

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D. C. 20554

FCC 87-239  
91872

In the Matter of )

Regulatory and Policy Problems Presented )  
by the Interdependence of Computer and )  
Communication Services and Facilities )

DOCKET NO. 16979

SUPPLEMENTAL NOTICE OF INQUIRY

By the Commission: Commissioner Wadsworth absent.

1. On November 10, 1966, the Commission issued the above-captioned Notice of Inquiry with respect to the regulatory questions which are being raised by the growing interdependence of computer services and technology and communications facilities and services of common carriers. The Notice specified the questions involved, concerning which the Commission desires to obtain information, views and recommendations from all interested persons. However, before fixing a date for the filing of such submissions and because of the complex nature of this matter, we invited interested persons to make suggestions, by December 12, 1966, for additions to or modifications or clarifications of the items of inquiry specified in the Notice. As stated in the Notice, after consideration of any such suggestions, we would then issue a Supplemental Notice and fix a date by which written responses are to be filed in this proceeding. The following have responded to the initial Notice: American Communications Association; American Newspaper Publishers Association; American Petroleum Institute (Central Committee on Communications Facilities); American Telephone and Telegraph Company; Applied Data Processing, Inc.; Association of American Railroads; Association of Data Processing Service Organizations, Inc.; Bunker-Ramo Corporation; Business Equipment Manufacturers Association; C-E-I-R, Inc.; Collins Radio Company; Computer Research Corporation; Computing and Software, Inc.; Department of Justice of the United States; Dial Data Inc.; East & Watts; General Electric Company; General Services Administration of the United States; Honeywell Inc.; Informatics Inc.; International Business Machines Corporation; ITT Data Services; ITT World Communications Inc.; John Wiley & Sons, Inc.; McDonnell Automation Center; Metromedia, Inc.; Microwave Communications, Inc.; Milwaukee Railroad; National Association of Educational Broadcasters; National Association of Public Utilities; National Committee for Utilities Radio; Randolph Computer Corporation;

Republic Systems and Programming; Rixon Electronics, Inc.; Robosonics, Inc.; Towson Laboratories, Inc.; Union Pacific Railroad Company; Unitab Company; VIP Systems; Western Union Telegraph Company; and Xerox Corporation.

2. Four types of responses were received. The largest number expressed the view that the items of inquiry specified in our Notice are sufficiently relevant and comprehensive as to require no modification or additions in order to accomplish the objectives of the inquiry. Certain of the respondents addressed themselves to the merits of the questions posed by the Notice and advanced positions and recommendations with respect thereto. The comments of these respondents are, of course, premature since the Notice did not seek such substantive submissions at this time. However, those persons who replied in this manner are assured that their comments will be considered after all substantive submissions are received on or before the date to be hereafter specified by this Supplemental Notice. They should also feel free to expand upon their comments at that time.

3. Other persons responded with comments which seek modification or interpretation of the items of inquiry listed in paragraph 25 of our Notice of November 10, 1966. Also, suggestions were advanced as to the procedures that the Commission should prescribe with respect to the substantive submissions contemplated by our Notice.

4. We will deal first with those comments suggesting modifications or interpretation of the items of inquiry listed in paragraph 25. At the outset, we wish to stress that it is our purpose to accord the widest possible latitude to all participants to make whatever submissions are relevant and material to a resolution of the basic regulatory and policy questions identified in our Notice of November 10 as having been raised by the growing convergence of computer and communication services and technology. In this context, after considering each of the modifications suggested, it is our view that, with certain exceptions hereinafter noted, the items of inquiry listed in paragraph 25 are sufficiently broad and encompassing to accommodate submissions by respondents treating those areas which are the subject of their suggestions. We believe that the following summary of the more significant and relevant suggestions that have been filed, together with our brief observations thereon, will assist participants in formulating their submissions.

5. The Western Union Telegraph Company urged that Item A, which asks for a description of the uses that are being made currently and the uses that are anticipated in the next decade of computers and

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communications channels and facilities, should expressly include remote terminal and channel derivation equipment. The telegraph company suggested that Item C, which inquires into the circumstances under which computer services should be deemed subject to regulation, should include the concept of any "combination of services." It also suggested consideration of the question as to whether, if any of these services or combination of services are offered by both regulated and non-regulated companies, there are any considerations, legal or otherwise, requiring the regulation of some, but not all, of the companies. The telegraph company also proposed that Item D, which asks the question whether regulation or competition will best serve the policies and objectives of the Communications Act, should be expanded to encompass a combination of regulation and competition. In our view, the items of inquiry set forth in our Notice of Inquiry of November 10, 1966, may be properly construed to permit all parties to address themselves to each of the foregoing matters.

