

limits the industry's choice of technologies.<sup>270</sup> NCTA maintains that government-mandated standards mean a loss of variety and consumer choices as well as technological competition because equipment manufacturers will not be able to offer differentiated products using different technologies.<sup>271</sup> BSA believes the market should drive the development of technical standards because government-imposed standards frequently increase costs to consumers, foreclose innovation, and impede competition.<sup>272</sup> ITI believes that a government mandated standard is often not the product of the technological and economic considerations that would otherwise drive sound business decisions in a free market.<sup>273</sup> CHTC and Echelon argue that adoption of compulsory government standards is inconsistent with Congress's clear intent that the FCC should defer to private standards-setting organizations.<sup>274</sup> GI argues that the statute does not authorize the Commission to involve itself in questions regarding the manufacture of navigation devices, but only seeks to ensure competition in the retail distribution of navigation devices to consumers, so that consumers have an alternative distribution source from which to obtain equipment.<sup>275</sup> Many commenters, agree that instead of the Commission mandating standards, it should encourage the development and adoption of industry-wide standards.<sup>276</sup>

130. There are other commenters who argue that mandated standardization of some aspects of navigation devices is required to ensure national portability. CEMA believes that within a single medium, there is no persuasive reason why a single set of interface standards cannot be agreed upon to promote portability of equipment<sup>277</sup> and contends that portability and interoperability on a national scale require standard interfaces between video CPE and the MVP networks to which these devices connect.<sup>278</sup> CE advocates an active Commission role in setting standards, contending that the process involving the decoder interface connector demonstrates the impracticability of leaving the matter of creating a standard interface specification to competing industry elements.<sup>279</sup> Some commenters prefer private-sector standards

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<sup>270</sup>CHTC Comments at 8.

<sup>271</sup>NCTA Comments at 38.

<sup>272</sup>BSA Comments at 9.

<sup>273</sup>ITI Comments at 15.

<sup>274</sup>CHTC Comments at 3; Echelon Comments at 29.

<sup>275</sup>GI Reply at 4; Additionally, Motorola contends that "technological neutrality" by the Commission benefits consumers by promoting competition and retaining the incentive for manufacturers to continue to invest in developing new products that deliver innovative solutions and features. Motorola Comments at 26; WCA contends that the Commission has fostered technical innovation by refusing to impose technical standards. WCA Reply at 10.

<sup>276</sup>Ameritech Comments at 80; CEMA Comments at 9; GTE Reply at 2; ITI Comments at 14; TW Comments at 33; Zenith Comments at 5.

<sup>277</sup>CEMA Comments at 9.

<sup>278</sup>CEMA Reply at 11.

<sup>279</sup>CE Comments at 7.

setting, but believe the Commission should set standards if the industry cannot reach a consensus.<sup>280</sup> Additionally, CERC and Viacom contend that the Commission should require implementation and support of the technical standards by clear dates certain.<sup>281</sup> Circuit City supports the adoption of fundamental standards developed by the private sector with respect to security and transmission at a level which will support compatibility of a CPE across a given system, while leaving specific MVP services and product functions and features to the marketplace.<sup>282</sup>

131. Commenters proposing mandated standardization vary on which aspects of MVP services should be standardized. CERC argues that navigational devices must have a common transmission standard and suggests that analog transmissions are already NTSC and broadcaster compatible, and the majority of digital MVPDs are going to implement a transport layer based on MPEG.<sup>283</sup> Ameritech proposes a four-part hierarchy of services based on the standards in the computer industry, with the hardware services layer and hardware communications services layer standardized and subject to commercial availability, and the applications services layer and the applications support services layer without specific regulations to allow for innovation and product differentiation.<sup>284</sup> MSTV and NAB argue standardization is necessary to develop cable ready television sets.<sup>285</sup>

132. Appreciating the tension reflected in the comments and without any current proposal for specific standards before us, we believe the best course of action at this time is to establish general parameters and to evaluate how the efforts to comply with these mandates progresses. We have made clear that the requirements we do adopt are necessary to commence the evolution to commercial availability of navigation equipment. We are relying on the relevant industries to make progress towards achieving portability and interoperability, and in other areas. If they do not, or if the effort is unduly delayed, it will be necessary for the Commission to consider whether further action is necessary.

## V. PROCEDURAL MATTERS

133. Effective Date. Upon approval by the Office of Management and Budget ("OMB"), the rules adopted in this *Order* shall become effective, with the exception of Section 76.1203, Availability of

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<sup>280</sup>CERC Reply at 19; Circuit City Reply at 2; Viacom Reply at 11.

<sup>281</sup>CERC Comments at 19; Circuit City Comments at 27. Viacom Reply at 11.

<sup>282</sup>Circuit City Comments at 27.

<sup>283</sup>CERC Comments at 25.

<sup>284</sup>Ameritech Comments at 15.

<sup>285</sup>MSTV and NAB *ex parte* filing (May 20, 1998).

Equipment Performing Conditional Access or Security Functions.<sup>286</sup> Section 76.1203 shall become effective on July 1, 2000 after approval by OMB.

134. Paperwork Reduction Act of 1995 Analysis. The requirements adopted in this Rulemaking have been analyzed with respect to the Paperwork Reduction Act of 1995 (the "1995 Act") and found to impose new or modified information collection requirements on the public. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public to take this opportunity to comment on the information collection requirements contained in this Rulemaking, as required by the 1995 Act. Public comments are due 60 days from date of publication of this Rulemaking in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

135. Written comments by the public on the new or modified information collection requirements are due 60 days from date of publication of this Rulemaking in the Federal Register. Comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, DC 20554, or via the Internet to [jboley@fcc.gov](mailto:jboley@fcc.gov). For additional information on the information collection requirements, contact Judy Boley at 202-418-0214 or via the Internet at the above address.

136. Final Regulatory Flexibility Analysis. The Final Regulatory Flexibility Analysis, required by Section 603 of the Regulatory Flexibility Act, as amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996), is contained in Appendix C.

## VI. ORDERING CLAUSE

137. IT IS ORDERED that, pursuant to authority found in Sections 4(i), 303(r), and 629 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 549, the Commission's rules ARE HEREBY AMENDED as set forth in Appendix A.

