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Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: CS Docket No. 97-80

Dear Ms. Dortch:

This letter responds to an *ex parte* filing submitted by Neal M. Goldberg, Esq. of the National Cable and Telecommunications Association (“NCTA”) on November 29, 2006. In this filing, NCTA raises a litany of misplaced and rhetorical objections to the proposal for allowing access to bi-directional cable services by competitive devices submitted by CEA and a host of major CE and IT companies on November 7, 2006.

The objections raised in the NCTA *ex parte* reveal a variety of misconceptions about what the proposal would and would not require. The following refutes the points made in the NCTA *ex parte* in an effort to ensure that the Commission’s record remains clear.

Most, if not all, of the misunderstandings evidenced by the NCTA *ex parte* are capable of being resolved in a face-to-face meeting between the two sides. The CE industry remains ready to engage in such discussions at any mutually convenient time and place. The status quo simply will not lead to the consumer choice envisioned by Section 629. This process must move forward.

CEA’s responses to the points and objections raised in the NCTA *ex parte* are as follows:

1. *“The marketplace OCAP approach developed by the cable industry and major CE companies is bringing two-way plug and play products to market now, much faster than any hypothetical approach could ever do.”*

*“All CE companies committed to using OCAP middleware for two-way plug and play products in the negotiated Cable-CE Plug and Play Agreement submitted to the FCC in 2002.”*



The 2002 MOU contains but a single reference to OCAP, on page 10, Section 4.3, which states the following: “Cable operators’ EPG will be provided for advanced interactive digital cable products via OCAP or its successor technology.” The November 7, 2006, CE proposal is consistent with this statement. More importantly, it is difficult to read into this Section 4.3 any commitment by CE companies to use OCAP middleware for two-way plug and play products. (Nor would CEA consider it appropriate for competitive manufacturers to engage in a discussion of what features they intend to include in future products as actually marketed.)

At the conclusion of the one-way negotiations, CE companies did agree to use OCAP as a starting point for the then-nascent two-way discussions. At that time, however, the accompanying CHILA license did not exist, and, as has been jointly reported to the FCC, licensing issues were not discussed at that time. Similarly, OCAP itself was in its infancy and not fully defined. As these discussions progressed, however, CE manufacturers began to learn more about the OCAP technology itself, and about the licensing scheme that would accompany it. These concerns were magnified by the cable industry’s ongoing resistance to making a regulatory commitment that it deploy OCAP by a date certain and rely on OCAP in all of its products. These facts ultimately led to the development of the November 7, 2006 proposal. It is worth noting, however, that the proposal accommodates those CE companies that prefer OCAP as well as those that prefer a non-OCAP alternative.

*“Over a dozen independent CE companies, including leaders in HDTV technology such as Samsung, Panasonic and LG Electronics, have signed the OCAP and CHILA licenses with the cable industry’s research and development center, CableLabs, to manufacture two-way retail devices.”*

Signing the only available license agreement should not be interpreted as tantamount to a policy position, or as exclusive of or inconsistent with improvements or other options. Moreover, the number one TV manufacturer in the United States, the number one software manufacturer in the world, the number one PC manufacturer in the world, and the number one chip manufacturer in the world – in addition to eight of the world’s major CE companies – have signed on to the November 7, 2006 proposal. CEA believes that consumers are best served by variety and choice, which the November 7, 2006 proposal aims to provide.

*“Two-way OCAP plug and play products have been built by CHILA/OCAP signatories, have been exhibited at the 2006 Consumer Electronics Show, and are being tested in live trials in a number of cable operator systems.”*

As any company involved in the CE industry is well aware, many products that have been exhibited at the International CES or been tested in live trials do not ultimately become available at retail. More importantly, companies must consider whether a product can be commercially viable until OCAP is deployed nationally, which will not occur until 2009 by cable’s own estimate. Moreover, even when OCAP is “deployed nationally,” the technology will not necessarily be available on every headend in every market.

