I. INTRODUCTION

1. Interactive Television (“ITV”) is a rapidly-developing service that could provide tremendous value to American consumers. ITV services, provided over a high speed\(^1\) platform, will

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\(^1\) The Commission’s second annual Section 706 Report defines “high speed” services as “those services with over 200kbps capability in at least one direction.” *See Second Inquiry Concerning the Deployment of Advanced Telecommunications Capability Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, FCC 00-290*, at 8 (released Aug 21, 2000).
offer, *inter alia*, increased viewer control of the television viewing experience; integration of video and data services, including web content; real-time interaction with other viewers; and television commerce ("t-commerce"). If it turns out that only one delivery platform in each geographic area has the capability to provide the most attractive ITV services package, and if the platform provider is vertically integrated with an ITV service provider, then there would be the potential for anticompetitive behavior. This Notice of Inquiry ("Notice") seeks comment on what services constitute ITV services, what entities constitute ITV providers, how ITV services will be delivered, what business models will govern the delivery of ITV services to consumers, and the general status of an ITV services market.

2. In the 1992 Cable Act, Congress determined that cable television was the dominant platform among multichannel video programming distributors ("MVPDs"), and that cable market power in local distribution necessitated regulatory intervention in certain situations, including in the case of vertically integrated cable programmers. In particular, Congress directed the Commission to adopt rules limiting the share of cable capacity that could be used for commonly-owned content and requiring vertically integrated cable programmers to provide their content to rival distribution platforms on nondiscriminatory terms. If the same factual predicates that Congress cited in the 1992 Cable Act were to apply to a distribution platform delivering ITV services, then some regulation of those distribution facilities might be warranted.

3. This Notice addresses the question of whether, at least in the near term, the modern cable television plant is likely to be the superior platform for distribution of high speed ITV services. Commenters asserting that the cable platform will, in fact, have substantial advantages in distributing ITV services should also comment on whether certain cable operators should be prohibited from discriminating among ITV service providers. The 1992 Cable Act analytic framework would suggest that such regulations be applied, if at all, to vertically-integrated cable ITV providers, *i.e.*, cable television operators that have an attributable interest in an ITV service provider. Commenters arguing in favor of regulatory actions in this area should also provide recommendations on how to make the principle of nondiscrimination operational and whether the principle should be applied to cable television operators unaffiliated with an ITV provider. Commenters advocating imposition of regulations only on vertically integrated cable ITV providers should also address whether the current cable television ownership attribution rules would be appropriate for determining if a cable operator would be subject to nondiscrimination rules.

4. The Notice also seeks comment on whether any other distribution platform does or might possess market power in the distribution of ITV services and, if so, what regulatory approach, if any, might be warranted. The Notice seeks comment on the likely ITV delivery capabilities of other delivery platforms, such as Direct Broadcast Satellite ("DBS") and Digital Subscriber Line ("DSL"), in addition to cable. The Notice explores the idea that those distributors, if any, that we determine to have the power to act anticompetitively with respect to ITV service delivery should be subject to regulations that require nondiscriminatory treatment of unaffiliated ITV providers.

5. The Notice seeks comment on the legal classifications of ITV services, what public policy and statutory objectives ITV rules would promote, and the Commission’s authority to protect this market. The Notice also asks questions about enforcement of any new rules, proposing alternatively a voluntary arbitration, subject to judicial review, or a Commission complaint procedure.

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II. DEFINING ITV SERVICES

6. The nature of ITV services is evolving rapidly, with constant and continuous technological changes and evolving business models making it difficult to specify a definition. Nevertheless, we offer the following characterization, which we use for purposes of the Notice, but we invite comment on the definitional question. ITV is a service that supports subscriber-initiated choices or actions that are related to one or more video programming streams. The subscriber-initiated choice could be to activate an electronic programming guide (“EPG”) in order to gather information about viewing options, and then choose from a menu of video signals being “broadcast” to all subscribers (e.g., selecting a football game on ESPN) or to initiate a “customized” (i.e., to one subscriber only) transmission of a video stream (e.g., interactive content related to the video stream). The choice could be to access an alternative but related video signal, e.g., transmission of a different camera angle on a sporting event. Alternatively, it could be to access a chat room or email service to be used in conjunction with a video stream. Another possibility could be to access a graphic interface, e.g., a screen or screens that wraps around the video signal(s) being displayed, which provides supplementary information related to the video display or the opportunity for “t-commerce” (the purchase of merchandise related to the displayed video signal).

7. As the preceding exposition makes clear, many ITV services could conceivably be associated with a particular video signal. For example, an on-line kiosk for purchasing licensed merchandise such as games may be associated with a particular children’s television program. We distinguish between the video signal and the ITV enhancements. The ITV enhancements are the subscriber-initiated choices and resultant supplementary material and services made available to the subscriber. In this context, then, the ITV service is a video signal plus related ITV enhancements. Certain ITV services, however, may not be associated with a particular video signal, such as email or instant messaging.

8. For purposes of this Notice, we use the term “video signal” to denote the basic video programming stream, broadcast or non-broadcast, with which ITV enhancements are associated. For example, in the case of ITV services provided via cable, the cable transmission of “MTV” might be the “video signal,” while additional material transmitted that permits the subscriber to access information about MTV licensed merchandise might constitute the associated ITV enhancements. We do not intend for the term “video signal” used herein to be confused with the term “primary video,” which is used in the context of our must carry rules. Under the must carry statute and rules, a cable operator is required to carry the “primary video” signal of broadcast stations and associated data that is “program related.” In two other proceedings, the Commission has before it the question of what constitutes “program related” material. We note that non-broadcast cable networks do not have any rights of carriage under our must carry rules or any other Commission rule. If a broadcast station entitled to must carry does not elect must carry, then it must give its consent to the cable operator to retransmit the station’s video signal to the cable operator’s subscribers. In retransmission negotiations for the carriage of the broadcast signal, the

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4 Under our cable rules, the term subscriber means a “member of the general public who receives broadcast programming distributed by a cable television system and does not further distribute it.” 47 C.F.R. § 76.5(ee).

5 See 47 C.F.R. § 76.62.

6 47 C.F.R. § 76.56(e).

broadcaster may negotiate, within the bounds of good faith, for the carriage of material other than the broadcast primary video.\(^8\)

9. Our descriptions of ITV services suggest several possible categories of ITV service providers. Some ITV service providers will also be video programming networks, or will have an attributable interest in video programming networks. Those without an attributable interest in video programming networks may or may not have contractual agreements with video programming networks to provide associated ITV enhancements. And some ITV service providers will have an attributable interest in a cable operator or an operator of another distribution platform. We seek comment on whether we have usefully characterized ITV services and service providers and, in particular, if it is reasonable to define many ITV services by reference to a video signal. We also seek comment on whether our definition of ITV services should include personal video recorder (“PVR”) services such as TIVO or RePlay.

