Utilities Fortnightly*. v135n9 May 1, 1997. p.26-30
Article Length: 4 p.

Abstract: Enova Corp. is set to acquire Southern California Gas Co. through a merger with the gas utility's parent, Pacific Enterprises. This strategy raises a tantalizing question: can the new merged company sell electricity through SoCalGas meters, using customer contacts on the gas side to grab market share in electricity from Southern California Edison, whose territory overlaps that of SoCalGas? This prospect puts a new shine on electric/gas

convergence. It shifts the focus from upstream commodities to downstream products. It redefines customer relationship. Micro-unbundling describes the process of identifying the individual components of electric utility distribution service, asking whether such components should be broken out as deregulated services, opened to the market.

Economies of regulation

Vass, Peter (1998). Regulatory Reform and Relations among Multiple Authorities in the United Kingdom. In Bruce Doern and Stephen Wilks, *Changing regulatory institutions in Britain and North America*, Toronto: University of Toronto Press, p. 236.

Reducing regulatory Risk

Kolbe, Lawrence, Tye, William, and Myers, Steward (1993). *Regulatory risk : economic principles and applications to natural gas pipelines and other industries.* Boston : Kluwer Academic Publishers.

Financial Times (London)
June 1, 1998, Monday LONDON EDITION 1

SECTION: LEX COLUMN; Pg. 20

LENGTH: 222 words

HEADLINE: Multi-utility regulation
LEX COLUMN

BODY:
Multi-utility regulation
Does the formation of multi-utilities like Hyder and United Utilities require a different approach to regulation? The government is looking for an answer as part of its utility review. The worry is that multi-utilities might be able to pull the wool over their regulators' eyes - particularly by playing games over cost allocation. One answer might be for the regulators to spell out precisely which costs should be allocated to which business. The snag is that the whole point of forming a multi-utility is to gain benefits from closer integration of different businesses - in areas such as maintenance, billing and procurement. Heavy-handed regulation might make it difficult to drive through these efficiencies. And that, in the long run, would harm customers.
How, though, can regulators encourage such efficiencies without losing their ability to regulate? One approach would be to define more narrowly which of a utility's functions are the irreducible monopoly. Activities, such as maintenance - where multi-utilities want to pool costs - could be opened to competition. Then only the core monopoly would need to be regulated. Of course, for such an approach to work, the various regulators would first need to agree where to fix the boundary between monopoly and contestable market.

Author : Parker, David
Title: Reducing regulatory risk: The case for a new regulatory contract with the privatized utilities
Appears In: *Public Money & Management*. v18n4 Oct-Dec 1998. p.51-57

Abstract: Privatization was intended to reverse the inefficiencies of state ownership. When the public utilities were privatized in the UK, between 1984 and 1996, new dedicated regulatory offices were established: Oftel, Ofgas, Ofwat, Offer and the ORR. Terms of reference for the regulators were set out in the privatization legislation, but more generally the regulators were given considerable discretion over their industries. Against the background of the Government Green Paper on the future of regulation in the UK, this paper argues that while regulatory discretion was desirable in the early days of regulation, there is now a stronger case for introducing "contacts" which constrain regulatory discretion and reduce regulatory risk.

Author: Trebing, Harry M

Title: Achieving coordination in public utility industries: A critique of troublesome options
Appears In: *Journal of Economic Issues*. v30n2 Jun 1996. p.561-570
Article Length: Long (31+ col inches)

Abstract: A more purposeful program for regulatory intervention would deal directly with sources of oligopoly power. This could be accomplished through the combined application of structural separations and cost-based regulation. For those segments of the industry where network economies and industry-specific barriers promote high concentration, structural separations could be applied. The network would remain under regulation, and the marketing of services (other than basic service, which would remain under regulation) could be divested and deregulated. This would eliminate common corporate control of diverse markets and a major source of cross subordination. Divested marketing affiliates, in turn, would compete directly with other resellers and brokers. Since the underlying network would serve both deregulated buyers and sellers and residual basic service customers, it would be necessary to put in place a system for assigning common and joint costs on the basis of the relative benefit derived from the use of the network.

Author : Bauer, Johannes M

Title: The regulatory treatment of utility diversification
Appears In: *Land Economics*. v71n3 Aug 1995. p.386-400

Abstract: Recent regulatory reform has gradually relaxed the constraints on vertical and horizontal diversification of public utilities. After earlier strategies of conglomerate diversification, utilities more recently started to expand into domestic and international activities more closely related to their core business. Sound diversification may improve corporate performance, but it raises complicated policy issues in firms operating in both regulated and unregulated markets. The problems of cross-subsidization, risk-shifting, and profit-shifting that may result under conditions of partial regulation are discussed.

