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DATA TRANSMISSION VIA CABLE REGULATORY PROBLEMS

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Abstract

Recent advances in computers have been gradually erasing a clear distinction **between** traditional notions of computing and communicating. The policy sphere has felt the impact of this phenomenon in its attempts to regulate data communications in a reasonable and consistent fashion. One particular example is the use of cable television for data communications. The technology involved in this application refers to coaxial cable traditionally used for the retransmission of broadcast signals or the transmission of origination programming. Current uses such as **two-way** cable already involve data communication in the form of subscriber responses. A technologically possible use that calls into question the current regulatory framework is the use of this technology for the provision of access to data bases through teletext-type services.

Precedent for the regulation of data communication currently exists **within** the framework of common carrier regulation. According to the Second Computer Inquiry, the type of data transmission under present consideration falls into the category of "enhanced non-voice" communication. As such, those entities who provide the transmission facility would be prohibited from providing data processing services as well. However, in this case it is normally a single entity who provides both the transmission facility and the service -- the cable operator. Further, cable operators **are** prohibited elsewhere **from** functioning like a common carrier.

It can be noted, therefore, that the current regulatory framework does not account for such new uses of data transmission as suggested by the present case. A **recommended** approach would be to focus on the use made of the **medium** rather than on the **medium** itself when attempting to articulate a regulatory position.

1. INTRODUCTION

Recent developments in computer technology have been gradually erasing a clear **distinction between** traditional notions of **computing and communicating**. One result has been the difficulty in regulating the **computer/communication** interface in a reasonable and consistent fashion. **An example** of this regulatory **dilemma** can be seen in the attempt to regulate the use of cable television for data **communications**.

Part of the **problem** is due to the evolutionary nature of the technology **involved**. However, **while this** application **is** not currently in widespread

use, there is **nothing**, technologically, that prohibits it. Thus, the present consideration can be justified. Further, it can be pointed out that the policy **ramifications** of a given technological application ought to be considered in advance of wide-scale implementation. A final rationale for this consideration is that it serves to point out the **pitfalls** inherent in regulating information technology and practices in a fragmented fashion.

2. THE TECHNOLOGY

Traditionally, cable television has been used to: 1) enhance broadcasting through the retransmission of telecasts to remote areas; and 2) provide origination programming, usually of local/community interest. Lately, however, there have been selected CATV installations in which data transmission has been involved as well. The first such application was Warner Communications' cable system QUBE in Columbus, Ohio. This type of cable system provides a two-way or interactive capability. The communication from the cable operator to the subscriber is a traditional cablecast. The viewer has a subscriber response capability in the form of program selection and audience response. This latter communication, then, constitutes data transmission. Additionally, such cable systems allow for the transmission of data necessary in home security and fire alarm systems.

Another **form** of data communications that could be made available via CATV is the provision of such information retrieval services as are now associated with videotext. Current examples of this service (i.e. providing textual **information** that can be displayed on an adapted television screen) utilize either the broadcast spectrum or the telephone network. The advantage of the telephone network is the interactive capability that is provided. Britain's PRESTEL system is one such example. Since cable television has grown out of the broadcast tradition but has the additional interactive capability it would seem to be well suited for the provision of videotext services. The **main** drawback is a temporary one; the nation is not yet "wired" for cable. However, as more communities develop the capacity for cable television the reality of its possible use for data transmission will be clear.

Thus, the technological potential exists for a CATV operator to be engaged in the transmission of cablecasts along **with** data transmission either in the **form** of messages (e.g. subscriber responses) or textual material (e.g. that which is retrieved from a data base).

3. REGULATORY ISSUES

Among the **many** considerations surrounding the provision of such a service are the regulatory issues. Since this application is of a "hybrid" nature, regulation by analogy is not completely satisfactory. However, it is valuable to consider the regulatory **frameworks** of the relevant arenas.

Through the **Communications** Act of 1934 the Federal Communications **Commission** was established and charged **with** regulating broadcast. The rationale derived **primarily** from the nature of the medium. Since the broadcast spectrum is a scarce **medium**, its management was deemed as in order. In addition, **since** the **airwaves** are considered to be in the public domain regulation **wa**. recognized as necessary in order to guarantee that broadcast would operate **in** the public's interest, convenience, and necessity.