10. On the assumption that our tentative definition of ITV is a useful one, we seek comment on the technical resources or “building blocks” that a distribution system would need to provide in order to support ITV. We see the use of three major building blocks for delivery of ITV services. The first is a video stream, which is provided simultaneously to a group of viewers or subscribers. In the case of a digital transmission, this would be a high-capacity MPEG video stream. Of course, some ITV services can be supported by transmissions using the vertical blanking interval of analog video channels. Although our inquiry will be couched primarily in terms of the digital transmission scheme that is likely to be able to support high speed ITV services, we are also interested in the use of analog transmissions for ITV. Moreover, our inquiry emphasizes current MVPD platforms, such as cable and satellite, rather than existing single-channel television stations, although they certainly can provide some ITV services.

11. With these qualifications in mind, it is useful to begin by considering high capacity distribution MPEG video streams, which contain the video signals for digital channels delivered by the MVPD. These streams can incorporate some ITV enhancements. These enhancements could include ATVEF “triggers” and some of the content to which these triggers can direct the subscriber.\(^9\) We understand that there are two types of ATVEF triggers. ATVEF A triggers are used to access ITV content from the Internet and ATVEF B triggers are used to access content transmitted along with the video signal and stored in the subscriber’s ITV set-top box.\(^10\) For ease of exposition, we use the term

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\(^8\) See In re SHVIA: Retransmission Consent Issues: Good Faith Negotiations and Exclusivity, CS Docket No. 99-363, Report and Order, 15 FCC Rcd 5445, 5462 ¶ 39 (2000) (“[W]e reject the suggestions of certain commenters that we prohibit proposals of certain substantive terms [in retransmission agreements], such as offering retransmission consent in exchange for carriage of other programming such as a cable channel, another broadcast signal, or a broadcaster's digital signal.”). The Commission held that the substance of retransmission agreements “generally should be left to the market.” Id.

\(^9\) ATVEF is the Advanced Television Enhancement Forum, a cross-industry group whose members are major computer companies, television programmers, broadcasters, providers of transport, and others. ATVEF standards define a common set of requirements for the creation, transport, and delivery of interactive television. ATVEF appears to be far along in developing standard protocols for delivering ITV enhancements. See www.atvef.com. Although we couch our discussion in terms of ATVEF standards, we intend our analysis to apply to other standards that are developed to provide similar functionality.

\(^10\) See www.atvef.com. See also Applications of America Online, Inc. and Time Warner, Inc. for Transfers of Control, CS Docket No. 00-30, Order (“AOL Time Warner Order”), FCC 01-12 (adopted Jan. 11, 2001), Ex Parte Comments of Disney, (Oct 25, 2000), (“Disney Oct., 25 Ex Parte”) at 5, transmitted by letter from Lawrence R. Sidman on behalf of The Walt Disney Company, to Magalie Roman Salas, Secretary, FCC, dated Oct. 25, 2000. This document states that ATVEF B triggers are for accessing “data contained in the video signal and stored in the (continued....)
“video pipeline” to refer to the high capacity MPEG video stream as well as to, in context, analog transmissions. It appears that the success of ITV depends on at least some content being closely synchronized with the video signal in order to provide a seamless blend on the subscriber’s television. The MPEG stream could also be used to deliver ITV enhancements requested by the subscriber (as opposed to those that are transmitted to all subscribers, without regard to any individual request by a subscriber), although these may also be delivered over an Internet connection, as discussed below.

12. The second building block is a two-way connection (e.g., via the Internet). This connection has two functions in providing ITV services. It is used to carry upstream requests from the subscriber, perhaps in response to ATVEF triggers, to access ITV enhancements from Internet sites; and it is used to deliver those enhancements to the subscriber’s video display. Hence, we envision two categories of ITV enhancements—those “broadcast,” i.e., transmitted point to multipoint, as part of the video pipeline, and those transmitted point to point using the Internet Protocol (IP) over the subscriber’s Internet connection.\textsuperscript{11} Our tentative assumption is that the IP ITV enhancements are accessed from Web sites, but we seek comment on whether some might actually be cached at a distribution center or strategic location of the MVPD providing the services (e.g., at a cable headend) or a nodal site.

13. The third building block is specialized customer premises equipment, which we shall refer to as the interactive television service set top box, or ITV-STB. The ITV-STB, which could be a stand-alone device or integrated into an MVPD set top box or a television receiver, is used to access ITV enhancements. Similar to the two categories of ITV enhancements mentioned above, the ITV-STB can access the enhancements in two ways. The enhancements transmitted as part of the video pipeline can be accessed in real time or may be stored in the ITV-STB’s memory and can be called up from the ITV-STB’s memory as needed. Alternatively, the ITV-STB can access the ITV enhancements from the Internet (or possibly from a cache at the MVPD distribution center) and then display them in real time or store them in the ITV-STB’s memory. We seek comment on our whether our discussion of these three “building blocks” is an accurate portrayal of the method by which ITV services will be delivered to viewers.

14. To assess the possibilities for discriminatory behavior and what enforcement procedures might be effective for any rules that might be proposed in the future, it is important to understand clearly how ITV providers will deliver their services to consumers, including what type of contractual arrangements will govern this delivery. We seek comment on the plausibility of the following scenarios, which are not intended to be mutually exclusive. Some ITV service providers will choose to provide enhancements for the video signals of video programming networks to which they are not otherwise affiliated. These ITV service providers will likely contract with the video programming networks for the right to provide the enhancements. The ITV provider will create ATVEF triggers and enhancement content to be packaged in an MPEG datastream that the programmer will transmit along with the video programming to cable headends for distribution to subscribers. The ITV provider may also author content that resides on a Web site or sites, to which ATVEF A triggers would direct subscribers. The Web site or sites could belong to the video programmer or be independent. A video programmer could contract with more than one ITV service provider, and the video programmer could be an ITV service provider to itself on an exclusive or nonexclusive basis. Under this scenario, presumably when the video programmer negotiates with a cable operator for carriage of its video signal, it would also negotiate for carriage of (Continued from previous page)                     

\textsuperscript{11} We recognize that the Internet connection could be used to deliver ITV enhancements on a point-to-multipoint basis as well. Moreover, we recognize that, in the more distant future, the distinction between the MPEG video pipeline and the IP connection may disappear.
whatever ITV enhancement datastreams that need to be associated with the video signal. Subscribers to
the ITV service will need some specialized customer premises equipment (“CPE”) to access the service.
This could be a separate proprietary ITV-STB or it could simply be proprietary software or circuitry built
into a general purpose CPE.

15. A pure EPG service is potentially another scenario. Cable operators argue that this ITV
service, the EPG, is not “program related” to the “primary video.”\textsuperscript{12} Moreover, the EPG data transmitted
to the subscriber may not need to be synchronized with any particular video stream. If this is the case, the
question arises as to whether a pure EPG provider needs access to a cable operator’s video pipeline at all.
Could the EPG information be transmitted via the IP connection, either dial-up or high speed, that is
assumed to be part of the delivery platform for ITV services? Along these same lines, we seek comment
on the potential viability of a service designed to be associated with a video signal or stream, but for
which close synchronization and cooperation with the video programmer is unnecessary. As with the
EPG case, the issue here would be pure access to cable operator transmission capacity, either MPEG or
IP. For example, a service offering online sales of collectible baseball cards might aspire to wrap around
telecasts of Major League Baseball games, but would not need a direct association.

