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August 3, 1998

*By Hand Delivery*

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Room 222  
Washington, DC 20554

Re: Additional and Corrected Copies of Comments Filed July 31, 1998 for  
Gemstar International Group Limited and StarSight Telecast, Inc. in  
CS Docket No. 98-102

Dear Ms. Salas:

Last Friday, July 31, an original and four copies of the above-referenced Comments were filed with the Commission. Subsequently, some non-substantive typographical errors were discovered and corrected in the document. Enclosed in the morning of the next business day are an original and nine copies of the corrected document, which we would appreciate your substituting for those filed earlier. We are including the additional five copies so that each Commissioner may receive one, and include a diskette which commenters are encouraged to provide, in accord with Paragraph 28 of the Notice of Inquiry.

Please direct any question concerning this submission to the undersigned. Thank you very much.

Respectfully submitted,

  
Michael D. Berg

Enclosures

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COMMENTS OF GEMSTAR AND STARSIGHT  
CS DOCKET NO. 98-102  
July 31, 1998

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SUMMARY OF  
COMMENTS IN CS DOCKET NO. 98-102

Gemstar International Group Limited and its subsidiary StarSight Telecast, Inc. (collectively, "Gemstar/StarSight") are leading, pioneer developers and distributors of electronic program guide ("EPG") technology and services to consumers. Gemstar/StarSight are not affiliated with any multichannel video programming distributor ("MVPD"). Drawing on their participation in this aspect of the video programming market since 1986, Gemstar/StarSight provide information and comment in response to the Notice of Inquiry, particularly paragraphs 8, 17 and 27, issued to obtain input for the Commission's required annual report to Congress ("Report") concerning competition in the video program marketplace.

Gemstar/StarSight applaud the Commission's explicit inclusion of EPGs in the Notice for the first time since the inception of the Report in 1992. EPGs such as those developed by Gemstar/StarSight exemplify the communications technology which Section 628, the source of the required Report, is designed to spur. EPGs also promote two other goals of Section 628: by making television programming from all sources easier for consumers to access and select, EPGs promote diversity and competition in programming and the MVPDs who provide it.

Gemstar/StarSight offer a variety of interactive guides to consumers in several ways. Gemstar/StarSight license advanced EPG technology for incorporation by manufacturers into consumer equipment such as TV receivers, VCRs and set-top boxes. Gemstar/StarSight also license MVPDs to use their technology in developing their own guides, and offer service directly to consumers as well. Gemstar/StarSight technology and services compete with other products from different providers, often with EPGs affiliated with and provided by MVPDs.

As a result, the EPG aspect of the video market is subject to anticompetitive conduct by MVPDs against unaffiliated providers. Such conduct is analogous to that which Section 628 and much of the rest of the Communications Act is designed to thwart. For example, for consumer equipment with Gemstar/StarSight EPG technology to work after purchase by the consumer, a stream of updating program data is sent continually to the consumer's equipment. Gemstar/StarSight insert this data into the vertical blanking intervals (VBIs) of locally available broadcast and cable program signals as a method of delivery. Those signals must transit cable systems to reach EPG consumers who subscribe to cable. At times cable operators have acted to interrupt the data of competing, unaffiliated EPGs.

This type of action is the antithesis of what Congress and the Commission seek to promote: competitive alternatives to consumers (the focus of the Report). The Commission should note this concern explicitly in the 1998 Report; should monitor competition in the EPG arena closely and actively, as it pledged to do in the recent navigational devices Report and Order; and should be prepared to act effectively and quickly when it is necessary to call instances of anticompetitive interference to the Commission's attention.

