

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

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Federal Communications Commission  
Office of Secretary

In the Matter of )  
)  
Implementation of Section 304 of the )  
Telecommunications Act of 1996 )  
)  
Commercial Availability of )  
Navigation Devices )

CS Docket No. 97-80

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INITIAL COMMENTS OF AMERITECH NEW MEDIA, INC.

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Ameritech New Media, Inc. ("Ameritech") respectfully offers the following initial comments on the Notice of Proposed Rulemaking released in this docket on February 20, 1997 ("NPRM"). In the NPRM, the Commission solicits comment on its proposals to implement Section 629 of the Communications Act,<sup>1</sup> proposals which generally are intended to assure the commercial availability of equipment used to access multichannel video programming from vendors not affiliated with any multichannel video programming distributor ("MVPD").

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<sup>1</sup> 47 U.S.C. Section 549; Pub. L. 104-104, 110 Stat. 56 (1996)(the "1996 Act").

## I.

### INTRODUCTION AND SUMMARY

Section 629 requires the Commission, *inter alia*, to adopt rules to assure the commercial availability of equipment used to access MVPD services from vendors not affiliated with any MVPD. MVPDs may continue to provide such equipment themselves, but the charge for the equipment must be separately stated. According to Section 629, the Commission must develop these rules in consultation with appropriate industry standard-setting bodies. Section 629 says that the Commission may not adopt rules which would jeopardize the security of services offered over a MVPD system. Section 629, as a whole, is intended to provide customers with the benefits of competition in the manufacture and sale of equipment used to access MVPD programming and other services.<sup>2</sup>

When it considers rules to assure the commercial availability of such equipment, the Commission should be guided by four key objectives. As an initial matter, the rules should confer no artificial advantage on any individual MVPD, or any particular sector of the MVPD industry. However, the rules should take into account the current state of commercial

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<sup>2</sup> NPRM at pars. 1-3.

availability of such equipment and focus on those areas where relief is most urgently needed. It also is important to recognize that requiring interoperability and portability of waning analog technologies would result in relatively high cost and little benefit. And the rules should allow for the maximum flexibility for innovation in MVPD services. These are the objectives which will promote competition in the manufacturing and distribution of navigation devices for use with MVPD services.

To achieve these objectives, the Commission should take three specific steps in this docket.

First, the Commission should make it clear that its rules apply to all MVPDs and all equipment used to access video programming provided by MVPDs.

Second, the Commission should focus its efforts in this docket on digital, rather than analog, equipment that is used to access MVPD programming and other services.

Third, the Commission should convene an industry advisory group to work with existing standards bodies to develop standards for

hardware interfaces and communications platforms which allow for the maximum flexibility for innovation in MVPD services.

If the Commission takes these specific steps, it can assure the commercial availability of equipment for MVPD services and thereby achieve Congress' goal in adopting Section 629 of the Communications Act.

## II.

**THE RULES ADOPTED IN THIS DOCKET SHOULD APPLY TO ALL MVPDs AND TO ALL EQUIPMENT THAT IS USED TO ACCESS THE VIDEO PROGRAMMING PROVIDED BY MVPDs.**

Section 629 of the Communications Act was enacted to ensure the commercial availability of equipment used to access the video programming provided by MVPDs. To achieve that goal, the rules adopted in this docket should apply to all MVPDs, that is, the rules should apply to any entity that provides multiple channels of video programming to subscribers, with or without equipment that controls access by the consumer. This would include not only existing types of MVPDs, such as CATV, SMATV, MMDS and DBS;<sup>3</sup> it also would include LMDS, OVS and any entity that uses DTV

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<sup>3</sup> Because the Commission's rules should not advantage one type of MVPD over another, CATV operators should not be required to open their equipment to competition without also requiring the availability of DBS equipment from entities other than the DBS operator and its sales agents.

broadcast spectrum to deliver multiple channels of video programming to subscribers. The Commission may be faced with requests to exempt various parts of the MVPD industry from these rules based on a variety of distinguishing factors, such as service type, technology type, or technology maturity. Those requests should be reviewed in the context of specific facts and circumstances. As a baseline, however, the rules adopted in this docket should apply to all MVPDs because that would have the greatest effect in promoting the commercial availability of equipment.