16. One early example of ITV is AOLTV. AOL offers a standalone ITV-STB, which can
function with either cable or DBS (in this case, DirecTV). The early version contains a special purpose
dial-up (\textit{i.e.}, narrowband) modem to deliver ITV enhancements to the subscriber. These enhancements
include interactive graphic interfaces, “triggers,” and supplementary content requested in response to the
triggers. The service includes an EPG and provides a "wraparound" to whatever video is being displayed
on the television screen. Video programming networks with whom AOLTV has partnered may include
ATVEF triggers and other enhancement content with their video pipelines. The AOLTV ITV-STB is
designed to detect these triggers and provide access to the enhancement content.

17. We seek comment on the preceding characterizations of ITV service providers. In
particular, is it accurate to distinguish between those providers whose downstream ITV enhancement
content will be packaged with video signals and those providers whose downstream content will be
independently delivered? Is it reasonable to assume that if ITV enhancements are associated with a video
signal, carriage of the enhancements by cable operators will be negotiated between the video
programming provider and the cable system?

18. We seek comment on whether ITV services will rapidly evolve in a way that will make
access to a high speed connection necessary in order to realize completely the capabilities of the service.\textsuperscript{13}
With this in mind, we seek comment on the range of distribution platforms that might be able to support
ITV services in the future. As noted above, the early narrowband version of AOLTV is available in
association with both the cable and DBS platforms. Versions of the Microsoft product WebTV are
available via cable, DBS, and terrestrial broadcast television. Echostar’s Dish Network offers WebTV
Plus, and DirecTV offers a version of WebTV in a service called Ultimate TV.\textsuperscript{14} WebTV is also available
in association with terrestrial broadcast television or cable television, again using a dial-up Internet
connection. WorldGate Communications provides ITV service via a cable set top box, using the vertical

\textsuperscript{12} Whether an EPG is “program related” is pending before the Commission. \textit{See In re Petition for Special Relief of Gemstar}, CSR-5528-Z (filed March 16, 2000).


blanking interval of analog signals for transmissions to and from WorldGate equipment at the cable headend. In turn, the headend equipment supports a connection to the Internet.\footnote{Myers Group Report at 31.}

19. Looking to the future, both the cable and DBS platforms offer substantial downstream bandwidth, and this bandwidth is currently configured almost entirely for downstream, point-to-multipoint video transmissions. Much of the cable systems’ capacity is now utilized in the analog mode, but the transition to digital MPEG transmissions has clearly begun. The DBS services are all-digital. With regard to upstream capacity, cable operators are increasingly offering high speed Internet connections via cable modems in addition to their substantial downstream video capacity. DBS services currently offer hybrid Internet services, with a high-speed downstream connection via satellite and a dialup telephone connection for upstream transmissions. Both DirecTV and Echostar have announced plans for two-way Internet service via satellite, but it is not yet clear how competitive to cable the satellite service will be.\footnote{We note that most satellite service currently utilizes a narrowband return path. However, in April 2000, StarBand Inc., began offering two-way, satellite Internet service in conjunction with Gilat Satellite Networks, Microsoft Corp., and Echostar Communications. The most basic, unlimited access service is currently offered at $69.95. \textit{See} http://www.starband.com (visited Nov. 21, 2000).} Current satellite systems use satellites in the geostationary orbit, causing users to experience propagation delays that may constrain services with a high degree of rapid interaction. Although there are likely to be some geographic areas in which satellite is, in fact, the only viable high speed option, it is important to keep in mind that, in most areas, there will be at least two rival satellite high speed services. High-speed Internet service is also available over wireline telephone plant using DSL technology. However, our impression is that, at present, DSL delivery of MVPD services is at an early stage of its development.\footnote{See http://technews.netscape.com/news/0-1004-200-2652456.html, http://www8.zdnet.com/intweek/stories/news/0,4164,311162,00.html.} In particular, the DSL family of technologies does not support sufficient downstream bandwidth to provide the full range of expected ITV services, including multi-channel high quality video transmission. Digital terrestrial television licensees have sufficient capacity to transmit ITV enhancements as part of their 19 Mbps digital datastream, but have no integrated upstream capacity. Furthermore, this downstream capacity appears to be insignificant when compared to the capacity of a multichannel cable system that services customers through nodes serving 500-2,000 subscribers. However, the grouping of television licensees and their digital data streams may result in new MVPD platforms.

20. We seek comment on the technical description of distribution platform functionality outlined in the previous paragraph and in particular on whether the current lack of a satisfactory upstream channel for DBS and digital terrestrial television and the bandwidth constraints of DSL leaves the cable platform with significant advantages in providing ITV services. Among other things, we ask commenters to assess the technical efficacy and marketing practicality of providing ITV services over a hybrid platform, \textit{e.g.}, cable, DBS or broadcast television plus DSL. Additionally, we ask whether any other platforms, \textit{e.g.}, terrestrial microwave (such as multichannel multipoint distribution systems), are likely to be viable competitive distribution platforms for ITV services. In other words, we seek comment on whether there are ways that an unaffiliated ITV service provider could bypass the cable system plant and provide equivalent quality ITV services to those provided by an affiliated ITV provider using cable plant. We also seek comment on whether the promulgation of rules is appropriate at this time. Would Commission rules promote or restrict capital investments in ITV services? If Commission action is not taken, will the ITV services market suffer? How would inaction impact consumers? On the other hand, is the ITV services market too nascent for Commission action? Would Commission rules, rather than
promote diversity in ITV services, instead stifle innovation and development of new ITV services?

III. NONDISCRIMINATION

21. In this section we consider how a nondiscrimination rule might be made operational and seek comment on how a nondiscrimination provision might be implemented. Our understanding of the current state of technology suggests that the cable platform is likely to be the best suited for delivering ITV services, particularly high speed services, for at least the near term. For that reason, our exploration of possible nondiscrimination provisions draws heavily on the cable regulatory and market environment. For the purpose of this exercise, we adopt the hypothetical assumption that cable operators are likely to have the incentive and the ability to favor affiliated ITV service providers over non-affiliated ones. As noted above, we have drawn on the framework of analysis that led to our regulation of cable operators’ provision and distribution of video content. Pursuant to statute, the Commission has adopted various rules addressing the conduct of cable operators vis-à-vis unaffiliated video programming networks, based on the finding that cable operators have market power in the local MVPD market. Moreover, the Commission’s statutorily mandated program access regulations generally apply to vertically-integrated cable video programming networks, i.e., satellite cable video programming networks in which a cable operator has an attributable interest. Along these lines, we seek comment on whether any incentives for anticompetitive behavior that cable operators might have with respect to ITV service providers are, if not created, then strengthened substantially by the vertical linkage between content and distribution capacity. We seek comment on whether it is appropriate to apply to ITV service provision the same reasoning used by Congress to establish regulations on access to satellite cable programming services. However, it is important to note that we are not seeking comment on mandatory access to cable capacity for ITV service providers. We envision that any nondiscrimination rule would not be triggered unless a cable operator chose to offer ITV services directly or through an affiliate.