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

In the Matter of )  
)

Annual Assessment of the Status of )  
Competition in Markets for the )  
Delivery of Video Programming )  
)  
)

CS Docket No. 98-102

To: The Commission

**COMMENTS OF  
GEMSTAR INTERNATIONAL GROUP LIMITED  
and  
STARSIGHT TELECAST, INC.**

Multichannel video programming distributors ("MVPDs") having an interest in electronic programming guides ("EPG") have the ability to engage in anticompetitive conduct by affirmatively disabling devices such as televisions purchased by consumers which incorporate competitive EPGs. Gemstar International Group Limited ("Gemstar") and its wholly-owned subsidiary, StarSight Telecast, Inc. ("StarSight") (hereinafter collectively "Gemstar/StarSight"), by their counsel, submit these Comments pursuant to Section 1.415 of the Commission's rules<sup>1/</sup> in response to the Commission's *Notice of Inquiry* ("Notice") in this proceeding.<sup>2/</sup> The *Notice* particularly requested comment on the offering and availability of EPGs by MVPDs and other competitors in the video marketplace.<sup>3/</sup>

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<sup>1/</sup> 47 C.F.R. § 1.415.

<sup>2/</sup> Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 98-102, *Notice of Inquiry*, FCC 98-137 (released: June 26, 1998).

<sup>3/</sup> *Notice*, at ¶ 17.

## I. INTRODUCTION AND STATEMENT OF INTEREST.

The Commission issued the *Notice* to gather input for the annual report to Congress which Section 628(g) of the Communications Act ("Act") requires concerning the status of competition in markets for the delivery of video programming ("Report").<sup>4/</sup> The expressed purposes of subsection 628(g), and of Section 628 as a whole, are "to promote the public interest, convenience, and necessity by increasing competition and diversity in the multichannel video programming market, to increase the availability of satellite cable programming and satellite broadcast programming to persons in rural and other areas not currently able to receive such programming, and to spur the development of communications technologies."<sup>5/</sup>

Section 628 was added to the Communications Act by the 1992 Cable Act.<sup>6/</sup> As noted in the *Notice*, the procompetitive provisions of that Cable Act were extended by the Telecommunications Act of 1996 ("1996 Act") "to establish a 'pro-competitive de-regulatory national policy framework' for the telecommunications industry. The Commission continues to pursue the goal of the 1996 Act to foster competition . . . . In the 1998 Competition Report . . . [w]e expect to assess the competitive alternatives available to consumers . . . ."<sup>7/</sup>

For the first time since the 1992 Act, the *Notice* to gather input for the annual Report asks explicitly about competitive availability to consumers of electronic programming guides

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<sup>4/</sup> *Notice*, at ¶1.

<sup>5/</sup> 47 U.S.C. § 548(a) and (g).

<sup>6/</sup> Cable Television Consumer Protection and Competition Act, Pub. L. No. 102-385, 106 Stat. 1460 (1992).

<sup>7/</sup> *Notice*, at ¶ 3 (emphasis added).

(EPGs).<sup>8/</sup> This is an appropriate recognition, necessary to the completeness of the Section 628 1998 Report, of the importance of EPGs as developing “communications technology” that facilitates competition and diversity in the video market by making the programming and its providers more easily accessible to consumers.<sup>9/</sup> Inclusion of EPGs is consistent with the recognition that the same types of anticompetitive conduct which Section 628 is designed to thwart can occur in the market for EPGs as well as in the market for the programming choices they facilitate.

Gemstar/StarSight are leaders in the development and distribution to consumers of EPG technology, equipment and services. StarSight first pioneered its on-screen, interactive EPG in 1986. Since then Gemstar/StarSight have offered viewers many navigational features which make it much easier to watch television programs, including but not limited to features facilitating the finding, viewing, selecting, tuning to and recording of television programs across many hardware platforms. Gemstar/StarSight have accomplished this by pioneering the underlying technology necessary to perform such tasks and by incorporating and by licensing such navigational technology for incorporation by manufacturers into cable set top boxes, personal computers, internet devices and into consumer home electronic products such as televisions, VCRs, TV/VCR combination units and stand alone TV set top boxes. MPVDs and others use the aforementioned Gemstar/StarSight technology to provide EPGs and related services to their subscribers. In some cases, by way of example, the EPG and related services are

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<sup>8/</sup> Notice, at ¶ 17.

<sup>9/</sup> 47 U.S.C. § 548.

provided directly by Gemstar/StarSight over an MPVD system, and in other cases the MPVD provides its own customized EPG and related service under license from Gemstar/StarSight.