Likewise, all equipment used to access video programming provided by a MVPD should be subject to the rules adopted in this docket. Access in this context should be defined as receipt and conversion of non-restricted signals to the format required (*e.g.* bandwidth) for display on video monitors of any sort, including television sets and personal computers. This, again, would be consistent with the statutory requirements of Section 629 as they relate to the availability of devices to allow access to video programming and other services.<sup>4</sup>

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<sup>4</sup> Although the Commission's rules in this docket should apply to all MVPD providers and all equipment used to access MVPD services, the rules should be revoked in their entirety -- preferably through a specific sunset provision -- when such equipment has widespread commercial availability.

However, the Commission should distinguish between “access” functions of such equipment, and “non-access” functions. “Access” functions relate to the accessibility of video programming and other services; this is the focus of Section 629. On the other hand, “non-access” functions relate, for example, to security or to the way in which information is displayed on the viewing screen. Security-related functions of equipment may not be jeopardized by the Commission’s rules; that is clear given the plain language of Section 629.<sup>5</sup> Moreover, it is likely that equipment vendors will establish other, non-access-related functions for their products in order to attract would-be buyers. The Commission should adopt rules in this docket which will preserve the right of MVPDs to offer such functions in their equipment, without a commercial availability requirement, in order to allow product differentiation in the marketplace.<sup>6</sup>

Requiring commercial availability of these non-access, proprietary features could actually penalize consumers. Service providers, for example, may find the process of introducing new, market-driven features more difficult and time-consuming if equipment manufacturers, as the

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<sup>5</sup> 47 U.S.C. Section 549(b)(the Commission’s rules “shall not ... jeopardize security of ... services offered over multichannel video programming systems, or impede the legal rights of a provider of such services to prevent theft of service”).

<sup>6</sup> Conversely, commercially available equipment should not be permitted to inhibit the operation of MVPD network features which rely on certain set-top functionalities.

gatekeepers of all non-access functionality, demand a critical mass on a nationwide basis before they are willing to adopt a design change. In addition, the incremental cost of functionality may increase as vendors try to build “all things to all people” units instead of units which offer smaller subsets of specific functions. Further, mandatory availability of all non-access features and functions could chill efforts by any device provider to develop innovative, differentiating features and functions. In any case, the likely result would be more limited choices for consumers. Under a properly structured availability framework, on the other hand, the market (*i.e.*, consumers) will dictate what combinations of features and functions manufacturers and MVPDs make available, resulting in a broader range of choices. The consumer, in effect, will have ultimate control over feature/function availability and degree of portability and interoperability. Therefore, while the Commission certainly should adopt rules which promote the commercial availability of equipment, the Commission should not do so in a manner which jeopardizes the security of services offered by a MVPD, or which inhibits the development of non-access-related functionalities which may be demanded in the marketplace.<sup>7</sup>

### III.

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<sup>7</sup> The Commission recognizes that the 1996 Act and its legislative history indicates a preference for market driven standards and technical innovation. NPRM at 4.

**THE FOCUS OF THE COMMISSION'S RULES IN  
THIS DOCKET SHOULD BE ON THE COMMERCIAL  
AVAILABILITY OF DIGITAL, NOT ANALOG, EQUIPMENT.**

When enacting Section 629, Congress specifically directed the Commission to “take cognizance of the current state of the marketplace ....”<sup>8</sup> Thus, before the Commission adopts rules in this docket to assure the commercial availability of equipment, the Commission must make a determination of the current extent of commercial availability of equipment used to access the programming of particular types of MVPDs. This determination, in turn, should provide the Commission with a focus on how to implement the directives of Section 629. Ameritech believes that the Commission’s focus should be primarily on the commercial availability of digital, not analog, equipment.

In the case of equipment used to access analog cable system programming, the Commission should find that the widespread commercial retail availability of cable-ready television sets and VCRs, as well as converter boxes, is more than adequate to meet the availability requirements of Section 629. This finding also should extend to PC monitor

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<sup>8</sup> 1996 Act, Joint Explanatory Statement accompanying Conference Report at 181.

display of programming because television tuner cards, widely available at retail, allow for viewing of video programming on PCs.