22. As with traditional MVPD services, we see the geographic market for ITV services as local and each cable operator having market power in the distribution of ITV services in its respective local service areas. We seek comment on this analysis. In particular, is it correct to assume that the incentive for anticompetitive behavior with respect to unaffiliated ITV service providers exists only where there is vertical integration of an ITV service provider and a distributor, i.e., a cable operator, with market power in local distribution? Alternatively, does market power in high speed distribution create incentives for cable operators to forge agreements with one or a limited number of ITV service providers, even without actual ownership of an ITV service provider, and deny the rest access to cable subscribers? If so, what is the potential harm to subscribers from such behavior?

23. If the geographic market for ITV services is local, should only regulated cable operators be covered by any ITV anti-discrimination rules? Where a local cable system is subject to effective competition, that cable system is no longer regulated under the cable rate rules. If there is a finding that a local cable system is subject to effective competition, should the cable system be deemed to not have market power in the provision of ITV services and therefore not subject to anti-discrimination rules? We note that there may be a finding of effective competition in cable service areas where sufficient numbers of people subscribe to DBS. If it were decided that DBS may not provide competitive ITV services, should an exception to any ITV anti-discrimination rules be limited only to situations where the cable

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18 See, e.g., 47 C.F.R. § 76.504 (prohibiting cable operators from devoting more than 40 percent of their first 75 channels to affiliated content); 47 C.F.R. § 76.1300 et seq. (“Regulation of Carriage Agreements,” prohibiting various cable operator practices, including requiring grant of a financial interest in a channel or an exclusive distribution agreement in exchange for carriage).

19 47 C.F.R § 76.905.
operator is subject to effective competition by a cable overbuilder? Are the policies underlying the effective competition rules relevant here? Are there any relevant differences between MVPD services and ITV services that would merit a different test for effective competition here? Should the Commission consider adopting a special test for ITV services to determine whether a cable operator does not have local market power?

24. We seek comment on whether, if it were determined that operators of cable systems (or another delivery platform) had the incentive and ability to behave anti-competitively vis-a-vis ITV service providers, we should consider prohibiting those operators from discriminating between affiliated and unaffiliated ITV service providers. Under such a regime, such operators might be required to provide the same features and functions to unaffiliated ITV service providers as they do to affiliated ITV service providers, and on the same terms and conditions. However, these operators would not be required to provide features and functions to unaffiliated providers that they did not provide to their affiliates (although they may). We seek comment on whether we should consider adopting the general principle of nondiscrimination, as well as on how to apply it to provision of the various building blocks of ITV service that we have identified above. We are particularly interested in suggested procedures for evaluating claims by ITV service providers that a cable operator is charging a discriminatory price for access to cable facilities. Recognizing that the cable operator might not be furnishing facilities to its affiliated ITV provider at a market rate, what benchmarks are available for evaluating discrimination claims?

25. We also seek comment on whether small cable operators should be treated differently under any anti-discrimination rules. Would anti-discrimination rules place burdens on small cable operators such that they should merit an exception to the rules? Should alternative anti-discrimination rules be designed for small cable operators?

26. The Video Pipeline (MPEG Video Stream). ITV service providers may need access to the distributor’s video pipeline to transmit ATVEF triggers and ITV enhancement content, or to the subscriber’s ITV-STB for storage of content. In order to understand the potential for anticompetitive behavior, it is necessary to examine in some detail the nature of the ITV enhancements that might be transmitted in the cable operator’s (or other MVPD’s) video pipeline. One scenario involves a specific video signal with which ITV content is to be associated. It would be necessary for ATVEF triggers to be transmitted in the video pipeline along with the video signal. For the ITV enhancements to be precisely synchronized with the video signal and thereby provide a seamless and attractive ITV service, it is necessary for the ITV service provider and the video programming network to agree on associating the video signal transmission with the transmission of ITV enhancements. Hence, one type of discriminatory behavior might be for a cable operator to agree to carry in its video pipeline the ITV enhancements of an affiliated video signal but not those of an unaffiliated video signal. Another type of discriminatory behavior might occur when both an affiliated and an unaffiliated ITV provider have agreed to establish a relationship. In that case the cable operator might carry the ATVEF triggers and enhancements of the affiliated ITV service provider but not those of the unaffiliated provider. We seek comment on this description of how ITV enhancements might be delivered over cable and on how to craft a nondiscrimination rule. For example, if both affiliated and unaffiliated ITV providers have contracted with a video signal provider to enhance its programming, it would be possible to require the cable

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20 See 47 C.F.R. § 76.901 (“A small cable operator is an operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent 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. For purposes of this definition, an operator shall be deemed affiliated with another entity if that entity holds a 20 percent or greater equity interest (not including truly passive investment) in the operator or exercises de jure or de facto control over the operator.”).
operator to provide the same amount of “enhancement bandwidth” to both.\textsuperscript{21} In the case of an unaffiliated ITV provider partnering with a video programming network it might be feasible to look at the ratio of ITV enhancement content bandwidth to video signal bandwidth that the cable operator offers (with respect to other video signals) to affiliated ITV service providers and to require that the cable operator offer the same capacity ratio to unaffiliated ITV service providers. Under this regime, however, a cable operator willing to restrict itself to a certain level of ITV enhancement service could also restrict unaffiliated ITV service providers to that level. Hence we ask whether there is a useful standard available based on the behavior of other cable operators (\textit{e.g.,} some sort of “national best practices” criterion). Another approach would be to consider requiring the cable operator to declare the total bandwidth that it is willing to provide for ITV enhancements and then to impose a requirement that this operator-selected total bandwidth be allocated in nondiscriminatory fashion among affiliated and nonaffiliated ITV service providers. We seek comment on these nondiscrimination approaches.

27. A number of cable rules already require cable operators to carry certain types of programming. Cable operators are required to retransmit local commercial television broadcast signals pursuant to our must-carry rules (which require local broadcasters to choose every three years between must carry and retransmission consent status), and to the extent that ITV services are deemed to be “program related,” cable operators might be required to carry those services as well. Cable operators are required to offer up to 15 percent of their capacity to unaffiliated providers of video programming, pursuant to our leased access rules.\textsuperscript{22} Those rules provide a formula for calculating the price that the cable operator may charge for leased access channels. In addition, our channel occupancy rules require that no more than 40 percent of a cable operator’s first 75 channels of capacity by affiliated video programming networks. However, the channel occupancy rules leave to the cable operator discretion as to which unaffiliated services it chooses to carry.

28. Commenters are specifically asked to address the situation in which a cable operator is under no obligation to carry a video programming network’s video signal. As discussed in Section II above, non-broadcast video programming networks have no carriage rights under our must carry rules. Suppose that a cable operator were transmitting the content of an affiliated ITV provider and that the affiliate’s ITV enhancement content occupied bandwidth equal to five percent of the associated video signal. One method of making a nondiscrimination requirement operational would be to require that the cable operator offer an unaffiliated provider ITV enhancement content bandwidth equal to five percent of the video signal with which the unaffiliated provider’s content is associated, \textit{i.e.,} prohibit agreements to carry only the video signal? What if, at the margin, the cable operator did not have available capacity to offer that five percent? Would the public interest be better served by the unaffiliated service appearing on the cable system without the ITV enhancements or not appearing on the system at all? Alternatively, what if adding an additional service provider’s ITV enhancements could be accomplished at the cost of slightly degrading the quality of the video signal with which it is associated? We also ask whether it is possible to distinguish clearly between the ATVEF triggers and other ITV enhancement content transmitted via the MPEG data stream. If so, commenters should address whether the Commission should consider adopting a narrower nondiscrimination requirement, requiring that cable operators devote some fixed minimum capacity per unaffiliated video channel to transmitting the ATVEF triggers associated with that channel, but not face an obligation regarding other ITV enhancement content.