When the **United** States Supreme Court **expanded** the jurisdiction of the FCC to include **CATV in** 1968, with its ruling in *U.S. v. Southwestern Cable*(1) it did so because cable was seen to be "reasonably ancillary" to broadcast **and** thus **susceptible** to regulation. The caveat was that "the authority

which we recognize today under § 152(A) is restricted to that reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting". (2) (Emphasis added)

Following this grant of authority over cable television, the FCC issued its first set of rules governing CATV in the 1972 Cable Television Report and Order. (3) In it the FCC sought to allow for the technological potential of cable while at the same time maintaining the existing structure of broadcast television. Of particular interest to the present consideration is the requirement that public access channels be made available to anyone who wished to use them. (4)

These rules were eventually overturned in 1979 in FCC v. Midwest Video Corp. (5) The high Court held that mandatory access regulations exceeded legal bounds for two reasons. The first is because "the regulations were not reasonably ancillary to the Commission's jurisdiction over broadcasting, a jurisdictional condition established by past decisions of this Court". (6) The second rationale articulated by the Court for holding the rules invalid is that the rules "amounted to an attempt to impose common-carrier obligations on cable operators and thus ran counter to the statutory command that broadcasters themselves may not be treated as common carriers." (7)

Given the existing regulatory framework for cable television, the question at hand, then, is: How should the use of CATV for data transmission be regulated? Before suggesting an answer to this question, one final regulatory framework should be examined: common carrier use for data communications. The reason for examination of this area of regulation is that it is the locus of present data transmission activity and therefore where precedent currently exists for the regulation of data communications.

The policy governing data communications has been primarily articulated in two computer inquiries conducted by the FCC. (8) The first, which was concluded in 1970 was motivated by the development of technology that had enabled remote access to computing. This inquiry sought to acknowledge the computer/communications interface and the inherent regulatory problems. It concluded that data processing should not be regulated but that there should be maximum separation between the activities of common carriers and the entities providing computer services. The intent of such regulation was to avoid cross-subsidy and eliminate (or at least reduce) unfair advantage by established giants in the field.

It is interesting to note two underlying assumptions of this inquiry. The first is that the relevant terms could be adequately defined. Thus, terms such as "data processing", "remote access data processing service" and "message switching" were given definitions (9) that were expected to serve as the basis for regulatory distinctions. The second assumption is that with the use of these definitions it would always be possible to determine if the use of the computer was incidental to the communication event and vice versa.

The Second Computer Inquiry, concluded in 1979, was conducted in response to the recognition that the technological developments and applications of the ensuing decade had called the assumptions of the first inquiry into question. There was also a concurrent phenomenon that had an impact on the regulatory posture: a general tendency toward deregulation - as evidenced in the proposed amendments to the Communications Act of 1934. Thus, this inquiry sought to develop a regulatory posture that would not impede the development of innovative communication services involving the computer.

Among the tentative decisions, two are of particular relevance to the present consideration. The first is that the definitions of relevant

terms needed to be revised. Of interest here, are **two** definitions of "data processing service", "A 'data processing service' is **defined** as the **offering** for hire of **computer** processing capabilities for the purpose of... (b) **maintaining**, managing, or **providing** a data information bank or information retrieval service whereby information may be selectively retrieved by or for a subscriber to the service, or (c) monitoring **or** controlling an on-going non-communications process **or** event." (10)

The second decision regards the service structure. The FCC proposed that the regulatory framework be based upon a clear distinction between the service being provided and the transmission facility involved. To facilitate this a three-way categorization of services involving common carriers was made. Voice service refers to the electronic transmission of a human voice to another human. Basic non-voice service refers to the transmission of subscriber inputted information where the carrier performs such functions as converting the signal for transmission, routing it through the network, and maintaining the signal integrity in the presence of noise. It is acknowledged that the carrier might make use of a computer, but that its role is to facilitate what is essentially a communication event. That is, the **information** content is not altered by the carrier's use of a computer. In contrast, enhanced non-voice service refers to a "communication setting in which the "computer acts upon the form, content, etc. of the inputted information to change it. (11) As defined, then, a "data processing service" would fall into this last service category. It was then concluded that: (1) common carriers may directly provide only voice and basic non-voice services; (2) such carriers may only provide enhanced non-voice services through a separate corporate entity; and (3) computer facilities associated with the first two types of services may not be used for the third type of services.

4. REGULATORY OPTIONS

Given the present regulatory frameworks governing cable television and data communications, one can now return to the question posed earlier: How is this hybrid application which draws from two distinctly regulated areas to be managed?