*“Major cable operators have committed to using and supporting OCAP in their own leased set-top boxes, and are beginning deployment now.”*

In 2002, major cable operators committed to supporting unidirectional CableCARD™ technology, and were subsequently obligated to do so under the Commission's rules. The CE industry's experience with MSO support for unidirectional CableCARD-enabled products has provided ample evidence that the cable operators' commitment to CableCARD and, indeed, to complying with the Commission's rules, has been halfhearted at best. We have no reason to believe that their commitment to OCAP will be any more durable, particularly in the absence of any regulatory obligation.

Moreover, as evidenced by the Comcast, Charter and BendBroadband waiver requests, it appears that cable operators intend to deploy a substantial number of set-top boxes that do not contain OCAP. The November 7, 2006 proposal seeks to allow independent CE and IT manufacturers to build a device with a feature set equivalent to those non-OCAP boxes that are the subject of these waiver requests, as well as to build a device with a feature set equivalent to the fully OCAP-enabled leased set-top boxes.

2. *"The approach submitted by competitors to CHILA signatories is not a 'compromise.'"*

*"It is a proposal for perhaps the most intrusive regulatory regime ever established. It would impose substantial costs on cable customers and cable operators alike, and yet be instantly archaic for both. It would create a regulatory quagmire for the Commission, the cable and CE industries, and consumers."*

Notwithstanding this hyperbole, the fact is that the November 7, 2006 proposal is a substantially more cable-friendly approach than CE's earlier positions on two-way plug and play. The proposal asks for *minor* modifications to two cable-developed technologies – CableCARD and OCAP. It asks that today's CableCARD be modified, based on minor extensions to *currently existing standards* promulgated by the Society of Cable Telecommunications Engineers (SCTE), to allow consumers to access three additional services: impulse pay-per-view, video-on-demand, and switched digital.

It is not "archaic" to seek assurance for consumers that an OCAP-enabled device purchased today will work tomorrow. Thus, the proposal also asks that CableLabs decide upon a specific version of OCAP, that cable operators deploy that specific version of OCAP on all headends nationwide, and that cable operators continue to support that specific version of OCAP for the foreseeable future. It would require cable operators to use that same version of OCAP on a substantial percentage, but not all, of their own set-top boxes. In short, the proposal would not be costly, instantly archaic, or difficult to administer and is, in principle, complementary to cable's OCAP/CHILA regime.

*"The proposal is contrary to the Commission's policy of technological and competitive neutrality by seeking to impose burdensome new requirements on cable but not on cable's DBS, telco, wireless, and Internet competitors."*

Discussions between the CE industry and alternative service delivery providers are ongoing and proceeding smoothly. By contrast, the joint CE/cable negotiations have dragged

on for years, and this is why the Commission established an ongoing status reporting requirement for the CE and cable industries. Moreover, the Commission directed the CE and cable industries, and not alternative service providers, to submit proposed regulations for two-way plug-and-play at the end of November, 2005. The November 7, 2006 proposal represents a natural evolution of the previous CE submissions.

*“The proposal cannot be implemented in a timely manner. Even if it could, by imposing costly and highly invasive regulations exclusively on the cable industry and consumers, it would contravene Congress’ directive to the Commission that, in implementing Section 629, it should “avoid actions which would have the effect of freezing or chilling the development of new technologies and services.”*

Because it leverages existing and already deployed technologies, the proposal can be implemented as quickly as, if not significantly faster than, the OCAP/CHILA regime proposed by cable. The proposal impacts only the software that is already dynamically loaded onto and maintained for today’s CableCARDs, and accordingly would require little effort to modify these existing technologies. The proposal in no way limits the development of new technologies and services by cable, which can and presumably will be supported both by retail and leased OCAP-enabled devices.