29. We also seek comment on how we should treat ITV services that are not “program

\textsuperscript{21} Of course, one of the ITV service providers could be the video programming network itself. For example, Oxygen could provide ITV enhancements to its network, but AOLTV might also have an agreement with Oxygen for ITV enhancements.

\textsuperscript{22} \textit{See 47 C.F.R. §§ 76.56 et seq. and §§ 76.970 et seq.}
related” to the primary video stream. As discussed in section I above, under the must carry rules, a cable operator is not required to carry material that is not program related. How should we treat ITV services that are not associated with any particular video signal, nor need to be synchronized with any particular video signal? Should a nondiscrimination principle require cable operators to transmit these services for unaffiliated ITV providers? Does the answer depend on whether the cable operator is transmitting a similar ITV service? If nondiscrimination rules were to apply to material that it not program related, a cable operator would not be required to carry this material for free if the cable operator carries and charges affiliated ITV content; thus, a nondiscrimination rule would not appear to contradict the must carry rules. If the content described in this paragraph is not transmitted via the video pipeline, what other transmission mechanisms are available to these providers?

30. In summary, then, we seek comment on possible scenarios for nondiscrimination rules, including the extent of, and the terms and conditions for, access by unaffiliated content providers to the video pipeline of a cable operator. Commenters should also address the question of how to decide on the amount of cable video capacity to be reserved for unaffiliated content providers pursuant to a nondiscrimination rule (in particular, whether the must-carry, leased access, and channel occupancy rules set aside sufficient capacity) and how should it be divided among those unaffiliated providers.

31. Commenters should also address how a nondiscrimination rule might apply to existing contracts between cable operators and ITV service providers to the extent that those contracts are in violation of newly promulgated rules. Would the public policy objectives that support the promulgation of new rules also support a requirement that preexisting exclusive contracts be preempted? Should the Commission grandfather contracts entered into before a certain date? Should that date be the date that this Notice is released?

32. The IP Connection. ITV providers will need to make use of an IP connection in addition to the video pipeline. The IP connection may be required for transmitting subscriber requests upstream as well as for downstream transmission of content requested by subscribers. The downstream transmissions could include streaming video. For this reason, it appears likely that in the future ITV service will require a high speed IP connection. We seek comment on what, if any, regulations are needed to ensure that cable operators vertically integrated with ITV service providers do not discriminate against unaffiliated ITV service providers with respect to use of the high speed IP connection. In general terms, discrimination could mean two things. First, with respect to the upstream requests sent by subscribers in response to ATVEF triggers, the cable operator could take actions to constrain the “quality” (e.g., transmission speed or reliability) of transmissions on behalf of unaffiliated ITV service providers versus transmissions on behalf of an affiliated ITV service provider. Second, the cable operator could take actions to reduce the “quality” of downstream transmissions on behalf of unaffiliated ITV service providers versus transmissions on behalf of affiliated ITV service providers.

33. Although the Commission has an inquiry pending on the subject of cable open access, the issues raised here with regard to nondiscrimination in the provision of ITV services exist independently of the issues raised in that proceeding. Any regulatory requirements we might consider adopting with respect to ITV services would be triggered by the voluntary decision by a cable operator, or cable operator’s ITV affiliate, to provide its own ITV services. Moreover, any incentives that a cable

23 Current versions of ITV service, such as the first generation AOLTV service, do not use a high-speed connection. AOLTV now uses a proprietary version of a dial-up connection. WebTV uses a standard dial-up connection, and WorldGate uses the proprietary upstream channel that cable operators have available for pay-per-view ordering.

24 Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, Notice of Inquiry, FCC 00-355 (rel. Sept. 28, 2000).
operator might have to discriminate against unaffiliated ITV service providers might be present regardless of whether unaffiliated ISPs are utilizing the cable operator’s facilities.

34. With the foregoing in mind, we seek comment on the following questions. With respect to high speed IP connections provided via cable facilities, should we consider a requirement that all upstream requests sent by subscribers in response to ATVEF triggers be provided the same quality of service, regardless of whether the request is transmitted on behalf of an affiliated or an unaffiliated ITV service provider? Should we consider imposing the same requirement on downstream IP transmissions of ITV enhancement content? How could such provisions be implemented in the case of a cable-owned ISP provider that wishes to offer subscribers a choice among multiple levels of service quality? Would it be necessary to apply whatever requirements might be adopted to any unaffiliated ISPs that might be providing service over cable facilities? Is it likely that affiliated ITV service providers will employ a proprietary, special purpose high speed Internet connection as part of their ITV service? Would nondiscrimination regulations need to take specific account of this configuration? How (if at all) does the answer to this question depend on what general purpose ISP service is offered via the cable system?

35. **Customer Premises Equipment.** Customer premises equipment is another area where cable operators could discriminate against unaffiliated ITV service providers. Consider the case of a cable subscriber with a STB leased from the cable operator. The subscriber presumably is leasing the STB in order to receive scrambled programming. If the cable system is analog only, then the subscriber has no choice but to lease the STB. If the cable system is digital, then our navigation devices rules require the operator to provide a point of deployment or "POD" module to subscribers who have purchased navigation devices at retail. Under the rules, the POD provides conditional access functions and must be able to interface with commercially available "navigation devices" (e.g., STBs) that perform all other navigation functions. Commercially available navigation devices (other than modems) have yet to appear in the market, but once they do, subscribers to digital cable systems will have the choice of purchasing a STB at retail or leasing one from the cable operator. Cable operators may build ITV capability into their STBs, but we assume for this example that unaffiliated ITV services do not have access to the cable STB. Thus, if the subscriber wishes to subscribe to an unaffiliated ITV service, (s)he would need a separate ITV-STB. In order to access the unaffiliated ITV service, the subscriber would need to connect the ITV-STB to the cable STB provided by the cable operator.  

36. We seek comment on whether the cable operator might have the incentive and the ability, even if it were passing unaffiliated ITV enhancement content down the cable, to block that content in the cable STB and hence to prevent it from reaching the ITV-STB. Should we prohibit cable operators from configuring their STBs to limit access to unaffiliated ITV enhancement content? How much of a

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25 We note that this requirement would be analogous to the must carry requirement that a cable operator may not materially degrade a broadcast station’s video signal when the cable operator retransmits the signal to the cable subscriber. See 47 U.S.C. 534(b)(4)(A) (“[T]he quality of signal processing and carriage provided by a cable system for the carriage of local commercial television stations will be no less than that provided by the system for carriage of any other type of signal.”).