Author: Hempling, Scott

Title: Electric utility holding companies: The new regulatory challenges
Appears In: *Land Economics*. v71n3 Aug 1995. p.343-353

Abstract: Prior to 1935, the US electric industry was dominated by holding companies and was unresponsive to ratepayers, regulators, and market forces. The Public Utility Holding Company Act of 1935 reshaped the industry by requiring the divestiture of nonintegrated utility systems. The industry has begun to reshape itself again. Domestic utilities now may invest in generating companies anywhere in the world. The form and activity of a holding company is almost unlimited. The risks of the 1930s - corporate complexity, market power, and limits on regulatory resources - have not changed, and new forms of regulation are necessary.

Author: Cross, Phillip S

Title: Diversification puts regulators on edge
Appears In: *Public Utilities Fortnightly*. v132n3 Feb 1, 1994. p.41-44
Article Length: 4 p.

Abstract: In the 1980s, corporate diversification by public utility companies emerged as a topic of concern when the economy slowed and a substantial share of their investments failed to produce anticipated returns. Regulated utilities or their holding companies incurred losses from investments in a broad range of activities that became the subject of long and complicated state regulatory proceedings. Recent activity at the state regulatory level shows that utilities are still seeking ways to benefit financially through diversification. Much of the interest in utility diversification is geared toward protecting ratepayers from financial loss resulting from a utility company's efforts to start or support a new line of business. At the same time, however, regulators must provide such protection without interfering in the management decision-making process or unfairly sending a subsidy back the other way (shareholders to ratepayers).

Author : Kilpatrick, Kenneth, Lapsley, Irvine

Title: "Trust us" - Regulators and the governance of privatized utilities
Appears In: *Public Money & Management*. v16n2 Apr-Jun 1996. p.39-46
Article Length: 8 p.

Abstract: The processes of regulation of the newly privatized utilities are examined. Four key aspects of the UK system are identified: 1. regulator discretion and regulatory risk, 2. the powers of the regulator, 3. a regulator-regulatee expectations gap, and 4. a regulator-public interest expectations gap. The crucial role played by trust is highlighted. The tension and straining of the trust between the regulator and the regulatees can be seen as inherent in the present regime, and an obstacle to its reform. On the other hand, this tension can be viewed as a constructive force at work to promote the efficiency of these enterprises. It could be further utilized to enhance the accountability of these enterprises by encouraging the regulator to scrutinize the risk/reward structures for the various stakeholders.

Genesis

Odgers, Graeme [et al.] (1995). *Utility regulation : challenge and response : the state of Britain's regulatory régime*. London: Institute of Economic Affairs in association with the London Business School.

Eisner, Sharon and Vogelsang, Ingo (Eds.). *Competition, Regulation, and Convergence: Current Trends in Telecommunications Policy Research*.

Mather, Janet (2000). Chapter 6: Multi-sector or multi-level governance? In *The European Union and British democracy: towards convergence*. New York: St. Martin's Press, P.152

Author : Blackman, Colin

Title: Globalization, convergence and regulation
Appears In*:* *Telecommunications Policy*. v21n1 Feb 1997. p.1-2

Abstract: An editorial states that in order to serve large multinational customers, carriers must be able to control global telecommunication assets. Globalization is being driven by technological advances, convergence between telecommunications, computing, and the info-entertainment industries, and the growth of new services. The advent of global mobile personal communications systems over the next few years will enable the provision of ubiquitous voice or data communications to a handheld or portable terminal, regardless of the user's location. These and other trends are bringing about profound social, economic, and political changes, with a consequent need for policy and regulatory responses.

Author: Jameson, Justin

Title: The likely development path and future regulatory requirements
Appears In*:* *Telecommunications Policy*. v20n6 Jul 1996. p.399-413
Article Length: Medium (10-30 col inches)

Abstract: There has been widespread discussion of how the perceived convergence of the telecommunications, media and information technology industries might affect the way people lead their lives. It is suggested that on-line services, rather than the TV market, will drive the development of new media markets. In particular, it is suggested that switched broadband networks will not be established on a wide scale for the foreseeable future. Guiding principles are identified to be used in defining regulatory regimes of the future. The suggestion is made that conflicting consumer and commercial interests can only be balanced if a country's regulator is free to create a stable, yet flexible, regulatory environment.

Mesher, Gene and Zajac, Edward (1998). Toward a Theory of the Global Liberalization of Telecommunications: Implications for Convergence Regulation. In Erik Bohlin [et al.] (eds.) *Convergence in communications and beyond* , Amsterdam: Elsevier [Science], p. 283.