138. IT IS FURTHER ORDERED that the rules as amended in Appendix A shall become effective upon approval by the Office of Management and Budget, except for 47 C.F.R. § 76.1203, which shall become effective on July 1, 2000 after approval by the Office of Management and Budget.

139. IT IS FURTHER ORDERED that Tele-Communications, Inc., Time Warner Cable, Jones Intercable, U S WEST Media Group, Marcus Cable, Advance/Newhouse Communications, Cox Communications, and Comcast Corporation SHALL FILE REPORTS on January 7, 1999, July 7, 1999, January 7, 2000, and July 7, 2000 detailing the progress of their efforts and the efforts of CableLabs to

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<sup>286</sup>Because the rules impose new or modified information collection requirements, they cannot become effective until they are approved by OMB pursuant to the Paperwork Reduction Act of 1995, 5 C.F.R. §§ 1320.1-18.

assure the commercial availability, to consumers of equipment used to access multichannel video programming and other services offered over multichannel video programming systems, from manufacturers, retailers, and other vendors not affiliated with any multichannel video programming distributor.

140. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, shall send a copy of this *Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act, Pub.L. No. 96-354, 94 Stat. 1164, 5 U.S.C. §§ 601 *et seq.* (1981).

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas  
Secretary

## APPENDIX A

Part 76 of Title 47 of the Code of Federal Regulations is amended as follows:

## PART 76 -- MULTICHANNEL VIDEO AND CABLE TELEVISION SERVICE

1. The authority citation for Part 76 is amended to read as follows:

AUTHORITY: 47 U.S.C. 151, 152, 153, 154, 301, 302, 303, 303a, 307, 308, 309, 312, 315, 317, 325, 503, 521, 522, 531, 532, 533, 534, 535, 536, 537, 543, 544, 544a, 545, 548, 549, 552, 554, 556, 558, 560, 561, 571, 572, 573.

2. Subpart P is added to read as follows:

Subpart P -- Competitive Availability of Navigation Devices

**§ 76.1200 Definitions.**

As used in this subpart:

(a) *Multichannel video programming system*. A distribution system that makes available for purchase, by customers or subscribers, multiple channels of video programming other than an open video system as defined by §76.1500(a). Such systems include, but are not limited to, cable television systems, multichannel multipoint distribution systems, direct broadcast satellite systems, other systems for providing direct-to-home multichannel video programming via satellite, and satellite master antenna systems.

(b) *Multichannel Video Programming Distributor*. A person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who owns or operates a multichannel video programming system.

(c) *Navigation Devices*. Devices such as converter boxes, interactive communications equipment, and other equipment used by consumers to access multichannel video programming and other services offered over multichannel video programming systems.

(d) *Affiliate*. A person or entity that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person, as defined in the notes accompanying §76.501.

(e) *Conditional Access*. The mechanisms that provide for selective access and denial of specific services and make use of signal security that can prevent a signal from being received except by authorized users.

**§ 76.1201 Rights of Subscribers to Use or Attach Navigation Devices.**

No multichannel video programming distributor shall prevent the connection or use of navigation devices to or with its multichannel video programming system, except in those circumstances where electronic or physical harm would be caused by the attachment or operation of such devices or such devices may be used to assist or are intended or designed to assist in the unauthorized receipt of service.

**§ 76.1202 Availability of Navigation Devices.**

No multichannel video programming distributor shall by contract, agreement, patent right, intellectual property right or otherwise prevent navigation devices that do not perform conditional access or security functions from being made available to subscribers from retailers, manufacturers, or other vendors that are unaffiliated with such owner or operator, subject to §76.1209.

**§ 76.1203 Incidence of Harm.**

A multichannel video programming distributor may restrict the attachment or use of navigation devices with its system in those circumstances where electronic or physical harm would be caused by the attachment or operation of such devices or such devices that assist or are intended or designed to assist in the unauthorized receipt of service. Such restrictions may be accomplished by publishing and providing to subscribers standards and descriptions of devices that may not be used with or attached to its system. Such standards shall foreclose the attachment or use only of such devices as raise reasonable and legitimate concerns of electronic or physical harm or theft of service. In any situation where theft of service or harm occurs or is likely to occur, service may be discontinued.

**§ 76.1204 Availability of equipment performing conditional access or security functions.**

(a)(1) A multichannel video programming distributor that utilizes navigation devices to perform conditional access functions shall make available equipment that incorporates only the conditional access functions of such devices. Commencing on January 1, 2005, no multichannel video programming distributor subject to this section shall place in service new navigation devices for sale, lease, or use that perform both conditional access and other functions in a single integrated device.

(2) The foregoing requirement shall not apply to a multichannel video programming distributor that supports the active use by subscribers of navigation devices that: (A) operate throughout the continental United States, and (B) are available from retail outlets and other vendors throughout the United States that are not affiliated with the owner or operator of the multichannel video programming system.

(b) Conditional access function equipment made available pursuant to subsection (a)(1) of this section shall be designed to connect to and function with other navigation devices available through the use of a commonly used interface or an interface that conforms to appropriate technical standards promulgated by a national standards organization.

(c) No multichannel video programming distributor shall by contract, agreement, patent, intellectual property right or otherwise preclude the addition of features or functions to the equipment made available pursuant to this section that are not designed, intended or function to defeat the conditional access controls of such devices or to provide unauthorized access to service.

(d) Notwithstanding the foregoing, navigation devices need not be made available pursuant to this section where:

(1) It is not reasonably feasible to prevent such devices from being used for the unauthorized reception of service; or

(2) It is not reasonably feasible to separate conditional access from other functions without jeopardizing security.

(e) The requirements of this section shall become applicable on July 1, 2000.

#### **§ 76.1205 Availability of Interface Information.**

Technical Information concerning interface parameters that are needed to permit navigation devices to operate with multichannel video programming systems shall be provided by the system operator upon request in a timely manner.

#### **§ 76.1206 Equipment Sale or Lease Charge Subsidy Prohibition.**

Multichannel video programming distributors offering navigation devices subject to the provisions of §76.923 for sale or lease directly to subscribers, shall adhere to the standards reflected therein relating to rates for equipment and installation and shall separately state the charges to consumers for such services and equipment.

