

## **I. Introduction**

We take it as axiomatic that the policies the Commission adopts regarding the commercial availability of navigation devices should be based on what is best for the consumers of those devices and not what is best for any retailer or manufacturer, or for any MVPD. Thus, policies should be judged as desirable if they provide benefits to consumers even if they make some particular industry participants worse off. In the jargon of the antitrust laws, it is the protection of competition, not the protection of competitors, that should be the guiding principle of FCC policy.

The primary focus of this proceeding is on competition in the retail distribution of navigation devices to consumers. The stated objective of Congress in adopting Section 629 was to prevent any MVPD from being the only source from which its subscribers could obtain navigation devices. More fundamentally, Congress' objective was to prevent any MVPD from exercising market power in the supply of such equipment to consumers.

It is important to distinguish the objective of promoting retail competition from another objective that is discussed in the Notice and which has been addressed by several commenters: the promotion of competition in the manufacture of navigation devices.<sup>1</sup> This objective is logically distinguishable from the promotion of retail competition. That is, robust retail competition can exist regardless of the number of manufacturers as long as the equipment is available to consumers through retail outlets unaffiliated with the MVPD.

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<sup>1</sup> See, e.g., Comments of Consumer Electronic Retailers Coalition at 8-10, 34; Comments of the Consumer Electronics Manufacturers Association at 8; Comments of Circuit City at 4-5, 12; Comments of Commercial Engineering at 4; Comments of Information Technology Council and the Computing Technology Industry Association at 8-13; Comments of Zenith at 12.

Moreover, promoting competition among manufacturers raises fundamentally different issues from those involved in the promotion of retail competition. The focus of retail competition is on the price of equipment, and the primary concern is whether the number and nature of retail outlets is sufficient to drive the margin earned by retailers toward the costs of distribution.<sup>2</sup> That is, the objective is to eliminate any excess profits earned from the distribution of equipment to consumers.

By contrast, especially in markets undergoing rapid technological change, there is often, in addition to price competition, a high degree of non-price competition (e.g., features, options, service, training, etc.) among manufacturers, as well as competition in the associated research and development activities. Here, policymakers must be concerned not only with the prices charged by manufacturers to retailers, but also with the effect of regulation on both the variety of products offered and the pace of innovation. A reduction in prices that results from, say, widespread compulsory licensing or mandated national portability, may be harmful to consumers if it reduces the incentives of manufacturers to engage in innovative activity or it limits their ability to offer a wide range of products.

Even where equipment compatible with an MVPD's system may only be available from a single manufacturer, that manufacturer is unlikely able to charge non-competitive prices. Because an MVPD has an interest in equipment being purchased by as many consumers as possible, the manufacturer may well have to commit to low wholesale prices in order to be selected by the MVPD as its equipment provider. As we discussed in our original comments, the MVPD

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<sup>2</sup> This does not imply that there is no non-price competition among retailers. Retailers can compete through location, service, and financing options in addition to price.

may even insist that a manufacturer license a second source before committing to purchasing its equipment in order to ensure the competitive manufacture of equipment.<sup>3</sup>

The prices paid by consumers depend both on wholesale prices -- the prices charged by manufacturers to retailers -- and on the retail markup -- the difference between the retail and the wholesale price; the policies aimed at the two factors have very different implications. If the markup is reduced through additional retail competition, there is likely to be little effect on variety and innovation.<sup>4</sup> On the other hand, if wholesale prices are driven down through, for example, widespread compulsory licensing, the incentives of manufacturers to engage in R&D will be reduced and, thus, so will the rate at which new products are developed and brought to market.

The Commission is being asked in this proceeding to choose between two widely different views about the market for navigation devices. Advocates of system standardization, mandated national portability, and widespread compulsory licensing apparently view navigation devices as relatively mature commodities for which few variations need be provided to consumers and for which most important innovations have already been undertaken. As a result, they would freeze, or substantially retard, the rate at which innovations are introduced and limit the variety of products that could be offered in order to achieve a high degree of price competition.