27 47 C.F.R. § 76.1204(a)(1). Conditional access ensures that subscribers receive only the services that they are authorized to receive.

28 For analog video programming sent over cable systems, the ITV enhancement content would likely be sent via the vertical blanking interval of the programming channel.
disincentive would it be to potential ITV subscribers if they must purchase or lease a second STB, in addition to the cable STB, in order to access an unaffiliated ITV service provider? With respect to the situation where a cable subscriber has purchased a STB at retail but needs a POD from the cable operator, we ask whether the cable operator has the incentive and ability to utilize the POD module to block transmission of ITV enhancements to unaffiliated ITV service providers, given that the cable operator has agreed to transmit those enhancements down the cable from the headend. We also seek comment on the relationship of such activities to our navigation device rules.29

37. Affiliated Content. Our discussion of nondiscrimination to this point has focused on the cable operator’s distribution platform and how it might be used to discriminate against unaffiliated ITV providers. We note that vertically-integrated cable video programming networks are currently subject to program access regulations that, in general, require them to offer their “satellite cable programming” channels to rival distribution platforms on nondiscriminatory terms. The satellite cable programming channels correspond to the video signals that comprise part of the ITV services discussed herein. Hence we also wish to examine the possibility that the affiliated ITV provider has the incentive and the ability to favor affiliated video programming in a way that damages rival providers of ITV content. In particular, we seek comment on whether ITV providers affiliated with cable operators are likely to favor video programming channels that the cable operator owns for inclusion in the affiliated ITV provider’s service. We also seek comment on options available to unaffiliated video programming networks who are not included in the affiliated provider’s ITV service, but who wish to provide subscribers with ITV services. On the one hand, it would appear that entry into ITV service provision is relatively easy. On the other hand, an ITV service that did not include the most popular programming channels might not be attractive enough to compete with the cable-affiliated ITV service. We therefore ask commenters who conclude that cable operators could act anticompetitively with respect to ITV service providers to comment on whether affiliated ITV service providers should be subject to any regulation with respect to carriage of ITV enhancements provided by unaffiliated service providers. Additionally, we inquire whether cable operators that also own ITV service providers and programming networks should have any content supply obligations beyond making their video signals (programming networks) available to rival distribution platforms. These requirements could include, for example, the obligation to supply their associated ITV content to unaffiliated ITV service providers or to permit unaffiliated ITV service providers to furnish ITV content in association with the cable operator’s video signals. In other words, commenters should address the question of whether vertically integrated cable video programming networks should be subject to regulations regarding the supply of both their video signal and their ITV enhancements to rival ITV providers on nondiscriminatory terms. We note that the exclusivity provisions of the program access rules requiring vertically integrated video programming networks to provide their content to rival distribution platforms is scheduled to sunset in 2002 unless the Commission undertakes a proceeding in 2001 to extend them. Should any requirement to offer ITV content to rivals be subject to the same sunset provisions as the requirement to offer the video signal?

38. Summary. Recognizing the complex nature of ITV services, we seek comment on the predicate for regulation—market power possessed by the owner of a distribution platform vertically integrated into ITV services. We have attempted to define ITV services in general terms and we do not intend to limit our analysis to any one particular ITV implementation technology. Hence, while we have framed our discussion primarily with reference to the ATVEF standards, we mean it to apply not only to ATVEF but to other protocols for implementing ITV service that may come into being. Also, in addition to comments on the specific ideas that we have put forward, we also seek comment on whether a sunset

29 We note that the Commission is currently engaged in a proceeding to review the effectiveness of the navigation devices rules and to consider whether any changes are necessary. Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket No. 97-80, Further Notice of Proposed Rulemaking and Declaratory Ruling, FCC 00-341 (rel. Sept. 18, 2000).
provision and/or periodic review should be part of any regulatory regime that we consider.

**IV. ENFORCEMENT**

39. We seek comment on alternative methods for enforcement of any nondiscrimination rules that we might consider adopting. One approach would be for ITV providers and cable operators to rely on private enforcement arrangements, subject to judicial review. A second option is for aggrieved parties to use the Commission’s normal complaint procedures in order to seek relief.

40. Under the first method, our understanding of how the ITV services market is developing suggests that some ITV service providers (e.g., EPG service providers) will negotiate directly with cable operators for carriage. Other ITV service providers will contract with video programming networks to associate their ITV enhancements with particular video channels, and the video programming networks will then contract with cable operators for carriage of the video signal(s) plus ITV enhancements. We could propose that, whenever a cable operator enters into a contract with an unaffiliated ITV service provider or with a video programmer for carriage of content that includes the ITV enhancement content of an unaffiliated ITV service provider, the contract parties agree that an unaffiliated ITV services provider has the right to have an independent auditor determine whether the terms, conditions, prices or the performance of the contract by the cable operator are discriminatory. If the results of the audit demonstrated discrimination, the aggrieved party would be entitled to seek judicial relief, including equitable relief or monetary damages. In order to assist the auditor in determining whether discrimination had occurred, the cable operator would be required to retain all business practice and technical performance records that are required to conduct the relevant audits.

41. Under the second method, if a cable operator and an ITV service provider disagree on whether the cable operator has discriminated against the ITV service provider in violation of our rules, the parties could use the Commission’s ordinary complaint procedures to resolve the dispute. While we believe that it is in the public interest for interested parties to make diligent efforts to resolve disputes through negotiations, voluntary arbitration, or any other reasonable procedure, should such efforts fail, the Commission, of course, retains authority to enforce its rules, after gathering the necessary information from the parties. If the Commission makes a finding of discrimination, in addition to ordering that the discriminatory practices cease, the Commission could assess a forfeiture pursuant to section 503 of the Act.

42. We seek comment on these enforcement options. What are the practical and legal implications of these alternatives? What public policy interests are involved?

**V. JURISDICTION**

43. We seek comment on whether Commission protection of ITV services would be within our statutory authority. In this regard, we seek to determine the proper classification of ITV services. We also seek to determine whether the Commission has explicit statutory authority, or may exercise ancillary jurisdiction, to adopt rules protecting the development of ITV services. In addition, we seek comment on the constitutional implications, if any, of adopting any regulations that might require nondiscriminatory treatment of unaffiliated ITV service providers.

A. Legal Classification

44. We seek comment on the proper legal classification of ITV services. We note that the Commission is seeking similar comments in connection with the pending Notice of Inquiry on High-
speed Internet Access. Specifically, should ITV services be regulated as a cable service subject to Title VI of the Act, as a telecommunications service subject to Title II of the Act, as an advanced telecommunications capability under section 706 of the Telecommunications Act of 1996, as an information service under Title I of the Act, or as a hybrid service subject to multiple provisions of the Act?