One option would be to focus on the technology and extend the regulatory scope of cable. This **view could** be justified in that the cable operator's provision of "cabletext" is analogous to his/her provision of program origination and retransmission to the subscriber. That is, subscribers would be selecting data bases to search much as they do programs to view. An implication of doing so, however, lies in the fact that the "public interest, convenience and necessity" standard of the **Communication Act** of 1934 made applicable to CATV in *Southwestern Cable* does allow the FCC to control some aspects of programming. Through a plethora of litigation, (12) the Federal Courts have arrived at the position that while the FCC **may** not control the content of broadcast messages, it may require programming in certain categories. This requirement fosters such regulations as the Fairness Doctrine and the Personal Attack Rules. Thus, under the public interest standard, the cable operator providing "cabletext" could be forced to comply with the **same** policy guidelines that broadcasters must meet such as the equal **time** rule, community ascertainment and the **Prime Time Access Rules**.

A position on this matter was articulated in response to a request by the American Newspaper Publishers Association that the FCC make clear its position regarding facsimile transmission of a newspaper via cable. The FCC stated that: **"The** point is that we have no intention of regulating the

print medium when it is distributed in facsimile by cable. **but** we do hold that the publication of a newspaper by a party does not put it in a different position from other persons when it sponsors or arranges for the presentation of a CATV origination which does not constitute the distribution of its newspaper." (13) Thus, the possibility exists that some services involving the delivery of textual material would be subject to the same regulatory strictures to which cable operators **are** subject.

A second option would be to focus on the content of the communication event rather than on the transmission facility. This would require extension of regulation governing common carrier data communications. The rationale for this perspective is that this is the present locus of data communications regulation. An additional reason would be that the cable operator in facilitating a subscriber's access to various data bases is functioning like a common carrier. There are two problems, however, in choosing this regulatory path. The first is that there exists a statutory position, referred to earlier, that cable operators may not function like common carriers. The second problem is that the services involved - information retrieval and home monitoring - are by definition "data processing services" and therefore fall into the category of enhanced non-voice services. As noted earlier, the corporate entity providing the transmission facility is prohibited from also offering this type of service utilizing it. Such prohibition runs counter to the norm of the cable operator providing both the transmission facility and the information service.

5. CONCLUSION

It is clear that the existing regulatory approaches do not provide for reasonable regulation of the services and technology in question. In adapting the relevant policy arenas to account for this new application a recommendation would be to extend the difference-in-the-medium approach to regulation that has already begun to emerge. Following the recent failed attempts to rewrite the Communications Act, Congress is presently considering proposals to deregulate radio. The proposed deregulation is a response to the notion that instead of applying all regulation equally to all electronic media (as was the approach when television was developed), various regulations should be applied, and the application should be handled differently, depending on the unique aspects of the medium. **Thus**, for example, since radio is largely a local medium and television is largely a national medium, the **two** should be treated differently; since scarcity of public resources is a factor in over-the-air television but not with cable television, the two should be treated differently; and since traditional CATV presents pictures which may be intellectually intrusive and readily accessible to children and data transmission presents words which must be consciously read, the **two** uses should also be treated differently. Further support to this view can be found in the decision of the Second Computer Inquiry to distinguish the communication service being provided from the transmission facility employed.

The ultimate solution, it would seem, must therefore derive from **exami-** nation of the different uses to be made of a given technology, both in actuality and in potential. And what may result, in this case, might be divided regulation of cable: "Some government planners see cable (as) eventually divided into at least **two** regulatory slots: (the) **common** carrier with channels for lease to other programmers, (or the) cable franchiser **him-**self programming only few channels for such services as pay cable and ancillary services (security, information retrieval, etc.) (The) notion is that divided regulation will evolve during (the) next decade." (14)

REFERENCES

1. 392 U.S. 157 (1968).
2. *Id.* at 178.
3. 36 FCC 2d 143 (1972).
4. **Zuckman**, Harvey L. and Graynes, **Martin J.**, *Mass Communication Law* (St. Paul, **Minn.**, **West Publishing Co.**, 1977)
5. 440 U.S. 689 (1979). This case is referred to as **Midwest Video II**.
6. *Id.* at 695.
7. *Id.* at 695.
8. 72 FCC 2d 358 (1979).
9. *Id.* at 361.
10. *Id.* at 402.
11. *Id.* at 447.
12. See, for example, *NBC v. U.S.*, 319 U.S. 190 (1943); *National Association of Television Producers and Distributors v. FCC*, 516 F.2d 526 (1975); *Writer's Guild of America, West, Inc. v. FCC*, 423 F. Supp. 1064 (1976).
13. 23 FCC 2d 829-30 (1970).
14. "Closed Circuit" 49 *Broadcasting* 9 (**March** 24, 1980).