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<sup>3</sup> S.M. Besen and J.M. Gale, "An Economic Analysis of the Commercial Availability of 'Navigation Devices' Used in Multichannel Video Programming Systems," Charles River Associates, May 16, 1997, p. 39.

<sup>4</sup> This assumes that the MVPD itself is not engaged in equipment research and development. If, however, an MVPD engages in research and development with the expectation that the costs of doing so will be recovered through retail margins, additional retail competition may deter that investment.

By contrast, we view navigation devices as novel products that are still undergoing rapid and substantial technical progress. Moreover, we see manufacturers and MVPDs undertaking substantial experimentation in the features of these devices and the associated services that are offered, and we find it difficult to see how any other view is plausible given that radically new versions of these devices are continuing to be introduced.<sup>5</sup> In any event, the Commission will have to decide whether navigation devices are commodities or innovative products in reaching decisions in this and subsequent proceedings.

In this report, we respond to some of the specific points raised by commenters by amplifying on the analysis in our earlier economic report.<sup>6</sup> We explain in the next two sections why national portability is neither necessary to achieve commercial availability nor is it clearly desirable even if it were. In the following section, we explain why competition among MVPDs provides many of the same benefits as does commercial availability of the equipment of a given MVPD, so that the commercial availability requirements can be "sunsetting" for any MVPD that faces effective competition. In the following section, we explain why the Commission should not undertake policies that favor any particular form of retail distribution. In the final section, we explain why MVPDs should not be restricted from offering integrated security/non-security equipment.

## **II. Portability is Not Required for Commercial Availability**

Some commenters claim that portability, the ability to use a particular type of navigation equipment throughout the country, is a prerequisite to the

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<sup>5</sup> Not only is there wide variation among new devices offered by different types of MVPDs, but there is also considerable variety in the devices offered by different MVPDs of the same type, and even by the same MVPD.

<sup>6</sup> Besen and Gale, *op. cit.*

commercial availability of that equipment.<sup>7</sup> These commenters claim that without national portability, independent retailers would have no incentive to sell navigation equipment, and, even if they did, consumers would have no incentive to purchase such equipment from them. However, these filings make no effort to support this claim, simply assuming that it is true and then attempting to draw policy conclusions from it. But experience in many markets indicates that commercial availability can exist even if consumers never actually move equipment from one area of the country to another and retailers must stock different versions of the same type of equipment.

As we discussed in our earlier economic appendix to General Instrument's comments, evidence from both the markets for mobile telephone subscriber equipment and equipment used for the reception of Direct Broadcast Satellite service indicates that national portability is not required for retail availability. As we noted,

DBS equipment is not portable in that equipment purchased to receive and decode signals from one provider will not work if the customer changes to another, e.g., equipment purchased to receive Primestar signals cannot be used to receive service from DirecTV. Similarly, mobile telephones may work only with a single provider, e.g., equipment purchased for use on a Sprint Spectrum system cannot be used on, say, a Cellular One system. Thus, neither DBS nor mobile telephone equipment is "portable" in the sense that it can continue to be used if a customer changes vendors. Nonetheless, both continue to be offered primarily through traditional retail establishments.<sup>8</sup>

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<sup>7</sup> See, e.g., Comments of the Consumer Electronic Retailers Coalition at 8-10; Comments of the Consumer Electronics Manufacturers Association at 8; Comments of Circuit City at iv, 4-5, 14; Comments of Commercial Engineering at 5; Comments of Tandy at 8; Comments of Viacom at 6, 11.

<sup>8</sup> Besen and Gale, op. cit., p. 21.