3. *“The CE companies who submitted the proposal want a free ride on the cable industry’s multi-billion dollar investment in cable networks and services.”*

*“Cable operators have spent billions of dollars buying programming and equipment and designing their networks to deliver state-of-the-art, rapidly-evolving interactive services to their customers.”*

The efforts of cable operators in this regard, though laudatory, do not merit a guaranteed return and do not entitle the cable industry to protection from market competition. The marketplace should decide which of these services succeed and which fail, and consumers should not be forced to take and pay for services they will not use or even want. As the Comcast, Charter and BendBroadband waiver requests indicate, consumers would be allowed to receive basic interactive services—pay-per-view, video-on-demand and switched digital—through a proprietary device. Due to the limitations on any license available from CableLabs, consumers would not be permitted to purchase an equivalent non-OCAP device at retail. The November 7, 2006 proposal would merely correct this inequity by putting retail devices on equal footing with proprietary offerings.

*“These cable-delivered services, such as caller ID on the TV, instant polling/voting, interactive advertising, or Time Warner Cable’s Start Over service, are being deployed today.”*

All of the cable-delivered services referenced above, assuming that they are implemented through OCAP, would be available to those consumers who choose to purchase or lease an OCAP-enabled device. In fact, the November 7, 2006 proposal requires that the advanced interactive services of the kind listed above be accessed, by both industries, *only* through OCAP-enabled devices.

If NCTA contends that every cable customer must receive every possible interactive service, then why are some cable operators requesting waivers that would enable deployment of devices that do not and cannot receive such services? Some consumers might wish only to receive pay-per-view, video-on-demand and switched digital services. Under the current licensing regimes available, proprietary devices are the only ones available to consumers who wish to choose only these basic interactive services. Consumers should, as Section 629 mandates, have the option of purchasing an equivalent device at retail. The November 7, 2006 proposal, if implemented, would give consumers that choice.

*“The proposal would force the cable industry to disassemble its services so CE companies can repackage cable’s offerings as their own for viewing on their devices. This will make it impossible for consumers or operators to know what cable services a cable customer will be able to receive on a CE device and how they will be displayed.”*

The proposal would allow consumers to choose from an array of retail devices that provide an equivalent level of basic interactive services to those available through proprietary devices. Moreover, the proposal would not require the cable industry to disassemble any service, nor would it require the cable industry to replace a single wire or modify its headends in any way. It would simply require, as noted above, minor modifications to the existing CableCARD software, to permit translation of IPPV, VOD and SD services, in whatever form they are delivered by the cable operator, into a language that a retail device can understand and display.

Under the proposal, a CableCARD-enabled TV set would appear indistinguishable to the cable network from a so-called “low-cost, limited capability” proprietary set-top box, thus ensuring that the chances for consumer or operator confusion would be minimal. Further, CE companies would pledge to assist in resolving any customer service issues that might arise, as they have done for over two years with unidirectional digital-cable-ready devices. Substantial competition in the market for televisions and other devices that display video content will ensure that CE manufacturers work hard to fulfill consumer expectations and maintain customer satisfaction.

*“Consumers have the right to receive the services that a cable company has contracted to deliver and have them delivered in the manner consumers expect.”*

Consumers have the right to choose which interactive services they wish to pay for and receive, and they have a right to choose how to use the content they receive, subject to the reasonable requirements established by the content provider. Under the November 7, 2006 proposal, consumers would indeed have this choice from a cable operator, in that they could choose either a so-called “low-cost, low-capability” device, or an OCAP-enabled device with greater interactive functionality. The proposal merely would permit consumers to have the same scope of choice in retail devices.