45. First, we seek comment as to whether ITV services are subject to Title VI of the Communications Act. Do ITV services fall within the statutory definition of “cable services”?31 “Cable service” is defined under the Act as “(A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service and (B) subscriber interaction, if any which is required for the selection or use of such video programming or other programming service.”32 The terms “or use” were added to the definition in the 1996 Act. According to the legislative history, the amended definition was intended “to reflect the evolution of cable to include interactive services such as game channels and information services made available to subscribers by the cable operator, as well as enhanced services.”33 We seek comment on whether the addition of the terms “or use” expanded the category of services to cover ITV services within the statutory definition of “cable services.”34 To the extent the 1996 amendment did not sufficiently expand the definition, does ITV services constitute “other programming service” as defined in the Act?35 We also invite comment on the implications of classifying ITV services as “cable services” and how various regulatory provisions might apply if ITV services were considered “cable services.” For example, section 622 of the Act gives localities the authority to charge a franchise fee of no more than five percent of the cable operator's gross revenues.36 How would this requirement apply were the Commission to consider ITV services a "cable service"? Similarly, local franchising authorities have the power to establish requirements for facilities and equipment, and to establish and enforce customer service requirements. Cable operators also are subject to various requirements relating to subscriber privacy. We ask for comment on how these and any other pertinent regulatory provisions

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30 In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, Notice of Inquiry, FCC 00-355, ¶¶ 15-24 (Sept. 28, 2000).

31 The United States District Court for the Eastern District of Virginia ruled that a high speed interactive cable modem service – which includes among other things broadband connectivity between a cable operator and a subscriber, access to the Internet, interactive content and programming, menus, navigational aids and access to newsgroups – falls under the statutory definition of “cable service.” MediaOne Group, Inc. v. County of Henrico, 97 F.Supp.2d 712, 715 (E.D.Va 2000), appeal pending, 4th Cir. No. 00-1680; but see, AT&T Corporation v. City of Portland, 216 F.3d 871, 876-77 (9th Cir. 2000)(internet access is interactive and individual beyond the “subscriber interaction” contemplated by the statute and therefore does not fit within the definition of “cable service”).


33 S. Conf. Rep. No. 230, 104th Cong., 2d Sess. 169 (1996). The legislative history further provides that the amendment “is not intended to affect Federal or State regulation of telecommunications service offered through cable system facilities, or to cause dial-up access to information services over telephone lines to be classified as a cable service.” Id.

34 But see, Gulf Power Company v. FCC, 208 F.3d 1263, 1276-77 (11th Cir. 2000)(inclusion of the words “in use” was a minor amendment in both language and intent and did not justify a major statutory shift to include all interactive services, video and non-video, within the scope of the ‘cable service’ definition).

35 The Act defines “other programming service” as “information that a cable operator makes available to all subscribers generally.”47 U.S.C. § 522(14). But see, Gulf Power Company, 208 F.3d at 1277 (Congress could not have intended the term “other programming service” to cover Internet service provided by cable companies).

might apply if ITV services were considered a "cable service."

46. Second, we seek comment as to whether the existence of the ITV enhancements component renders ITV services a telecommunications service subject to Title II of the Act. We note that, under the Act, “telecommunications” means “the transmission, between or among points specified by the user, of information of the users choosing, without change in the form or content of the information as sent and received.” Does the ITV enhancements component satisfy the statutory definition of “telecommunications”? Does the answer depend on the nature of the specific ITV enhancement component provided, and, if so, how can we distinguish those components that are and are not “telecommunications.” If we assume that an ITV enhancements component is, in fact, “telecommunications,” does it follow that the cable operator that offers these ITV services is providing a “telecommunications service”? Under the Act, “telecommunications service” means “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.” To the extent that the cable operator is providing a telecommunications service, does this make it a "telecommunications carrier" or a "common carrier," or both? If a cable operator provides telecommunications services, does that mean that it is also providing common carrier services? We note that the Act imposes a wide variety of obligations on telecommunications carriers, including requirements relating to interconnection, universal service contributions, disabilities access, and privacy of subscriber information. How would those statutory provisions, and the Commission's implementing regulations, apply to cable operators that provide ITV services?

47. Third, we seek comment on whether ITV services are advanced telecommunications capabilities. The Commission has interpreted advanced telecommunications capability under section 706 of the Telecommunications Act of 1996 as "high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications using any technology" which has "the capability of supporting in both the provider-to-customer (downstream) and the customer-to-provider (upstream) directions, a speed in excess of 200 kilobits per second in the last mile." Do ITV services fall within this definition? To the extent that ITV


39 Under the Act, a telecommunications carrier "shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services ...." 47 U.S.C. § 153(44). The Act defines a "common carrier" as "any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy," other than a person engaged in radio broadcasting. 47 U.S.C. § 153(10). See also 47 C.F.R. § 21.2 (defining "communication common carrier" as "[a]ny person engaged in rendering communication service for hire to the public").

40 See, e.g., 47 U.S.C. § 251(a) (direct or indirect interconnection); 47 U.S.C. § 254(d) (contributions to the universal service fund); 47 U.S.C. § 255 (telecommunications services for hearing-impaired and speech-impaired individuals); 47 U.S.C. § 222 (privacy). See also 47 U.S.C. § 1001 et seq. (Communications Assistance for Law Enforcement Act). We note that telecommunications carriers also are subject to requirements derived from state law, which may include certification, tariffing, reporting requirements, and the payment of regulatory fees.


42 Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, Second Report, FCC 00-290 at ¶¶ 10-11 (rel. Aug. 21, 2000)(Second 706 Report). Advanced services provide various functions, such as allowing businesses and their (continued….)
services constitute advanced telecommunications capabilities pursuant to section 706 of the Telecommunications Act, how does that classification affect the Commission's authority to forbear from regulation under section 10 of the Act?  

48. Fourth, we invite comment on whether ITV services constitute an information service. Under the Act, “information service” is defined as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing.” We note that the Commission has classified the end user services commonly provided by dial-up ISPs as information services. Do ITV services fit within this definition? We seek comment on the implications, if any, of classifying ITV services as information services under the Act. We note that information service providers are not subject to regulation under Title II as common carriers; the fact that information service is provided "via telecommunications" does not alter that conclusion.

49. Fifth, we invite comment on whether ITV services are distinct from the classifications identified above and should more appropriately be treated as a hybrid service subject to multiple provisions of the Act. Assuming this is the case, which of the various provisions of the Act would apply to ITV services? By contrast, are the three building blocks (see Section II, supra) of ITV services severable for purposes of legal classification and regulatory treatment? In addition, should the ITV enhancements be classified and regulated differently than the video signal? If so, under what regulatory scheme would the ITV enhancements be regulated? Are ITV enhancements themselves comprised of subparts that should be regulated under an altogether different classification? Is there any reason to apply a uniform regulatory framework to the ITV services and building blocks rather than treat each service and building block differently?

50. Finally, we seek comment on the impact, if any, that a decision regarding the classification of cable modem service and/or the cable modem platform will have on determining the

(Continued from previous page) customers quickly to exchange data over long distances, doctors to provide realtime diagnosis to patients in remote areas, people with hearing and speech disabilities to communicate through video links using sign language, teachers to create interactive multimedia learning environments for their students, and individuals to have faster, more robust access to the Internet.  