#### **§ 76.1207 Waivers.**

The Commission may waive a regulation adopted under this subpart for a limited time, upon an appropriate showing by a provider of multichannel video programming and other services offered over multichannel video programming systems, or an equipment provider that such a waiver is necessary to assist the development or introduction of a new or improved multichannel video programming or other service offered over multichannel video programming systems, technology, or products. Such waiver requests should be made pursuant to §76.7. Such a waiver shall be effective for all service providers and products in the category in which the waiver is granted.

#### **§ 76.1208 Sunset of Regulations.**

The regulations adopted under this subpart shall cease to apply when the Commission determines that (1) the market for multichannel video distributors is fully competitive; (2) the market for converter boxes, and interactive communications equipment, used in conjunction with that service is fully competitive; and (3) elimination of the regulations would promote competition and the public interest. Any interested party may petition the Commission for such a determination.

#### **§ 76.1209 Theft of Service.**

Nothing in this subpart shall be construed to authorize or justify any use, manufacture, or importation of equipment that would violate 47 U.S.C. § 553 or any other provision of law intended to preclude the unauthorized reception of multichannel video programming service.

**§ 76.1210 Effect on Other Rules.**

Nothing in this subpart affects §64.702(d) of the Commission's regulations or other Commission regulations governing interconnection and competitive provision of customer premises equipment used in connection with basic common carrier communications services.

## APPENDIX B

**Note:** If no abbreviation appears in parentheses following the full name, the full name is used in the *Report and Order*.

## LIST OF COMMENTERS

1. AD HOC Computer & High-Technology Coalition (CHTC)
2. Ameritech New Media Inc. (Ameritech)
3. Richard A. Arsinow
4. Bell Atlantic & NYNEX (BANX)
5. Business Software Alliance (BSA)
6. Cellular Vision USA, Inc. (Cellular Vision)
7. Circuit City Stores, Inc. (Circuit City)
8. Commercial Engineering (CE)
9. Consumer Electronics Manufacturers Association (CEMA)
10. Consumer Electronics Retailers Coalition (CERC)
11. Corporate Media Partners d/b/a/ Americast (Americast)
12. DIRECTV, Inc. & Hughes Network Systems Inc.(DIRECTV)
13. Echelon Corporation (Echelon)
14. Gateway 2000, Inc. (Gateway)
15. General Instruments Corporation (GI)
16. GTE Services Corporation (GTE)
17. Information Technology Industry Counsel & Computing Technology Industry Association (ITI)
18. Motorola Inc. (Motorola)
19. National Cable Television Association (NCTA)
20. National Retail Federation (NRF)
21. Pacific Bell Video Services (PacBell)
22. PrimeStar Partners L.P. (PrimeStar)
23. Satellite Broadcasting & Communications Association Of America
24. Scientific Atlanta, Inc.(SA)
25. Tandy Corporation (Tandy)
26. Telecommunication Industry Association (TIA)
27. Time Warner Entertainment Company L.P. (Time Warner)
28. Uniden American Corporation (Uniden)
29. United States Satellite Broadcasting Company, Inc. (USSB)
30. U S WEST, Inc. (US West)
31. Viacom Inc. (Viacom)
32. Zenith Electronics Corporation (Zenith)

**REPLY COMMENTERS**

1. ABC, Inc.(ABC)
2. Ameritech New Media, Inc. (Ameritech)
3. Bell Atlantic & NYNEX (BANX)
4. BellSouth Corporation (BellSouth)
5. Business Software Alliance (BSA)
6. Circuit City Stores, Inc. (Circuit City)
7. Commercial Engineering (CE)
8. Consumer Electronics Manufactures Association (CEMA)
9. Consumer Electronics Retailers Coalition (CERC)
10. DIRECTV, Inc.and Hughes Network Systems, Inc.(DIRECTV)
11. Echelon Corporation (Echelon)
12. ESPN, Inc. (ESPN)
13. General Instruments Corporation (GI)
14. GTE Services Corporation
15. Information Technology Industry Counsel & Computing Technology Industry Association (ITI)
16. Motorola Inc. (Motorola)
17. National Cable Television Association (NCTA)
18. Navigation Device Competition Coalition (NDCC)
19. Pacific Bell Video Services (PacBell)
20. PrimeStar Partners L.P. (PrimeStar)
21. Scientific Atlanta, Inc.(SA)
22. Starsight Telecast Inc. (Starsight)
23. Tandy Corporation (Tandy)
24. Tele-Communications, Inc. (TCI)
25. Telecommunication Industry Association (TIA)
26. Time Warner Entertainment Company, L.P (Time Warner)
27. Viacom Inc. (Viacom)
28. Wireless Cable Association International, Inc. (WCA)

**APPENDIX C  
FINAL REGULATORY FLEXIBILITY ANALYSIS**

**A. Background**

As required by the Regulatory Flexibility Act (RFA),<sup>1</sup> an Initial Regulatory Flexibility Analysis ("IRFA") was incorporated into the Notice of Proposed Rule Making ("NPRM") in this proceeding.<sup>2</sup> The Commission sought written public comment on the possible impact of the proposed policies and rules on small entities in the NPRM, including comments on the IRFA. This Final Regulatory Flexibility Analysis ("FRFA") in this *Report and Order* conforms to the RFA.<sup>3</sup>

**B. Need for Action and Objectives of the Rules**

The 1996 Act added a new Section 629 to the Communications Act of 1934, as amended, that requires the Commission to develop rules to assure competitive availability of navigation devices used in conjunction with multichannel video programming distributors ("MVPD").<sup>4</sup> The Commission is promulgating these rules in order to implement this provision of Section 629. The statutory objective of Section 629 is assure that navigation devices used by consumers to access a particular MVPD's programming are available to consumers from manufactures, retailers and other vendors not affiliated with that MVPD.