4. *“The proposal would chill innovation contrary to the mandate of Section 629.”*

*“The proposal would freeze innovation in cable’s interactive video services, including Video-on-Demand, Electronic Program Guides, interactive programming enhancements as well as emerging interactive services by subjecting them to a time-consuming, expensive and unnecessary redesign and standardization process. No innovations in OCAP would be permitted without an FCC rulemaking or permission from CE manufacturers. Cable could not roll out new interactive services without first subjecting them to testing by the CE industry. Cable operators couldn’t migrate to switched video without FCC or CE industry approval.”*

The proposal places no restrictions on the development or deployment of any interactive cable video service, and requires no standardization of VOD or other interactive programming services among cable systems or even within a system. What it does require is that the conditional access element in the host device (*i.e.*, the CableCARD) be modified to enable translation of these interactive services, in whatever form they might be delivered, into a consistent format that host devices can understand and display to the consumer.

The proposal also requires cable to standardize, deploy and maintain support for a single version of OCAP, for use by retail devices and a substantial percentage of its own devices. Again, this requirement is necessary to ensure continued compatibility of and support for devices that consumers have purchased. For those OCAP-based devices deployed by cable and not covered by this requirement, cable operators may develop and deploy any technology that they desire, without the consent of any third party, including the Commission.

The proposal also requires that those OCAP-based applications used to provide IPPV, VOD and SD services be made available to competitive device manufacturers for testing a reasonable period before deployment. This approach aims to assist cable operators, by helping them identify problems with new applications, and specifically does not prevent cable from deploying innovative new services. Competitive device manufacturers would use this opportunity to test the applications and identify bugs and incompatibilities that might cause a host device to crash or otherwise operate improperly.

*“The proposal would enable some CE companies which are behind the curve to delay their CE competitors from delivering innovative new services. The delivery of important new services to consumers, such as those facilitated by switched digital video (as now used by AT&T), would be delayed or not happen at all. Cable could not change existing cable services for the life of deployed legacy CE products.”*

The proposal does not delay, and in fact was carefully written to avoid delaying, the availability of OCAP-based services and OCAP-enabled products to consumers, including those products purportedly under development by Samsung, Panasonic and LG. To the contrary, the proposal embraces OCAP, in that it requires that the cable industry: (1) decide on a final version of OCAP; (2) deploy it nationwide; and (3) continue to support it for the foreseeable future. In this sense, the proposal dramatically strengthens the OCAP/CHILA

regime by giving consumers and manufacturers some basic level of assurance that an OCAP-enabled device purchased today will work tomorrow and beyond. Moreover, given that the cable industry has not yet deployed OCAP for consumer use on a single headend, much less on a nationwide basis, it is difficult to see how any CE manufacturer is “behind the curve” today in developing OCAP-enabled products. Almost all major CE and IT manufacturers have direct experience with either OCAP or one of its underlying technologies, MHP and Java. Given this experience, it would not be difficult for a CE company to “catch up” with its more OCAP-focused competitors.

Nothing in the November 7, 2006 proposal would delay the delivery of switched digital services, though the Commission might reasonably decide to prohibit switched digital deployment until competitive devices have access to switched digital channels. In fact, the proposal *fixes* for future retail devices a major problem presented by switched digital and establishes a quick and easy path toward ensuring that consumers are not disenfranchised from the content for which they have paid. The proposal would require the cable industry to modify the existing CableCARD software in a way that would allow retail devices to access switched-digital services, but it would not affect any element of the underlying switched digital service itself. As such, it is difficult to understand how the proposal would delay or preclude entirely the deployment of switched digital or any other interactive services.

*“The proposal would discard the substantial investment and progress made to date by the cable industry and others on OCAP and on cable’s next generation of downloadable security (“DCAS”) and dictate that the cable industry and CHILA signatories shift their attention to the development of non-OCAP and other solutions dictated by self-selected CE and IT companies.”*

The November 7, 2006 proposal was drafted to impose the least number of technological obligations on cable operators necessary to enable the manufacture of competitive devices equivalent to those that cable plans to deploy. As noted above, the proposal would require the addition of three relatively simple formats to today’s CableCARD technology, and would do so by using existing standards developed and approved by SCTE. CEA disputes the implication that the resources available to the cable industry are so limited that such minor modifications would delay its other development efforts. Moreover, the proposal specifically contemplates developments in DCAS and OCAP, and thus proposes to build on the investment and progress made to date in these areas. The proposal in no way suggests that these efforts be abandoned.