This is not true for digital equipment, including the digital equipment used to view even the basic package of programming provided by digital MVPDs. A consumer can go to a number of retail establishments and purchase, for example, a DBS dish to receive DirecTV programming service. However, the retail establishment essentially is serving as the agent of the MVPD in this regard and the customer is effectively making the purchase from DirecTV, not from an unaffiliated retail vendor.<sup>9</sup>

There are other reasons as well why the Commission should focus its attention in this docket on digital, as opposed to analog, equipment. For instance, the analog segment of the MVPD industry is characterized by the use of multiple access technologies, even within a single distribution architecture, whereas the digital segment begins with the basic commonality of digital transmission. Moreover, if equipment must be retrofitted, the cost of doing so would be far less for the embedded base of

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<sup>9</sup> Where equipment currently is available only from the MVPD, the goal of Section 629 is to expand the availability of equipment from multiple unaffiliated sources. In those cases where retailers act as agents or distributors on behalf of the MVPD, the retailer is really an extension of the MVPD because the agent is not free to act independently in setting prices or other terms and conditions of the sale.

digital access equipment because it is relatively smaller than the embedded base of analog equipment used for the same purpose. Finally, it is generally agreed that digital technologies will supplant analog over the relatively short term; therefore, solutions to digital equipment availability issues will provide greater, long-term public benefit than comparable solutions directed at analog equipment.

For all of these reasons, the focus of the Commission's rules in this docket should be on the commercial availability of digital, not analog, equipment.

#### IV.

**THE COMMISSION SHOULD CONVENE AN  
INDUSTRY ADVISORY GROUP TO WORK WITH EXISTING  
STANDARDS BODIES TO DEVELOP STANDARDS  
FOR HARDWARE INTERFACES AND COMMUNICATIONS  
PLATFORMS WHICH ALLOW FOR MAXIMUM FLEXIBILITY  
FOR INNOVATION IN MVPD SERVICES, INCLUDING  
PORTABILITY AND INTEROPERABILITY OF EQUIPMENT.**

The Commission's goal in this proceeding should be to encourage the private sector to develop generic interface standards which facilitate commercial availability of portable, interoperable equipment. Ameritech believes the best way to achieve that goal is through an industry advisory

group that works with existing standards bodies to recommend standards for equipment that accesses MVPD services.<sup>10</sup>

Congress specifically directed the Commission “to consult with private standard-setting organizations, such as IEEE, DAVIC (Digital Audio Video Council), MPEG, ANSI and other appropriate bodies” when prescribing regulations to ensure commercial availability of equipment to access MVPD services.<sup>11</sup> Such organizations have the necessary expertise to bring about standards which maximize commonalties while encouraging innovation.

Rather than supplant these currently operational standards groups, the Commission should establish a cross-industry advisory group consisting of representatives of the content creation community, each of the major distribution segments, and consumers.<sup>12</sup> This group could work in concert with the existing standards organizations to encourage the establishment of common ground and the development of specific recommendations for

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<sup>10</sup> The Commission has recognized that “[r]ules assuring commercial availability must be developed ‘in consultation with appropriate industry standard-setting organizations . . .’” NPRM at par. 1, *citing* 47 U.S.C. Section 549(a).

<sup>11</sup> 1996 Act, Joint Explanatory Statement accompanying Conference Report, at 181.

<sup>12</sup> The Commission should ensure that new competitors are adequately represented in this group.

standards for equipment used to access MVPD services, standards which are consistent with marketplace realities.<sup>13</sup> The following should be among the items that are addressed by this advisory group:

- \* services which should be standardized (e.g. basic/expanded basic tiers);
- \* features and functions of services which are appropriate to be standardized giving due consideration to security; physical connections; signaling requirements; subscriber management including billing; applications processing, including compression and interfaces;
- \* recommendations for specific interface standards for the identified features and functions which meet portability and interoperability goals.