6. The other suggestions of Western Union are designed to "make more specific the areas in which information ought to be obtained." As previously indicated, the inquiry was designed to be broad enough in nature to allow interested persons maximum latitude in responding with any specific data or views which they believe are relevant to this inquiry and will aid the Commission in resolving the questions raised herein. Thus, with respect to Item B, which asks for a description of the basis for and structure of charges to customers for the services listed in Item A, Western Union suggests an amendment which would invite disclosure of the terms and conditions of sale, lease or other arrangements with customers involving computers or computer systems. Item B was designed to elicit such information and should be so construed.

7. The International Business Machines Corporation interpreted Item A "as limited to data processing applications requiring communications channels and facilities." It interpreted Item B "as not intended to elicit from the computer industry information concerning the basis for and structure of charges for computers for data processing services generally, but only to elicit information concerning the methods of handling communication costs in connection with the charges for communication channels and facilities required for data processing applications." These interpretations are much too restrictive. The purpose of this inquiry is to elicit full information essential to an understanding of the economic, operational and other aspects of the use of computers in conjunction with communication channels and services. It appears to us that such an understanding cannot be achieved by focusing upon the latter to the exclusion of the former. We are not here concerned with the charges made by the computer industry for the sale or lease of computer equipment per se. We are, however, concerned with ascertaining the structure of any and all charges related to the furnishing of the

computer services which are the subject of this inquiry, including all components of such charges and the basis therefor. Accordingly, responses herein should include full information concerning the charges made in connection with existing and anticipated uses of both computers and communication channels and facilities for the purpose contemplated by Item A.

8. The American Communications Association suggested that the Inquiry be expanded to include the "effect of any regulatory or policy decision dealing with this matter on the viability of the carriers." This question is comprehended in issues D and E. Whenever the Commission considers the policies and objectives of the Communications Act, the viability of communication common carriers is of direct relevance. ACA further suggests an expansion to include "possible effects on employment in the industry, both present and potential." The Inquiry is broad in nature and, while we did not include a specific issue on employment in the industry, those persons who wish to submit information on this point may do so. At such time as comments thereon are received, and in light of those comments, we will give further consideration as to whether additional information is needed to treat any specific questions that may be raised.

9. The Association of Data Processing Service Organizations, Inc. recommended enlargement of the Inquiry to consider "whether common carriers, or other governmental granted and regulated monopolies, should be permitted to engage in the business of marketing electronic data processing services at all, whether regulated or not." No specific item was included to obtain expressions of opinion on this question. However, we welcome comments from any persons who may wish to address themselves thereto. After study of the comments received, we will determine what further action, if any, is required in light of such comments.

10. Microwave Communications, Inc. suggested the Commission consider "whether the present and anticipated communications requirements of computer users may be best served by allowing the entry into this evolving field of small microwave common carrier companies capable of providing high quality, flexible, and individualized microwave communications services to computer users and to businesses having a multiplicity of communications needs." We view Item H as broad enough to include this issue.

11. The National Association of Manufacturers suggest "that in proceeding with your intention of delving into the questions of 'protection of privacy and the proprietary nature of data' that you also give substantial attention to the control capabilities these machines will have in the hands of government and others who might direct their arbitrary uses." Item J is designed to elicit information

on the protection of the privacy and proprietary nature of data stored in computers and transmitted over communications facilities. This issue seeks information on the means now being used or under consideration, and the effectiveness of such measures in insuring that only authorized persons have access to data. The proposed modification would appear to broaden this issue to include comments on possible limitations which should be placed on the uses which may be made of the information by those persons who properly have access thereto. We do not believe that this problem is appropriate for inclusion within the scope of the Inquiry. We note, however, that it has been the subject of Congressional hearings. A report of these hearings was published under the title The Computer and Invasion of Privacy, Hearings before a Subcommittee of the Committee on Government Operations, House of Representatives, Eighty-ninth Congress.

12. Rixon Electronics, Inc. suggested that Item H be amended to include consideration of (a) the economic suitability of present tariff offerings in regard to available bandwidth of channels conditioned for data transmission, and (b) the extent to which present-day tariffs describe the technical characteristics of the communications channel and the desirability and practicality of expanding these descriptions to describe the channel more fully.

Item H, as formulated in our Notice of November 10, 1966, embraces these matters.