46 See Universal Service Report, 13 FCC Rcd at 11508, 11511, 11516, 11520, ¶¶ 13, 21, 33, 39. Following passage of the 1996 Act, the Commission determined that Congress intended the categories of "telecommunications service" and "information service" under the Act to be mutually exclusive, and to parallel the definitions of "basic service" and "enhanced service" developed in the Commission's Computer II proceeding, as well as the Modification of Final Judgment. In Computer II, the Commission found that enhanced service providers were not "common carriers" under the Act and therefore were not subject to regulation under Title II of the Act. Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision, 77 FCC2d 384, 430-34, ¶¶ 120-29 (1980).
proper classification of ITV services in the instant proceeding.\footnote{47}

**B. Statutory Authority**

51. We seek comment on the jurisdictional basis for Commission rules in this area. Does the Commission have explicit authority to adopt any requirements under Title II or Title VI? For example, assuming ITV services are classified as “cable services” under Title VI, does section 612(g) of the Act\footnote{48} provide explicit authority for the Commission to adopt rules? Has the 70/70 threshold requirement of section 612(g) been reached?\footnote{49} Alternatively, is this a case in which the Commission should exercise its ancillary jurisdiction under Title I of the Act? In this regard, we ask commenters to identify provisions of the Act that may provide a basis for the Commission to exercise its ancillary authority.

52. We also ask commenters to identify any provisions of the Communications Act that may impact the Commission’s ability to adopt ITV services rules. For example, assuming ITV services are classified as “cable services,” what impact, if any would the mandatory carriage provisions under sections 614 and 615 of the Act\footnote{50} have on the Commission’s ability to adopt ITV services nondiscrimination rules? Are ITV services integrally related to the particular program received by the viewer so that they should be considered “program-related” within the meaning of section 614(b)(3) and 615(g)(1)?\footnote{51} Are ITV services “non-program related material” within the meaning of sections 614(b)(3) and 615(g)(1) and therefore may be carried at the discretion of the cable operator? Would section 336 of the Act, which governs ancillary and supplementary services, impact the Commission’s ability to adopt such regulations?\footnote{52}

53. We also seek comment on the constitutional implications, if any, of adopting regulations that would require nondiscriminatory treatment of unaffiliated ITV providers. In order that we may develop a full and complete record on this issue, we seek comment on a number of questions relating to our analysis. We seek comment on any burdens that would be placed upon cable operators as a result of the adoption of ITV services nondiscrimination rules. Are there capacity restraints limiting cable operators’ ability to accommodate multiple ITV service providers? How, if at all, will ITV services nondiscrimination rules serve the three governmental interests identified by the Supreme Court in *Turner Broadcasting System, Inc. v. U.S.*\footnote{53} What would be the harms sought to be alleviated through the

\footnote{47} The issue of the proper classification of cable modem service and/or the cable modem platform is currently pending in *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, Notice of Inquiry, FCC 00-355 (rel. Sept. 28, 2000).

\footnote{48} 47 U.S.C. § 532(g).

\footnote{49} See H.R. Rep. 94-34 (when the 70/70 threshold requirement is met, “the FCC is granted authority to promulgate any additional rules necessary to assure that leased access channels provide as wide as possible a diversity of information sources to the public. Along these lines, the Commission may develop additional procedures for the resolution of disputes between cable operators and unaffiliated programmers, and may provide rules or new standards for the establishment of rates, terms and conditions of access for such programmers.”)

\footnote{50} 47 U.S.C. §§ 534, 535.

\footnote{51} 47 U.S.C. §§ 534(b)(3), 535(g)(1).

\footnote{52} See 47 U.S.C. § 336(b)(3).

adoption of the ITV nondiscrimination regulations and how would the adoption of such rules alleviate the identified harms? Are there any alternatives available to adopting nondiscrimination regulations that would achieve the same goals while using less restrictive means?

VI. ADMINISTRATIVE MATTERS

A. Ex Parte Rules

54. This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the rules. 47 C.F.R. 1.1206(b), as revised. Ex parte presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral ex parte presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. See 47 C.F.R. 1.1206(b)(2), as revised. Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

B. Filing of Comments and Reply Comments

55. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments in response to this Notice on or before March 19, 2001 and reply comments on or before April 20, 2001. Comments may be filed using the Commission's Electronic Comment Filing System ("ECFS") or by filing paper copies. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filling instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form<your e-mail address." A sample form and directions will be sent in reply.

56. Parties who choose to file by paper must file an original and four copies of each filing. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. If more than one docket or rulemaking number appears in the caption of this proceeding commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554. The Cable Services Bureau contact for this proceeding is Royce Dickens.

57. Parties who choose to file by paper should also submit their comments on diskette. Parties should submit diskettes to Royce Dickens, Cable Services Bureau, 445 12th Street S.W., Room (Continued from previous page) (affiliated programmers, that this could make it more difficult for programmers not affiliated with cable to secure cable system carriage, and that there is a "substantial governmental and First Amendment interest in promoting a diversity of views provided through multiple technology media").

3A729, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible form using MS DOS 5.0 and Microsoft Word, or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the party's name, proceeding (including the lead docket number in this case CS Docket No. 01-7), type of pleading (comments or reply comments), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, referable in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, 1231 20th Street, N.W., Washington, D.C. 20036.

VII. ORDERING CLAUSES

58. **IT IS ORDERED** that, pursuant to Sections 1, 4(i) and (j), 201-202, 403 and 601 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i) and (j), 201-202, 403, 521, and section 706 of the Telecommunications Act of 1996, **COMMENT IS HEREBY SOUGHT** on the analysis, questions, discussions, and statements of issues in this Notice of Inquiry.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary
In re Nondiscrimination in the Distribution of Interactive Television Services Over Cable

Dissenting Statement of Commissioner Harold W. Furchtgott-Roth

I have voted against the adoption of this item for two reasons.

First, I believe it is much too premature for the Commission to address the topic of cable interactive television services. While the item is framed as a Notice of Inquiry (“Notice”), it is no less damaging to raise the specter of government regulation, at this point in time, for services that are still in their gestational period. Also, by the mere adoption of this item, the Commission communicates to the public that something has gone awry in the marketplace introduction of cable interactive services—something serious enough to warrant government intervention. This simply is not the case and there is no objective evidence to prove otherwise.

Second, I have serious reservations that the Commission has the legal authority to address cable interactive services. Section 624(f) of the Act clearly states that: “Any Federal agency, State, or franchising authority may not impose requirements regarding the provision or content of cable services, except as expressly provided in this title.” As the Act is void of an express statutory provision regarding ITV services over cable systems, it is arguable that the Commission is prohibited from commencing a rulemaking proceeding on the subject.

In sum, the Commission should have stayed its hand and not issued the Notice. Cable interactive services, like all new innovative technologies, should be allowed to mature free from unnecessary government involvement.
Separate Statement of Commissioner Gloria Tristani

In the Matter of Nondiscrimination in the Distribution of Interactive Television Services over Cable, CS Docket No. 01-7.

I support our action to begin addressing the issues arising in the new world of interactive television. I regret however, that we have undertaken a Notice of Inquiry rather than a Notice of Proposed Rulemaking. The world of communications is constantly and rapidly changing. This Commission must move promptly to ascertain the public interest in nascent industries to ensure appropriate measures are timely vetted and resolved.