We concluded from this evidence that "the absence of portability of cable set-top boxes need not be an impediment to retail sales."<sup>9</sup>

This conclusion is further buttressed by other evidence about the manner in which apparently portable equipment is actually employed. Household appliances such as refrigerators, ranges, dishwashers, washing machines, clothes dryers, furnaces, air conditioners, and water heaters are generally nationally portable in the sense that equipment purchased in one geographic area can be used in many others.<sup>10</sup> However, a substantial amount of such equipment is never actually moved from the area in which it is initially purchased either because it is conveyed to the buyer when a house is sold or because landlords supply the equipment to renters as part of the lease arrangement. Similarly, although C-band satellite receiving equipment can be used throughout the country, it is common for such equipment to be conveyed to buyers when a home is sold. The fact that this equipment is nationally portable may, thus, play only a very small role in the purchase decision because buyers have no intention or expectation of moving the equipment from the residence in which it is initially installed. Nonetheless, this equipment continues to be purchased primarily through ordinary retail outlets.

Although the arguments of some commenters appear to be based on the idea that navigation devices are akin to television sets, which buyers expect to take with them if they were to move, it is equally, if not more, plausible that such equipment will come to be conveyed to buyers when a family moves, either across town or across the country. These devices would then only be purchased at retail when a new home is built or a system is upgraded with no

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<sup>9</sup> Ibid.

<sup>10</sup> Of course, this is not universally true. Gas appliances cannot be employed in areas where there is only electric service.

intention of ever moving it from its initial location. In such cases, portability would not influence consumer purchase decisions.

The first part of the argument for national portability, that consumers will have no incentive to buy equipment that is not portable, is thus contradicted by the fact that consumers continue to purchase equipment at retail that they have no interest or intention of moving if they change their residences. The second part of the argument, that retailers will have no incentive to sell equipment unless it is highly standardized, and thus can be stocked and sold nationally, is also contradicted by examples of the behavior of retailers.

Retailers often carry a variety of incompatible equipment or offer widely varying models of the same product. There appear to be no impediments, for example, to large national retailers offering both "IBM-compatible" and Apple personal computers, although they employ incompatible operating systems. Similarly, incompatible video-game systems are marketed and sold successfully by mass-market retailers. More broadly, national retailers are very successful in selling products such as telephone answering machines, stereophonic sound systems, home theater systems, and telefax machines, even where they must carry many different brands with widely varying features, options, and prices in order to satisfy a wide variety of consumer demands. In each case, knowledgeable and motivated sales personnel are available to assess an individual consumer's needs and recommend equipment that satisfies those needs. The view that retail availability cannot occur without a high degree of standardization is clearly belied by these facts from the markets in which consumer electronics retailers operate.

National retailers in areas outside of consumer electronics also successfully market and stock products that are only demanded regionally or locally. For example, national home improvement centers carry plants and trees

that are only suited for specific regions. In an even more localized and prosaic example, individual store managers in grocery chains have significant discretion in stocking items that are highly specific to their own store's customer demographics. In both these cases, national retailers correctly gauge and meet local demand for non-standardized products.

Moreover, manufacturers also continue to produce equipment to meet local requirements. General Instrument itself manufactures, markets, and sells consumer equipment that is specialized to the needs of particular MVPDs. Although GI may lose some manufacturing efficiencies due to such specialization, the resulting savings to the operator can more than offset GI's higher manufacturing costs.

### **III. Mandating Portability Would Impose Significant Costs**

In addition to the fact that national portability is not required to achieve commercial availability, as we noted in our earlier economic report, the standardization that some would impose because they claim it is required for retail availability would come at a significant cost in terms of reduced innovation and lost variety. Furthermore, it would also impose direct costs on both consumers and MVPDs.

It is important to observe that there is a tradeoff between national portability and the associated standardization and manufacturing cost reduction, and the variety of features, experimentation, and innovation that accompany geographic variation. First, operator costs are likely to be lower if the equipment used by subscribers to a given MVPD are optimized for that particular system as opposed to being designed to work on any system regardless of its characteristics. This occurs because the system operator will face additional

constraints if forced to work within the standards that are required for national portability.