**C. Summary of Significant Issues Raised by the Public Comments in Response to the IRFA**

No comments were filed specifically in response to the IRFA. We have, however, considered the economic impact on small entities through consideration of comments that pertain to issues of concern to MVPDs. Commenters cautioned that rules enacted to implement the requirements of Section 629 must not jeopardize the system and signal security of MVPDs and should not mandate technical standards that would interfere with innovation of navigation devices or development of new technologies. In the *Report and Order*, we note our concern with system security and allow MVPDs to restrict the attachment or use of navigation equipment to their systems where electronic or physical harm would be caused by the attachment or operation of such equipment. As for signal security, the rules allow MVPDs to disconnect service to subscribers using a navigation device that assists in the unauthorized reception of service. The rules promulgated also note our concern for inhibiting innovation or development of new technologies.

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<sup>1</sup>See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) ("CWAAA"). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA").

<sup>2</sup>*Implementation of Section 304 of the Telecommunications Act of 1996 - Commercial Availability of Navigation Devices*, CS Docket No. 97-80, *Notice of Proposed Rule Making*, 12 FCC Rcd 5639, Appendix A (1997) ("NPRM").

<sup>3</sup>See 5 U.S.C. § 604.

<sup>4</sup>47 U.S.C. § 549.

We do not mandate particular standards or require specific action, but seek to recognize accepted industry standards that have evolved or are evolving.

*D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply*

The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that might be affected by the rules here adopted. The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>5</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>6</sup> Under the Small Business Act, a small business concern is one which: (a) is independently owned and operated; (b) is not dominant in its field of operation; and (c) satisfies any additional criteria established by the SBA.<sup>7</sup> The rules we adopt in this Report and Order will affect cable systems, multipoint multichannel distribution systems, direct broadcast satellites, home satellite dish manufacturers, satellite master antenna television, local multipoint distribution systems, small manufacturers, electronic equipment manufacturers, computer manufacturers, and small retailers.

*Small Multichannel Video Programming Distributors ("MVPD"):* The SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating \$11 million or less in annual receipts.<sup>8</sup> This definition includes cable system operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Bureau of the Census, there are approximately 1,758 total cable and other pay television services and 1,423 had less than \$11 million in revenue.<sup>9</sup> We address below each service individually to provide a more precise estimate of small entities.

*Cable Systems:* The Commission has developed, with SBA's approval, our own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small

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<sup>5</sup> 5 U.S.C. § 601(6).

<sup>6</sup> 5 U.S.C. § 601(3) (1980) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of small business applies "unless an agency after consultation with the Office of Advocacy of the Small Business Administration and after an opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definitions in the Federal Register."

<sup>7</sup> *Small Business Act*, 15 U.S.C. § 632; see also Appendix C, n.6, *supra*.

<sup>8</sup> 13 C.F.R. § 121.201 (SIC 4841).

<sup>9</sup> U.S. Department of Commerce, Bureau of the Census, Industry and Enterprise Receipts Size Report, Table 2D, SIC 4841 (Bureau of the Census data under contract to the Office of Advocacy of the SBA).

cable company" is one serving no more than 400,000 subscribers nationwide.<sup>10</sup> Based on recent information, we estimate that there were 1439 cable operators that qualified as small cable companies at the end of 1995.<sup>11</sup> Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1439 small entity cable system operators that may be affected by the decisions and rules we are adopting. We conclude that only a small percentage of these entities currently provide qualifying "telecommunications services" as required by the Communications Act and, therefore, estimate that the number of such entities are significantly fewer than noted.

The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."<sup>12</sup> The Commission has determined that there are 61,700,000 cable subscribers in the United States. Therefore, we found that an operator serving fewer than 617,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate.<sup>13</sup> Based on available data, we find that the number of cable operators serving 617,000 subscribers or less totals 1450.<sup>14</sup> Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

*Multipoint Multichannel Distribution Systems ("MMDS")*: The Commission refined its definition of "small entity" for the auction of MMDS as an entity that together with its affiliates has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.<sup>15</sup> This definition of a small entity in the context of MMDS auctions has been approved by the SBA.<sup>16</sup>

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<sup>10</sup>47 C.F.R. § 76.901(e). The Commission developed this definition based on its determinations that a small cable system operator is one with annual revenues of \$100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation, Sixth Report and Order and Eleventh Order on Reconsideration*, 10 FCC Rcd 7393 (1995).

<sup>11</sup>Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

<sup>12</sup>47 U.S.C. § 543(m)(2).

<sup>13</sup>47 C.F.R. § 76.1403(b) (SIC 4833).

<sup>14</sup>Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

<sup>15</sup>47 C.F.R. § 21.961(b)(1).

<sup>16</sup>See *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, MM Docket No. 94-31 and PP Docket No. 93-253, *Report and Order*, 10 FCC Rcd 9589 (1995).

The Commission completed its MMDS auction in March 1996 for authorizations in 493 basic trading areas ("BTAs"). Of 67 winning bidders, 61 qualified as small entities. Five bidders indicated that they were minority-owned and four winners indicated that they were women-owned businesses. MMDS is an especially competitive service, with approximately 1573 previously authorized and proposed MMDS facilities. Information available to us indicates that no MMDS facility generates revenue in excess of \$11 million annually. We conclude that, for purposes of this FRFA, there are approximately 1634 small MMDS providers as defined by the SBA and the Commission's auction rules.

*ITFS*: There are presently 2032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.<sup>17</sup> However, we do not collect annual revenue data for ITFS licensees and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. No commenters address these non-educational licensees. Accordingly, we conclude that at least 1932 licensees are small businesses.

*Direct Broadcast Satellite ("DBS")*: Because DBS provides subscription services, DBS falls within the SBA definition of cable and other pay television services (SIC 4841). As of December 1996, there were eight DBS licensees. However, the Commission does not collect annual revenue data for DBS and, therefore, is unable to ascertain the number of small DBS licensees that could be affected by these proposed rules. Although DBS service requires a great investment of capital for operation, in the *NPRM*, we acknowledged that there are several new entrants in this field that may not yet have generated \$11 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated. Since the publication of the *NPRM*, however, more information has become available. In light of the 1997 gross revenue figures for the various DBS operators, we conclude that no DBS operator qualifies as a small entity.