*“The proposal requires a 180-degree change in course, not for the benefit of consumers, but instead to favor certain pet technologies and projects of certain CE and IT companies. Those companies have business reasons for placing obstacles in the path of CHILA signatories who are in the forefront of bringing two-way OCAP products to market. For example, OCAP is based on Sun’s JAVA technology, while Microsoft and its CE partners are deploying competing Microsoft IPTV devices, and DCAS utilizes a hardware-based chip while Intel’s chips use software-based security.”*

Although CEA does not purport to speak for Microsoft or Intel in this regard, it strongly believes that the parties to the proposal focused solely on offering a means for enabling consumer choice in the most cost- and time-effective manner possible.

Accordingly, CEA believes that NCTA's assertions of nefarious intent by the proposal signatories are misplaced.

5. *"The proposal would jeopardize the security of the cable network in violation of Section 629(b) of the Act."*

*"Development of cable's downloadable security would no longer be subject to non-disclosure protections which are essential to the development of effective network security, again contrary to the congressional mandate in Section 629."*

It is unclear whether DCAS, as proposed by the cable industry, meets the statutory requirements of Section 629 and the separable security requirements of the Commission's rules. It also is unclear whether DCAS is technically feasible from a manufacturer's standpoint. Absent a detailed review of the DCAS technology, the Commission cannot address these questions with any legal certainty, and CE manufacturers that have insight into these issues are prohibited from disclosing what they know. In short, DCAS as proposed may or may not violate the law, and may or may not be technically feasible, but absent disclosure of specific technical information, the Commission cannot fully assess these issues. Now is the time for the Commission to make such a determination, so that the DCAS technology can be reengineered, if necessary, to comply with the law before its currently predicted deployment in 2009 by the cable industry.

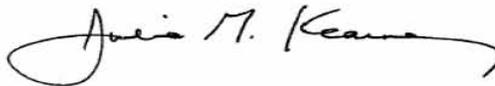
Moreover, it is emphatically not the case that any public disclosure of any portion of the DCAS technology would undermine the effectiveness of its network security protections. In any conditional access system, including those used by cable, satellite and telco video providers today, there are certain encrypted messages that must remain secret to maintain system security. However, the system architecture, algorithms, data structures and essentially all other technical information regarding the conditional access system can be disclosed without compromising security. In fact, many cryptographic experts have argued that public vetting of non-sensitive technical information results in a more secure conditional access system, not less, by allowing a broader examination for actual or potential defects in the system. Indeed, disclosure of equivalent information has not harmed the security of unidirectional cable services or, more broadly, of banking wire transfers, secure Internet transactions, cellular telephony, and automated bank teller systems, for example.

*"Cable operators would be forced to use content protection technologies that have not been properly vetted for use with cable content and do not have the support of the studios and other content suppliers for cable distribution. Cable would not be able to provide a competitive service – with high-value programming consumers want – under these conditions."*

The proposal would shift control over the approval of outputs and output protection technologies on retail devices from a small cadre of self-interested cable operators operating through CableLabs. This control would move instead to the Digital Living Network Alliance ("DLNA") a multi-industry home-networking consortium that includes most major CE and IT companies, motion picture and television studios and other content suppliers as members. CableLabs also is a member and active participant in DLNA.

This approach properly relieves cable operators of their role as a gatekeeper for the deployment of new output technologies, and instead puts that power to negotiate over such technologies where it belongs – in the hands of content creators and device manufacturers. Presumably, cable operators will have no problem providing high-value programming to consumers, as long as content creators are satisfied that CE and IT devices will adequately protect that content.

Sincerely,



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