Gemstar/StarSight face competition, particularly from MVPDs that have developed, or plan to develop, their own EPGs. Some MVPDs will no doubt view it as advantageous to engage in anti-competitive behavior against independent or other unaffiliated EPG providers such as Gemstar/StarSight.<sup>10/</sup> By way of example, EPG equipment and technology currently used by consumers must be able to receive the program data stream without interference from an EPG. An MVPD can disable the consumer's EPG by affirmatively blocking or otherwise interfering with that data stream. Accordingly, it is imperative that the Commission continue to monitor the development of the EPG market and to take appropriate steps to ensure that MVPDs do not inhibit competition.

## **II. COMPETITION IN THE ELECTRONIC PROGRAMMING GUIDE MARKET.**

### **A. Gemstar/StarSight Offer Innovative Electronic Programming Guides Which Allow Consumers to Access Over-The-Air and Multichannel Video Programming.**

#### **1. StarSight and Gemstar Make Available Various EPGs.**

Gemstar/StarSight EPGs offer consumers certain features which may include: <sup>11/</sup> (1) continually updated program schedule information for up to seven days (24 hours per day) for substantially all available channels, and information about programs in progress; (2) program

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<sup>10/</sup> Thomson Electronics and Viacom each own less than ten percent of Gemstar stock.

<sup>11/</sup> The provision of EPGs can be viewed as falling into at least two markets: (a) passive guides, which simply scroll through programming information (generally ordered by channels); and (b) interactive guides which assist the consumer in selecting desirable programming. Gemstar/Starsight concentrate on interactive EPG technology and services.

selection for present or future viewing or recording; (3) one-button recording of current or future programs or series; and (4) channel set-up: arranging the order of channels by preference and, if the consumer wishes, deletion of never- or infrequently-viewed channels from the program schedule.

The newer Gemstar Guide Plus+ Gold EPG adds to the existing Gemstar Guide Plus EPG a program guide in a seamless integrated video window. This feature allows consumers to use the guide to access information about a program in progress, while continuing to watch that program.

2. Gemstar/StarSight Market and Distribute Their EPGs Through a Variety of Sources.

Gemstar/StarSight make their EPG technology and services available to consumers by licensing their technology to manufacturers of consumer electronics devices, set top box manufacturers, software developers, satellite operators and broadcasters.

3. Gemstar/StarSight Utilize Various Delivery Systems.

Gemstar/StarSight purchase television program schedule data and MVPD channel line-up information in electronic format from data providers. This data is then processed to particularize it so that a consumer's EPG-capable equipment receives schedule information corresponding to the consumer's geographic area, method of reception and system configuration. The program schedule data is then distributed over a transmission network to the consumer on a daily basis.

The method of transmission of this EPG data varies. For MVPDs, Gemstar/StarSight deliver the data via telephone lines to the MVPD headend. The MVPD then uses its own

network to distribute the data to EPG-capable set-top boxes in subscribers' homes, and provides its own customer support.

Pursuant to agreements between Gemstar/Starsight and certain broadcasters and cable programming services, Gemstar/StarSight inserts its programming data into the vertical blanking interval (VBI) of the broadcast and cable program signals. Those signals are already available to the consumer and therefore the consumer receives the program data automatically, unless a cable operator deliberately interferes with it.

#### 4. Sources of Revenue.

The *Notice* asks about the types of financial support received by EPG providers from advertising, subscriber fees, or a combination of both.<sup>12/</sup> Gemstar does not collect subscription fees from consumers who use its EPGs. Rather, its revenues are generated from a continuing license fee from consumer electronic manufacturers and other licensees with whom Gemstar has licensing agreements.<sup>13/</sup>

Gemstar/StarSight is contemplating the inclusion of advertising in its EPG as a means of providing the EPG service to the consumer at no or a low charge.

#### **B. EPGs Available in the Marketplace.**

The *Notice* requests information about the number and types of EPGs offered in the marketplace.<sup>14/</sup> Generally, EPGs are offered in the form of on-screen, passive (non-interactive)

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<sup>12/</sup> *Notice*, at ¶ 17.