*Home Satellite Dish ("HSD")*: The market for HSD service is difficult to quantify. Indeed, the service itself bears little resemblance to other MVPDs. HSD owners have access to more than 500 channels of programming placed on C-band satellites by programmers for receipt and distribution by MVPDs, of which 350 channels are scrambled and approximately 150 are unscrambled.<sup>18</sup> HSD owners can watch unscrambled channels without paying a subscription fee. To receive scrambled channels, however, an HSD owner must purchase an integrated receiver-decoder from an equipment dealer and pay a subscription fee to an HSD programming packager. Thus, HSD users include: (1) viewers who subscribe to a packaged programming service, which affords them access to most of the same programming provided to subscribers of other MVPDs; (2) viewers who receive only nonsubscription programming; and (3) viewers who receive satellite programming services illegally without subscribing.<sup>19</sup>

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<sup>17</sup>SBREFA also applies to nonprofit organizations and governmental organizations such as cities, counties, towns, townships, villages, school districts, or special districts, with populations of less than 50,000. 5 U.S.C. § 601(5). See Appendix C (D) *supra*.

<sup>18</sup>*Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, CS Docket No. 97-141, *Fourth Annual Report ("1997 Report")*, 13 FCC Rcd 1034 at ¶ 68 (1997).

<sup>19</sup>*Id.* at ¶ 69.

According to the most recently available information, there are approximately 20 to 25 program packagers nationwide offering packages of scrambled programming to retail consumers.<sup>20</sup> These program packagers provide subscriptions to approximately 2,184,470 subscribers nationwide.<sup>21</sup> This is an average of about 77,163 subscribers per program packager. This is substantially smaller than the 400,000 subscribers used in the Commission's definition of a small multiple system operator ("MSO").

*Satellite Master Antenna Television ("SMATVs")*: Industry sources estimate that approximately 5200 SMATV operators were providing service as of December 1995.<sup>22</sup> Other estimates indicate that SMATV operators serve approximately 1.162 million residential subscribers as of June 30, 1997.<sup>23</sup> The ten largest SMATV operators together pass 848,450 units.<sup>24</sup> If we assume that these SMATV operators serve 50% of the units passed, the ten largest SMATV operators serve approximately 40% of the total number of SMATV subscribers. Because these operators are not rate regulated, they are not required to file financial data with the Commission. Furthermore, we are not aware of any privately published financial information regarding these operators. Based on the estimated number of operators and the estimated number of units served by the largest ten SMATVs, we conclude that a substantial number of SMATV operators qualify as small entities.

*Local Multipoint Distribution System ("LMDS")*: Unlike the above pay television services, LMDS technology and spectrum allocation will allow licensees to provide wireless telephony, data, and/or video services. A LMDS provider is not limited in the number of potential applications that will be available for this service. Therefore, the definition of a small LMDS entity may be applicable to both cable and other pay television (SIC 4841) and/or radiotelephone communications companies (SIC 4812). The SBA approved definition for cable and other pay services that qualify as a small business is defined in paragraphs 5-6, *supra*. A small radiotelephone entity is one with 1500 employees or fewer.<sup>25</sup> However, for the purposes of this *Report and Order* on navigation devices, we include only an estimate of LMDS video service providers.

An auction for licenses to operate LMDS systems was recently completed by the Commission. The vast majority of the LMDS license auction winners were small businesses under the SBA's definition of cable and pay television (SIC 4841).<sup>26</sup> In the *Second R&O*,<sup>27</sup> we adopted a small business definition for

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<sup>20</sup>*Id.* at ¶ 68.

<sup>21</sup>*Id.* at ¶ 69.

<sup>22</sup>*Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, CS Docket No. 96-133, *Third Annual Report ("1996 Report")*, 12 FCC Rcd 4358 at ¶ 81 (1996).

<sup>23</sup>*1997 Report*, 13 FCC Rcd at ¶ 84.

<sup>24</sup>*Id.* at Appendix D, Table D-1.

<sup>25</sup>13 C.F.R. § 121.201.

<sup>26</sup>*See* Appendix C (D), *supra*, for an estimate of the number of entities under SIC 4841.

entities bidding for LMDS licenses as an entity that, together with affiliates and controlling principles, has average gross revenues not exceeding \$40 million for each of the three preceding years. We have not yet received approval by the SBA for this definition.

There is only one company, CellularVision, that is currently providing LMDS video services. In the *IRFA*, we assumed that CellularVision was a small business under both the SBA definition and our auction rules. No commenters addressed the tentative conclusions we reached in the *NPRM*. Accordingly, we affirm our tentative conclusion that a majority of the potential LMDS licensees will be small entities, as that term is defined by the SBA.

*Small Manufacturers:* The SBA has developed definitions of small entity for manufacturers of household audio and video equipment (SIC 3651) and for radio and television broadcasting and communications equipment (SIC 3663). In each case, the definition includes all such companies employing 750 or fewer employees.

*Electronic Equipment Manufacturers:* The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment. Therefore, we will use the SBA definition of manufacturers of Radio and Television Broadcasting and Communications Equipment.<sup>28</sup> According to the SBA's regulations, a TV equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.<sup>29</sup> Census Bureau data indicates that there are 858 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.<sup>30</sup> The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment or how many are independently owned and operated. We conclude that there are approximately 778 small manufacturers of radio and television equipment.

*Electronic Household/Consumer Equipment:* The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will utilize the SBA definition applicable to manufacturers of Household Audio and Visual Equipment. According to the SBA's regulations, a household audio and visual equipment manufacturer must have 750 or fewer employees in

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<sup>27</sup>In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service, CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making, 62 FR 23148 (1997) ("Second R&O").

<sup>28</sup>This category excludes establishments primarily engaged in the manufacturing of household audio and visual equipment which is categorized as SIC 3651. See *infra*, for SIC 3651 data.

<sup>29</sup>13 C.F.R. §121.201, (SIC) Code 3663.

<sup>30</sup>U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table D, (issued May 1995), SIC category 3663.

order to qualify as a small business concern.<sup>31</sup> Census Bureau data indicates that there are 410 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 386 of these firms have fewer than 500 employees and would be classified as small entities.<sup>32</sup> The remaining 24 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Furthermore, the Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment for consumers or how many are independently owned and operated. We conclude that there are approximately 386 small manufacturers of television equipment for consumer/household use.