Second, even if systems have similar characteristics, consumers in different areas may demand different services that require the use of different types of equipment. As a result, costs may be higher, or services may be unable to be offered, if national standardization is imposed.

Third, there is likely to be considerable uncertainty about both the costs of offering particular services and the demand by consumers for those services. The experiments that are required to resolve these uncertainties will be made more difficult and costly if national portability is mandated.

Fourth, standardization is likely to inhibit innovative activity because the introduction of new equipment is likely to require modification of the national standard. This is an especially important concern where, as here, the potential for substantial innovation is large.

To require that the equipment be nationally portable will raise costs, limit variations in equipment and associated services, and retard innovation. Some features that are not part of a national standard will not be supplied, while others may be available only at unnecessarily higher costs. For these reasons, the assumed benefits of national portability do not come without a cost.

Finally, it must be recognized that to the extent that national portability provides substantial benefits, those benefits can be achieved through private standards activities and do not necessarily require government intervention. After all, if consumers demand the benefits of national portability, it will be in the interest of MVPDs to provide such benefits. Indeed, as we described in our original report, a substantial amount of such voluntary standards activity is already taking place.

#### **IV. Intersystem Competition Justifies Sunsetting**

A number of commenters have suggested that there must be multiple retail outlets for equipment that is used by subscribers to each MVPD to achieve the benefits sought by Congress when it adopted Section 629. In particular, these commenters argue that competition among MVPDs is not sufficient to provide these benefits.<sup>11</sup> This view is incorrect.

In adopting Section 629, Congress sought to protect consumers against the exercise of market power by MVPDs in the sale or lease of equipment to consumers. One way to prevent anticompetitive behavior is to have one or more unaffiliated retail outlets for the equipment that is sold or leased by the MVPD, because the existence of these retail alternatives permits consumers to switch to other suppliers if the MVPD raises the price of equipment. However, consumers are also protected if there are competing MVPDs even if each MVPD is the only source of equipment that can be used on its system.

Consumers will compare the combined prices of service and equipment charged by various MVPDs in determining the system to which they subscribe. An MVPD that raises the price of equipment also raises this combined price and loses patronage to competing MVPDs. Thus, this form of system-level competition constrains the ability of an MVPD to raise prices, and protects consumers against the exercise of market power in the supply of equipment by an MVPD, just as does the existence of multiple outlets for equipment that is supplied by that MVPD.<sup>12</sup> For that reason, the Commission can "sunset" the

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<sup>11</sup> See, e.g., Comments of Consumer Electronic Retailers Coalition at 37; Comments of Circuit City at v, 12; Comments of Tandy at 17-18.

<sup>12</sup> Each motion-picture theater is the "monopoly" supplier of refreshments sold at that theater. Nonetheless, each theater faces competition in the supply of refreshments because patrons can switch to other theaters with more attractive combined admission and refreshment prices if the theater were to raise the price it charges for refreshments, and thus its combined price, excessively.

commercial availability requirement for any MVPD that faces effective competition from other MVPDs.

#### **V. No Particular Form of Commercial Availability Should be Favored**

As we discussed in our earlier economic report, the pace at which technical progress is occurring in the supply of navigation devices argues strongly against the adoption by the Commission of national standards. For similar reasons, the Commission should avoid adopting policies that favor any particular form of commercial availability.

Some commenters appear to want the Commission to adopt policies that would make national mass-market retailers the sole, or dominant, way in which consumers would acquire navigation devices.<sup>13</sup> Their view is apparently that these devices must be highly standardized to permit marketing through these outlets.