<sup>13/</sup> The license fees are typically based on the number of units shipped incorporating the licensed EPG technology.

<sup>14/</sup> *Notice*, at ¶ 17.

scrolling program guides, such as PreVue Guide which is offered over many cable systems; interactive EPGs such as those offered by Gemstar/StarSight; and hybrid guides such as that offered by PrimeStar which, as part of its "Hyper-Surfing" offering, groups 160 channels into 10 programming categories and allows customers to jump to the first channel in a programming category. PrimeStar also offers five scrolling guides, each covering a different type of programming.<sup>15/</sup>

The Commission also requested information on whether there are existing or planned EPGs offered by MVPDs.<sup>16/</sup> Several MVPDs currently offer, or have plans to offer, their own EPGs which do or will compete with those offered by Gemstar/StarSight. Viewers who receive television programming via C-band satellite have access to a subscription EPG service called SuperGuide offered by SuperGuide Corporation. Using a remote control, SuperGuide subscribers can tune to shows by program title and can call up brief text descriptions of programs.

For example, Time Warner Cable has announced plans to offer an interactive program guide as part of its Pegasus digital cable offerings which will include near video-on-demand, new programming tiers and more channels of multiplexed premiums.<sup>17/</sup> Various DBS companies also offer their own EPGs such as Direct TV/USSB, Echostar and, as noted above, PrimeStar. Other MVPDs hold major interests in EPG providers. For instance, PreVue Guide, offered by PreVue

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<sup>15/</sup> See PrimeStar Press Release, "From Channel Surfing to "Hyper-Surfing"SM -- The New Wave in Watching Television From PrimeStar," at [www.primestar.com/ezget/news/articles/facts/hypsurf.htm](http://www.primestar.com/ezget/news/articles/facts/hypsurf.htm).

<sup>16/</sup> Notice, ¶ 17.

<sup>17/</sup> See Time Warner Cable Web-Page at [www.pathfinder.com/corp:80/fbook/fbcable.html](http://www.pathfinder.com/corp:80/fbook/fbcable.html)

Networks, Inc. is a wholly-owned subsidiary of United Video Satellite Company, which is controlled by TeleCommunications, Inc. In addition to the scrolling guide noted above, PreVue Network also offers an interactive program guide called PreVue Interactive.<sup>18/</sup>

Ultimately, in a cable or other MVPD system, the EPG installed at the system level competes with the EPG-enabled equipment (TV or VCR) that the consumer may have purchased. Each will enable the consumer to achieve the information and recording functions that an EPG makes possible. Yet this competition occurs in a highly restricted environment: the cable subscriber has only one franchised cable choice and the cable operator has the ability to entrench the cable system-provided EPG and foreclose the effectiveness of the consumer-purchased EPG. This can be done by either refusing to incorporate the competing EPG system into the cable box or by blocking consumer access to the necessary programming data that is distributed through the MVPD system.

### **III. REGULATORY IMPEDIMENTS TO COMPETITION IN THE EPG MARKET**

The information provided by Gemstar/StarSight demonstrates that they are independent of MVPD affiliation and control, and that they offer a variety of products and services to consumers of video programming in a variety of ways.

Paragraph 27 of the *Notice* asks whether there are any existing or potential regulatory impediments that may deter entry or prevent expansion of competitive opportunities in the video program delivery markets, or "specific Commission rules, policies or regulations that ought to be

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<sup>18/</sup> Gemstar recently filed a patent infringement law suit against PreVue Networks, Inc. with respect to its offering of that guide.

reexamined in light of current competitive opportunities within . . . markets."<sup>19/</sup> Paragraph 8 of the *Notice* invites "any other information relevant to consumer considerations when selecting among services."<sup>20/</sup>

The offering by several MVPDs (now or in the future) of their own programming guides in direct competition with those offered by StarSight and Gemstar creates the same set of incentives for some MVPDs to undermine competing EPG equipment and services analogous to the anticompetitive conduct that Section 628 was enacted to prevent with respect to video programming itself.