*Computer Manufacturers:* The Commission has not developed a definition of small entities applicable to computer manufacturers. Therefore, we will use the SBA definition of Electronic Computers. According to SBA regulations, a computer manufacturer must have 1,000 or fewer employees in order to qualify as a small entity.<sup>33</sup> Census Bureau data indicates that there are 716 firms that manufacture computers and of those, 659 have fewer than 500 employees and qualify as small entities.<sup>34</sup> The remaining 57 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 1,000 employees and therefore also qualify as small entities under the SBA definition. We conclude that there are approximately 659 small computer manufacturers.

*Small Retailers:* The Commission has not developed a definition of small entities applicable to navigation retail devices. Therefore, we will utilize the SBA definition. The 1992 Bureau of the Census data indicates: there were 9,663 U.S. firms classified as Radio, TV & electronic stores (SIC 5731), and that 9,385 of these firms had \$4.999 million or less in annual receipts and 9,473 of these firms had \$7.499 million or less in annual receipts.<sup>35</sup> Consequently, we conclude that there are approximately 9,663 small entities that produce and distribute radio, television, and electronic equipment that may be affected by the decisions in the *Report and Order*.

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<sup>31</sup>13 C.F.R. §121.201, (SIC) Code 3651.

<sup>32</sup>U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3651, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

<sup>33</sup>13 C.F.R. §121.201, (SIC) Code 3571.

<sup>34</sup>U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3571, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

<sup>35</sup>U.S. Small Business Administration 1992 Economic Census Industry and Enterprise Report, Table 2D, SIC 7812, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration)(SBA 1992 Census Report). The Census data does not include a category for \$6.5 million therefore, we have reported the closest increment below and above the \$6.5 million threshold. There is a difference of 88 firms between the \$4.999 and \$7.499 million annual receipt categories. It is possible that these 88 firms could have annual receipts of \$6.5 million or less and therefore, would be classified as small businesses.

***E. Description of Reporting, Recordkeeping and Other Compliance Requirements***

This analysis examines the costs and administrative burdens associated with our rules and requirements. The rules we adopt require MVPDs to make available upon request technical information concerning interface parameters. The Commission believes, however, that this requirement would not necessitate any additional professional, engineering, or customer service skills beyond those already utilized in the ordinary course of business by MVPDs.

***F. Steps Taken to Minimize Significant Economic Impact On Small Entities and Significant Alternatives Considered***

We believe that our rules, implemented to assure commercial availability of navigation devices, will have the positive result of opening up to small retailers the market to sell or lease navigation devices to MVPD subscribers. Section 629 includes provisions which may lessen compliance impact on small entities affected by the rules adopted in this *Report and Order*. Section 629(c) specifies that the Commission shall waive the regulations developed to implement Section 629 when necessary for an MVPD to develop new or improved services offered over its system. Second, Section 629(e) requires the Commission to sunset the rules adopted in the *Report and Order* once a determination is made that (1) the market for MVPDs is fully competitive; (2) the market for convertor boxes and interactive communications equipment used in conjunction with that service is fully competitive; and (3) elimination of the regulations would promote competition and the public interest. Our rules also consider situations and offer relief where the commercial availability of navigation devices performing conditional access functions could adversely impact an MVPD. An MVPD is not subject to the rules requiring the commercial availability of navigation devices if: (1) it is not reasonably feasible to separate conditional access functions from other functions; or (2) it is not reasonably feasible to prevent the unauthorized reception of service by subscribers using navigation devices obtained from other sources.

In the *NPRM*, the Commission asked for comment as to other means for achieving a competitive market for navigation devices. Commenters suggest means which would lead to more governmental involvement in the equipment design process and the retail marketplace. For instance, some commenters advocate that the Commission require MVPDs to license proprietary design specifications to manufacturers of navigation devices. The Commission has determined that allowing for technical innovation and flexible design standards would be the best means of meeting Section 629's statutory mandate of maximizing consumer choice in consumer electronics equipment. The Commission noted the ongoing activities of several industry organizations to develop open equipment standards. Accordingly, the Commission has adopted a regulatory regime to implement Section 629's requirements that causes minimum intrusion into the commercial marketplace.

***G. Report to Congress***

The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. § 801(a)(1)(A). A copy of the *Report and Order* and this FRFA (or a copy thereof) will also be published in the *Federal Register*, see 5 U.S.C. § 604(b), and will be sent to the Chief Counsel for Advocacy of the Small Business Administration.

**Statement from FCC Chairman William E. Kennard on  
TV Set Top Boxes and Navigation Devices**

The Commission's action today ensures that consumers will be able to purchase their television set top boxes and other equipment from retail stores starting in July 2000. This will create a huge market for the manufacture, distribution and sale of these devices. It will enhance innovation and bring consumers better prices. Our decision today is another key part of the larger goal of creating competition across the spectrum of telecommunications services.

Congress had the foresight to make it the Commission's statutory obligation to ensure that set top boxes and other navigation devices be made commercially available. By requiring that cable operators separate security functions from non-security functions for cable set top boxes by July 1, 2000, we have ensured that consumers will be able to purchase these cable boxes from their local retailers by that date.

I appreciate the commitment of more than half a dozen of the largest multiple system operators and General Instruments and Scientific Atlanta to make security modules available by September 2000. Although the Commission has pursued a slightly more aggressive deadline, I have every confidence that this deadline will be met. Indeed, our decision today is premised on the commitments that the multiple system operators and manufacturers have made. While some may argue that the Commission should have chosen a more aggressive effective date, I am persuaded that July 2000 is the most feasible and realistic timeframe within which to make our rules effective. We will examine carefully the progress reports to be filed with the Commission every six months to track progress towards the July 1, 2000 deadline.

I support the decision to establish a prohibition on the provision of integrated cable boxes as of January 1, 2005. While I appreciate the concerns raised by the cable industry and the manufacturers that such a prohibition is unnecessary, ultimately, I believe that a sunset is appropriate to ensure that the Commission satisfies the statutory mandate that cable boxes be commercially available and I believe that the January 1, 2005 date will provide for a reasonable transition period.