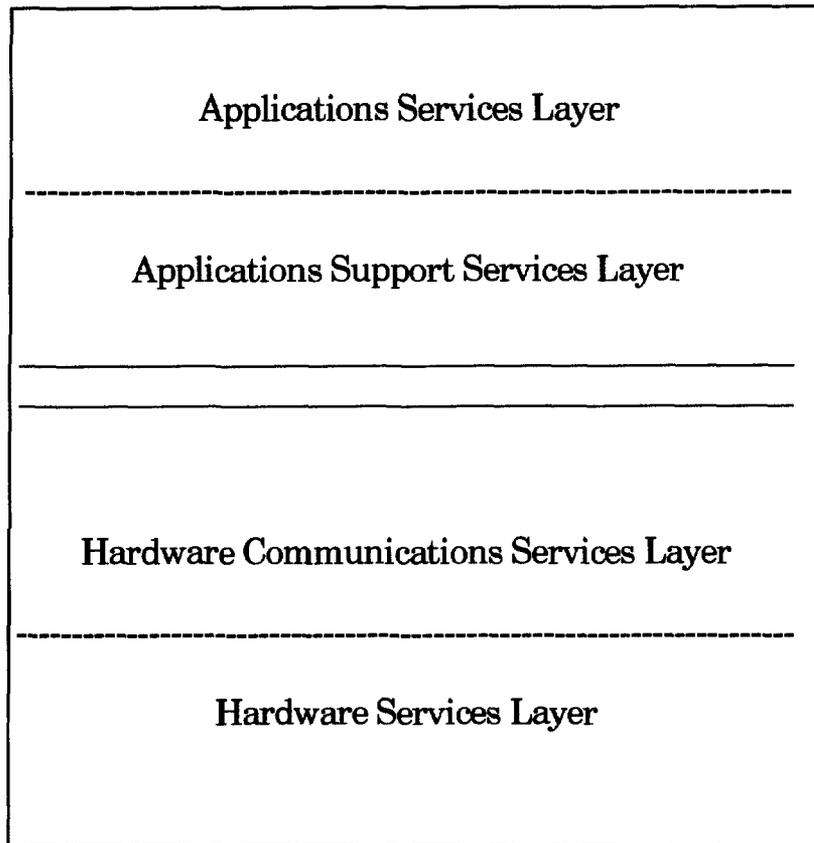
The standards setting approach should be sequential and prioritized. The advisory group should focus on the commercial availability of equipment used to access digital programming, a type of equipment which, as noted earlier, is not nearly as available as the equipment used to access basic and expanded basic programming on analog CATV systems. The advisory group should also segment digital services and then target the segments which can benefit the most by standardization. For example, by segmenting video program services into basic/expanded basic, premium, and

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<sup>13</sup> For example, these marketplace considerations may not support a version of portability that encompasses all features on a piece of equipment if a “fully portable” box is prohibitively expensive. Conversely, a “less portable” box might have market acceptance at the low end of the market if it provides access to programming and basic functions across multiple networks.

pay-per-view, efforts could be concentrated at the outset on standardizing the equipment used to access the basic/expanded basic offering because that segment has the broadest base of customers.

The advisory group could use a four-part hierarchy of services such as that depicted below. In this depiction, the bottom two layers could be standardized and subject to commercial availability requirements, while the top two layers could provide for innovation and product differentiation by individual vendors, including MVPDs.



Starting from the bottom of the depiction, the layers are described as follows. The Hardware Services Layer governs the physical aspects of connection, *e.g.* number of pins in a connector, pin configuration, minimum amount of memory in a smartcard. The Hardware Communications Services Layer, which interrelates with the Hardware Services Layer, governs the electrical aspects of connection, *e.g.* standardized data formats, signals to each pin of the connector, protocols between electronic devices. These two layers form the platform on which the generic interface rests.

Turning to the top two layers of the diagram, the Applications Support Services Layer contains the operating system, encryption services, application communication services, *e.g.* TCP/IP protocol stacks, and “miniware” software shells on which customized applications can be built. The Applications Services Layer is where the service applications themselves reside, *e.g.* navigators, electronic program guides, transactional services. Even though the top two layers are resident within the equipment, it is in these layers that MVPDs and manufacturers will develop innovative and differentiating features and functions. Consequently, these two top layers should not be subject to standardization, as they work together to define the specific services provided.