For example, as described above, Gemstar/StarSight currently deliver guide services direct to the home over the VBIs of broadcast and other signals. Consumers with or without cable can purchase certain television receivers and VCRs with Gemstar/StarSight technology imbedded in them, and receive the guide service by means of this equipment. For the equipment to deliver the EPG for which the equipment was purchased, the program data stream must be continually available to the consumer.

As 66.2% of US households subscribe to cable,<sup>21/</sup> it is more likely than not that the television set purchased by a consumer will be connected to a cable system. The percentage of U.S. households with cable has grown and is estimated to keep growing to the 70% level by

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<sup>19/</sup> *Notice*, at ¶ 27.

<sup>20/</sup> *Id.*, at ¶ 8.

<sup>21/</sup> Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 97-141, *Fourth Annual Report*, FCC 97-423 at ¶ 14 and Appendix B, Table B-1 (1998).

2002.<sup>22/</sup> If the cable operator interferes with or blocks the EPG data signal, then those who purchased equipment or otherwise selected a certain EPG will have their EPG disabled.

Unfortunately, this has occurred at times when certain cable MSOs, some developing or offering their own proprietary guides, have intentionally stripped the EPG data from the VBIs of broadcast and cable programming channel signals being retransmitted over cable systems. Thus the consumer's choice is nullified.

This eliminates competitive alternatives available to consumers (the Commission's focus in the 1998 Report)<sup>23/</sup> and creates a barrier to market entry and participation that is the diametric opposite of what Congress intended in Section 628, the Telecommunications Act of 1996 and the Act as a whole. It is also the antithesis of continued pursuit by the Commission of the goal of fostering competition.<sup>24/</sup> Recently, the Commission issued a *Report and Order* adopting rules implementing Section 629 of the Act, "Competitive Availability of Navigation Devices."<sup>25/</sup> In that decision, the Commission found that equipment used to access EPGs is covered by Section 629.<sup>26/</sup> The Commission expressed repeated concern about the need to monitor developments in this regard; for example, "If . . . service providers retain the ability to limit substantially consumer access to content, applications, and other services, this result would not achieve the . . .

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<sup>22/</sup> See, e.g., Kagan Associates.

<sup>23/</sup> Notice, at ¶ 3.

<sup>24/</sup> Id.

<sup>25/</sup> Implementation of Section 304 of the Telecommunications Act of 1996 -- Commercial Availability of Navigation Devices, CS Docket No. 97-80, *Report and Order*, FCC 98-116 (released: June 24, 1998) ("*Navigation Devices Report and Order*").

<sup>26/</sup> *Navigation Devices Report and Order*, at ¶ 116.

goals of the statute. We intend to monitor developments with respect to the compatibility of set-top boxes and digital television, and the availability of program guides."<sup>27</sup>

Gemstar/StarSight urge the Commission to note this critical concern and intent in the 1998 Report to Congress. In addition, StarSight/Gemstar will assist the Commission to monitor instances of anticompetitive interference with consumer availability of EPG equipment and services as necessary as the implementation of Sections 628 and 629 progresses.

#### IV. CONCLUSION

EPGs provide consumers with an easy and accurate method of accessing programming over-the-air and from MVPDs. EPGs developed by Gemstar/StarSight exemplify communications technologies whose development Section 628 is designed to spur. StarSight/Gemstar's EPGs also promote the other statutory goals of competition and diversity by facilitating consumer choice of available programs and MVPDs.

As described above, EPG providers unaffiliated with MVPDs, such as Gemstar/StarSight, make their guides available through a variety of platforms including advanced technologies. Some MVPDs are offering or planning to offer competitive program guide services. Certain MVPDs have a strong incentive to engage in anti-competitive behavior designed to preclude competition from unaffiliated EPG providers.

Accordingly, Gemstar/StarSight strongly urge the Commission to continue to take steps, including active monitoring and enforcement of its rules implementing Section 629, and to

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<sup>27</sup> *Id.*, at ¶ 16.

explicitly note in the 1998 Report to Congress the important role of EPGs in the video marketplace and the need to assure their competitive availability to consumers. In these ways the Commission can ensure that the goals of the Act are not frustrated.

Respectfully submitted,

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