We must recognize that this item is the beginning of a long process. There are many questions and issues that will arise during the development of new set top boxes and other navigation devices that the Commission may need to address. Many of these issues were raised late in this proceeding and are better addressed with the benefit of a full record, but that fact does not diminish their importance. For example, I am very concerned that a variety of electronic programming guides be made available to the consumer. While it is at least clear that the equipment used by these electronic programming guides is covered by Section 629, I believe that there may be additional questions under Section 629 about the availability of these services to the ultimate consumer. As the transition evolves, I will be watching this issue carefully and I invite further discussion on the need for Commission action.

Lastly, another issue that is important to me is that any new navigation devices be able to interact with digital televisions and that these devices not impede the development of digital television in any way. The introduction of digital television is one of the most important initiatives for the Commission and I am monitoring the transition closely to ensure that American consumers receive the full benefits of the digital transition.

**Separate Statement  
of  
Commissioner Susan Ness**

*Re: Commercial Availability of Navigation Devices*

Today we implement Section 629, one of the most pro-consumer, pro-competitive provisions of the Telecom Act. I believe development of a retail market for the devices covered by the provision may significantly improve the competitiveness and accessibility of broadband networks.

The "set-top device" that traditionally has consisted of a cable decoder and tuner is rapidly becoming a network computer with far greater capability and flexibility. Section 629 is far-sighted and requires the Commission to ensure that a range of consumer equipment -- including new types of set-top devices -- will be available in retail stores and through distributors other than program service providers. The legislative history makes clear that the Congress recognized consumer benefits that flowed from deregulation of telephone customer premises equipment (CPE) and enacted this provision to achieve the same ends with devices that connect to cable systems and other multichannel video programming services.

I support the item fully. I write separately to underscore some of the practical concerns that may affect the degree to which a robust market for devices covered by the statute will develop, and to caution that we may need to take further action if retail markets do not begin to emerge as envisioned by the statute.

No one disputes that separation of the security element from these devices is the centerpiece of effective implementation of Section 629. I am sensitive to the need for cable operators and other multichannel video program distributors to ensure that only authorized users have access to their services. The commenters have fully discussed whether security can be maintained if the security element is separate, and we have determined that it can be.

The second issue regarding security is the time frame in which new modular security "Point of Deployment" elements ("PODs") will be available. We are requiring cable operators to meet a July 1, 2000 deadline for POD availability. To some, this date may seem unduly far off, but we believe it is as aggressive as we can reasonably make it, bearing in mind that the POD development process is in its very early stages. We have also targeted 2005 to phase out distribution of any device that contains embedded security, while scheduling an assessment of that target when PODs become available.

We have, in other contexts, provided a phase out of equipment. For example, in the spectrum refarming decision (Report and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 10076 (1995)), in order to make a more efficient use of the spectrum, we ruled that only equipment operating with new specifications would be permitted after a transition period. And again, when the Part 15 regulations were changed in 1989 (First Report and Order, 4 FCC Rcd 3493, corrected, 4 FCC Rcd 5404 (1989)), we adopted several transitional rules for various types of equipment, to provide clear guidance to manufacturers and users of the eventual changeover to new equipment. This is also the standard practice in Part 68 rule changes.

Let me be clear. The phase-out of integrated devices does not mean that cable operators will be unable to lease or sell devices to their subscribers. As the statute provides, they may continue to make available such devices -- but those devices simply will have PODs in lieu of integrated security. Cable operators will be full and fair competitors in the new marketplace for set-top devices.

I believe we should also consider whether and to what extent these devices will work with new DTV receivers. I have been closely following the announcements by certain cable operators that they had placed orders for devices that would pass through only certain of the ATSC formats. I have also become concerned about the delay in the adoption of an industry-generated standard for the IEEE 1394 "firewire" which will connect DTV receivers to an array of digital peripheral devices. Development of the retail market for set-top devices would be bolstered by consumer confidence that there are available a variety of devices capable of decoding the ATSC formats compatible with their TVs and more fundamentally, that consumers are confident that the digital devices they buy will connect and distribute digital information between them. The record on this issue, however, is not fully developed in this proceeding, so we have stopped short of requiring compatibility.

It may not be sufficient to rely on the open-ended time frame for adoption of the 1394 "firewire" standard and it may not be sufficient to hope that the devices will work with all ATSC formats. If it becomes apparent that the goals of Section 629 are not being fulfilled because of consumer confusion over DTV compatibility, I would hope and expect the Commission would revisit the matter.

Achieving the goals of Section 629 will mean that consumers will have more choices and more reasonable prices. Unbundling of our telephone networks has reaped benefits for consumers. Entrepreneurs with new ideas and new products have found a way to enter and bring these products to market.

Standards for navigation devices have been developed or are being developed in the marketplace. The industries involved have assured us they are committed to making sure that navigation devices will be available for consumers at retail from unaffiliated manufacturers, retailers and other vendors. We have decided to fashion our rules so as to allow the industries to continue their work. We are giving the market the opportunity to fulfill the goals of Section 629 with minimal government regulation.

However, we fully intend to monitor the market. We fully intend to monitor the status reports provided by the industries. If the goals of the statute are not being realized -- if navigation devices are not commercially available -- I expect the Commission to revisit our rules and make the appropriate changes.

This item is based on trust. We are trusting the cable industry to move ahead on POD availability according to the schedule they have provided. We are trusting that retailers will provide sufficient information to consumers about new choices as they become available and that consumers will not face obstacles in the process of selecting new devices to work with their multichannel video programming services. We are trusting that open cable standards will be suitable or adaptable to the needs of other digital service providers outside of the cable arena. Most of all, we are trusting that the industries will all continue to work expeditiously and effectively to adopt voluntary standards to ensure that all of the devices contemplated by the statute will work together. Given the steps we have taken today, I am confident that our trust is well placed and I look forward to the opening of new markets and the introduction of new products and services, for the benefit of consumers.