This four-part hierarchy is based on standards work in the computer industry that has worked well to promote both standardization for purposes of basic access and the functional differentiation requirements of the marketplace. Standards should not result in total uniformity such that product differentiation among competing service providers is rendered a virtual impossibility. The optimum standards framework should require open interfaces, but allow for proprietary algorithms for security and other differentiating functionalities.

The standards approach in this four-part hierarchy has an added benefit in that it would eliminate, or at least substantially reduce, the need for developmental waivers. If the Hardware Services Layer and the Hardware Communications Services Layer allows for innovation at the applications layers, no specific regulations would be necessary and, therefore, no waivers would be necessary. Instead, MVPDs would be free to stray from the standard, but would do so at their peril in the marketplace.

Ameritech advises the Commission against using other existing regulatory frameworks for establishing the standards which may be required in this docket. For example, the Commission's Part 68 framework would not accomplish the goals of Section 629 for a number of reasons. In the first place, Part 68 rules are based on a model where the network contains all the necessary intelligence for management, routing and billing. However, some of the intelligence required for operation of an MVPD's network is contained in set-top boxes. In addition, the Part 68 rules were developed on an analog model that is not adequate for today's digital environment. Moreover, Part 68 "harms to the network" criteria such as signal power limitations and longitudinal balance requirements may be relevant for unsophisticated analog CPE, but they do not begin to address the harms that can be generated by today's modern digital CPE.

The model proposed in Docket 93-7 also is inappropriate for this docket because MVPDs need flexibility to provide non-security, non-access functions in order to differentiate their equipment from competitors' equipment. The model proposed in Docket 93-7 would restrict differentiation by requiring disclosure of all functions other than those required for signal security. This approach may help manufacturers incorporate those functions into consumer electronics devices, but will substantially undermine the incentive to differentiate functionality in response to market demands.

In short: the Commission should establish a new industry advisory group that works with existing standards bodies to recommend standards for equipment that accesses MVPD services, but does so outside the context of Part 68 or the model proposed in Docket 93-7. The establishment of such standards in this manner can facilitate the development of a thriving MVPD marketplace characterized by functional differentiation of equipment and real consumer choice.

V.

**THE COMMISSION SHOULD EXEMPT FROM ANY ANTI-SUBSIDY  
RULES CABLE SYSTEMS WHICH ARE SUBJECT TO EFFECTIVE  
COMPETITION.**

The NPRM asks whether Section 629(a) is applicable to cable systems subject to effective competition.<sup>14</sup> Ameritech agrees with the Commission's conclusion that Congress did not intend that cable systems subject to effective competition should be bound by the bundling and anti-subsidization requirements in Section 629(a).<sup>15</sup> Any other interpretation would be contrary to the clear intent of Congress.

## VI.

### CONCLUSION

The rules adopted in this docket must ensure, in both the short and long term, the commercial availability of both analog and digital equipment from vendors not affiliated with any MVPD, today and in the future. At the same time, the rules must strike the appropriate balance among the other -- sometimes competing -- interests in promoting commercial availability, security of video signals, innovation and competition. Thus, a rule that is too expansive in providing for unaffiliated sourcing may benefit manufacturers and retailers, but may do so at the expense of security and innovation needs of MVPDs, an effect that ultimately will reduce consumer

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<sup>14</sup> NPRM at 37.

<sup>15</sup> NPRM at 40.

benefit. Given how the rules adopted in this docket will affect the future growth and vitality of video-based services, Ameritech suggests that the Commission adopt the framework reflected in these comments as the way to maximize long-term consumer benefits.

Respectfully submitted,

AMERITECH NEW MEDIA, INC.

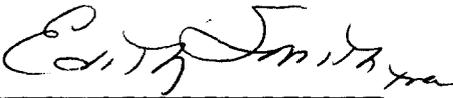
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Dated: May 16, 1997

CERTIFICATE OF SERVICE

I, Edith Smith, do hereby certify that a copy of Initial Comments of Ameritech New Media, Inc. has been served on the parties listed below via first class mail, postage prepaid, on this 16th day of May, 1997.

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