13. The Union Pacific Railroad Company addressed its response to Item C, which inquires into the circumstances, if any, under which computer services should be deemed subject to regulation, and Item D, which poses the question, assuming that such services are subject to regulation under the Communications Act, whether the policies and objectives of the Act will be served better by such regulation or by such services evolving in a free and competitive market. The railroad company suggested additions to the two Items as follows:

C (4). When furnished by right-of-way companies and enterprises whose rates and services are regulated by a governmental authority or body to other entities included within those classifications,

and

D (1). Assuming that it is subject to regulation under the Communications Act, should a right-of-way company or enterprise whose rates and services are regulated by a governmental authority or body be specifically authorized and permitted to utilize its own owned and/or leased communication facilities in connection with the furnishing of a computer or other data processing service to other entities included within these classifications.

The items which the Union Pacific wishes to amend are sufficiently broad in scope to permit treatment of the specific concerns reflected in these suggestions.

14. We turn now to the suggestions which have been made regarding the procedures that should be prescribed for this inquiry. The American Telephone and Telegraph Company, later joined by Western Union, suggests that the proceeding be divided into two phases. The first phase would encompass Items A and B of the Notice of November 10, 1966, which items are characterized by those companies as dealing with factual matters, and the second phase would encompass Items C through J, which are characterized as dealing with policy matters. It is urged that this arrangement will enable the parties, in treating the policy matters, to more logically address the factual situations which evolve from the responses to Items A and B. Although the responses called for by Items A and B involve mainly factual matters, it would appear that a number of the remaining items involve a mix of both policy and fact. Thus, it may well prove impractical to separate the factual and policy questions involved herein in view of the apparent interrelationship of those questions and the need for their contemporaneous consideration and development in responding to many aspects of this inquiry. Accordingly, we do not feel that the proposed phasing of this inquiry will be conducive to its orderly and expeditious conduct.

15. The United States Department of Justice has suggested that participants in this inquiry be permitted to submit to the Commission requests for information. The Commission would then forward such requests to the appropriate entity who would be required to supply answers thereto to be served on all participants. Thereafter, the participants would submit the views, recommendations and conclusions called for by the Inquiry. It is our view that adoption of these procedures may operate to complicate and delay the conduct of this inquiry. We are particularly concerned that implementation of such procedures would involve the Commission and the participants in a plethora of pleadings and counterpleadings related to each request for information. While it is our objective through this Inquiry to amass all relevant and substantial information, views and recommendations concerning the questions being examined, there is no reason to believe, at this time, that the procedures suggested by the Department are required to achieve that objective. In this connection, it is to be noted that thus far about 40 corporate entities and associations, representing the different segments of the computer industry have indicated intentions to participate fully in this inquiry. It is expected that these and other persons will be forthcoming with the information required to resolve the various questions in issue. If, after receipt of their submissions, it appears that additional information is required, the

Commission will be prepared to take such measures as are appropriate to elicit such additional information, including the conduct of open hearings for the receipt of testimony as has been suggested by Western Union.

16. The suggestion was also made that a list be established and maintained of all persons participating in this inquiry and that all such persons be required to serve copies of all documents filed upon each party appearing on the list. The Commission will, for the convenience and information of all interested persons, maintain and publish a list of all participants who will have filed responses to our Notice of Inquiry. However, in view of the large number and volume of filings that are likely to be involved, we believe that it will work an undue hardship on participants herein to require service of documents on all other participants. This may inhibit participation by individuals and small firms which constitute a vitally interested segment of the computer industry and whose responses will contribute materially to the record we are seeking to develop in this Inquiry. We would urge, however, that each participant, as a matter of courtesy, honor individual requests they may receive for copies of their documents from other parties.

17. Finally, Xerox Corporation requests that all interested government agencies and departments, which also have a regulatory concern with respect to the use of computers by entities subject to their regulatory jurisdiction, be notified by the Commission of the impending Inquiry, and that the Commission furnish copies of all comments received by the Commission to such agencies and departments, and invite their participation. We have been advised that the General Services Administration will represent the interests of government agencies as users of the services involved. However, government agencies have been generally notified of the pendency of the Inquiry and those who have interests other than as users of computer services are invited to make such comments as might be helpful. We will, in any event, forward copies of our Notices in this Inquiry to the regulatory agencies and departments involved.

18. Accordingly, all interested persons are invited to submit written responses to Items A through J contained in paragraph 25 of the Notice of Inquiry, released November 10, 1966, F.C.C. 66-1004, 31 F.R. 14752, 14755, no later than October 2, 1967. In reaching conclusions in this matter, the Commission may also take into account any other relevant information brought to our attention, in addition to the comments invited by this Notice.

19. All filings in this proceeding should be submitted in accordance with the provisions of Sections 1.49 and 1.419 of the Commission's Rules (47 CFR 1.49, 1.419), which require, inter alia, submission of an original and 14 copies.

FEDERAL COMMUNICATIONS COMMISSION

Ben F. Waple  
Secretary

Adopted: March 1, 1967  
Released: March 2, 1967