STATEMENT OF  
COMMISSIONER MICHAEL K. POWELL  
DISSENTING IN PART

Re: Commercial Availability of Navigation Devices, CS Docket No. 97-80

In this *Report and Order*, the Commission adopts rules to implement section 629 of the Communications Act. By and large, these rules are directly on target with the purpose of section 629, to “assure the commercial availability” of converter boxes and other equipment used to obtain multichannel video services from providers other than the programming distributor. For this reason, I support those portions of the decision that require operators to make technical interface information available and to make available a separated security device that will allow consumers to use commercially available equipment while still allowing the operator to protect itself against the theft of its services.

I respectfully dissent, however, from the portion of the Commission’s decision that, to my mind, veers off target. Specifically, I disagree with my colleagues’ decision to prevent multichannel video providers from offering set-top boxes that integrate security within the box (as opposed to a separable “point of deployment” or “POD” element) after the year 2005. I see nothing in the statute that requires this result and no persuasive policy reason to interfere with the market in this way.

First, let me address the statutory point. Section 629 clearly requires the Commission to “assure the commercial availability” of set-top boxes.<sup>1</sup> It does not mandate in any way, shape or form that we guarantee that retail distribution win out over operator supplied alternatives or that we tip the balance in their favor. Indeed, the statute squarely commands that “[s]uch regulations shall not prohibit any multichannel video programming distributor from also offering converter boxes.”<sup>2</sup>

The real purpose of section 629 was to ensure that consumers are not hostages to their cable operators and can go elsewhere, if they choose, to obtain set-top equipment. As set forth in the conference report, “[o]ne purpose of this section is to help ensure that consumers are not forced to purchase or lease a specific, proprietary converter box...from the cable system or network operator.”<sup>3</sup> We accomplish that objective by mandating that separate security pods are available. This allows commercial manufacturers to produce boxes without being inhibited by security specifications. And, it does so in a way that comports with the other provision of section 629 requiring the Commission to design rules that do not jeopardize the security of the multichannel system. It gives the operator control of the

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<sup>1</sup> 47 U.S.C. § 549(a). Section 629 was adopted as part of the Telecommunications Act of 1996. Pub. L. No. 104-104, 110 Stat. 56 (1996).

<sup>2</sup> 47 U.S.C. § 549(a).

<sup>3</sup> Joint Explanatory Statement of the Committee of Conference, S. Conf. Rep. 104-230, 104th Cong., 2d Sess. at 181 (1996) (Conference Report).

vital security component that they must have and that the statute mandates.<sup>4</sup> Both retailers and cable companies agreed on this reasonable compromise.

The Commission, however, has not stopped there. It has gone beyond the target established in the statute and adopted a regulation that interferes with market choices for equipment design. I fear that this decision may in fact contradict another goal of section 629, to spur innovation and competition. The legislative history of section 629 specifically states that "[t]he conferees intend that the Commission avoid actions which could have the effect of freezing or chilling the development of new technologies and services."<sup>5</sup> The record developed in this case includes evidence that potential competitors to incumbent cable providers are developing integrated set-top boxes with unique functionalities as a way to enter the market.<sup>6</sup> The decision of the majority today may well inhibit that development.

The question we must ask is why? The decision to ban eventually the availability of integrated boxes rests on the very speculative conclusion that integrated boxes are an "obstacle to the functioning of a fully competitive market for navigation devices by impeding consumers from switching to devices that become available through retail outlets."<sup>7</sup> We have not been asked to ensure that consumers switch to devices that become available through retail, only that they have that choice.

Quite apart from my statutory concern, I am further perplexed by the majority's divergence, without explanation, from our own instructive prior precedent. In the *Equipment Compatibility Reconsideration Order*, we stated with respect to the decoder interface standard: "we see no need to preclude cable operators from also incorporating signal access control functions in multi-function component devices...Our decision ensures that subscribers will have several competitive alternatives in selecting component descrambler equipment."<sup>8</sup>

The decision today sways from this judgment, without full explanation. It is too flip to suggest that this is just a different proceeding and a different provision. At bottom, the point of that prior decision was that ensuring customers have choice and then letting those choices govern the market is the sound way to go. It was there, it is here.

As Senator Burns noted in a letter to this Commission, our conclusion should allow "consumers to have the benefit of choice and of any lower prices that cost efficiencies of integrated equipment would

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<sup>4</sup> 47 U.S.C. § 549(b) ("The Commission shall not prescribe regulations...which would 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>5</sup> Conference Report, *supra* note 3, at 181.

<sup>6</sup> See Ameritech *ex parte* statement (June 4, 1998).

<sup>7</sup> ¶ 69

<sup>8</sup> Equipment Compatibility Reconsideration Order, FCC Rcd. 4121, 4127 ¶ 38 (1996).

generate."<sup>9</sup> I fear that the majority decision today denies a cost effective choice for consumers. It is quite plausible to me that the "impediment" to switching to retail may in fact be a consumer preference for distributor-supplied integrated boxes! I see no reason to attempt to control consumer preferences.

Many consumers may not elect to purchase boxes from their local retailer. They may find it inconvenient to have to hike out, plunk down hundreds of dollars for a box, and then get a security pod from their operator. Others may conclude that it is more prudent to lease a box from their provider rather than make an investment in a box, because of rapidly changing technology. These consumers should not be forced by regulation to lease a multi-component box (probably with other features such as VCR and DVD capability) at a higher price, simply because we, in our wisdom, decided "availability" should mean nudging consumers into stores and, at the outset, categorizing their possible preference for integration an "impediment" to retail availability. The market should be allowed to play this out.

In my opinion, fears that cable companies will obstruct or slow roll separate security devices into retail outlets is well addressed without banning integrated boxes. The rules preclude service providers from contractually or otherwise limiting the addition of features or functions to devices made available to retail outlets. And, the statute itself prevents cross-subsidization.

I believe these measures more than adequately address "anticompetitive fears." We talk so glowingly about letting consumers make choices in free markets, but, time and again, we cannot quite bring ourselves to trust either those consumers or the market. Because I am willing to trust the marketplace, I must respectfully dissent.

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<sup>9</sup> Letter from Senator Conrad Burns, Chairman, Subcommittee on Communications, Senate Committee on Commerce, Science and Transportation, to William E. Kennard, Chairman, Federal Communications Commission (June 4, 1998).