Apart from the dubious validity of the premise that a high degree of standardization is required in order for these retailers to stock and sell navigation devices, a more important point is that consumers may be better off if they acquire less-standardized products through outlets such as mail order catalogs, direct ordering through 800 numbers, or the Internet. Even if the lack of national portability were to make it more difficult for mass-market retailers to supply navigation devices, it does not follow that national portability is best for consumers, and therefore, should be mandated. Consumers may be better off if a wide variety of innovative products are available through less convenient retail outlets, than if a more limited array of less novel products are available through

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<sup>13</sup> See e.g., Comments of the Consumer Electronics Manufacturers Association at 2; Comments of Circuit City at 20; Comments of Zenith at 11.

traditional retail outlets. Contrary to the suggestion of some commenters, what is good for mass-market retailers is not necessarily good for consumers. A high degree of standardization may favor traditional retail outlets in the sale of navigation devices but that is no reason for the Commission to adopt policies that support such favoritism, particularly if the result is to make consumers worse off.

Similarly, some commenters seem to believe that features should be incorporated into the receivers themselves, thus dispensing with the need for auxiliary devices.<sup>14</sup> However, the pace at which new services and features can be introduced is far more rapid than is the turnover of these receivers, so that the need for set-top boxes will continue unless consumers are either forced to abandon their existing receivers to receive new services or the pace of the introduction of new services is slowed to accommodate the slower rate at which features are incorporated into receivers. Slowing the pace at which services are introduced would favor the manufacturers of receivers, and the retailers who carry their products, over the manufacturers of navigation devices and more novel forms of retail distribution. This would also, however, undoubtedly deny many of the benefits of innovation to consumers. The Commission should not adopt policies that provide such favoritism.

#### **VI. MVPDs Should be Permitted to Offer Integrated Boxes**

A number of commenters have suggested that if MVPDs are required to offer separate security equipment, they should be prohibited from offering integrated security and non-security equipment in order to ensure a market for

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<sup>14</sup> See e.g., Comments of the Consumer Electronics Retailers Coalition at 18; Comments of Circuit City at 18; Comments of Zenith at 4.

non-security equipment.<sup>15</sup> However, consumers will be foreclosed from the benefits that may arise from integrated equipment if a sales ban were adopted. Moreover, there is no incentive for an MVPD to use integrated equipment to disadvantage sales of non-security equipment in an anticompetitive way.

If separate security boxes are offered, consumers would be free to choose between purchasing an integrated box provided by the MVPD and purchasing a security-only box from the MVPD and a features box from a source that is unaffiliated with the MVPD. Consumers may benefit from such an arrangement if, because of design and manufacturing efficiencies, the integrated box is less expensive than the two separate boxes. However, some consumers may still prefer the combination of the security-only and features-only boxes both because they prefer the set of features offered and because large consumer electronics manufacturers are also likely to offer features-only boxes at attractive prices due to significant design and scale economies.<sup>16</sup> Consumers, through the marketplace, will determine the nature and amount of integration that is best for them, and there is no reason to prevent consumers who prefer integrated boxes provided by the MVPD from having the opportunity to make that choice.

Further, as we described in our previous economic report,<sup>17</sup> MVPDs have no incentive to use their ability to offer integrated boxes to prevent consumers from choosing separate boxes. An MVPD sells services for which it collects monthly fees, and it wishes the demand for those services to be as large as possible. Limiting equipment choices to potential subscribers, or raising the price of equipment, is, therefore, not in the interest of the MVPD because that

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<sup>15</sup> See e.g., Comments of Consumer Electronics Manufacturers Association at footnote 12, Comments of Circuit City at 32, Comments of Tandy at 13.

<sup>16</sup> These manufacturers may also be able to reduce their costs by combining non-security components with other equipment, such as personal computers, VCRs, and television receivers.

<sup>17</sup> Besen and Gale, *op. cit.*, p. 17.

reduces the demand for its service. Because some consumers will prefer the style, design, and capabilities of features-only boxes purchased from sources that are unaffiliated with the MVPD, the MVPD can increase the demand for its services from that set of consumers by offering security-only boxes on attractive terms and, therefore, gain additional subscribers.