Consumer Electronics Association
1919 South Eads Street
Arlington, VA
22202 USA
(866) 858-1555 toll free
(703) 907-7600 main
(703) 907-7601 fax
www.CE.org

September 6, 2007

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Petition for Deferral of Section 76.1204 of JetBroadband VA, LLC and JetBroadband WV, LLC, CSR-7131-Z, MB Docket No. 97-80

Dear Ms. Dortch,

The Consumer Electronics Association ("CEA") offers these comments in response to a letter submitted by JetBroadband VA, LLC and JetBroadband WV, LLC ("JetBroadband") on August 7, 2007 regarding the "openness" of conditional access technology from Beyond Broadband Technology ("BBT"). An open standard for conditional access is vital to achieving a national market for competitive navigation devices. Unfortunately, JetBroadband and BBT have yet to provide *any* substantive information that would allow the Commission to evaluate whether BBT's technology complies with 47 C.F.R. § 76.1204 of the Commission's rules, and ultimately whether it can form the basis for a national conditional access interface that equipment manufacturers can rely on. JetBroadband could provide no information at all, and BBT merely repeated its assertions which were already in the record of this docket: that BBT will disclose technical information only under nondisclosure agreement preventing any public discussion. Just as including a downloadable software component does not, by itself, fulfill the separable security requirement of Section 76.1204(a)(1), the mere assertion that a technology will be licensed to all comers does not fulfill the national standard or "commonly used interface" requirements of Section 76.1204(b).

In a news release of January 10, 2007, the Commission expressed its opinion that downloadable conditional access technologies can satisfy Section 76.1204(a)(1)'s requirement of separable security, and noted that BBT is developing a downloadable technology.[1] The Commission has not yet made a finding that BBT, or any other conditional access technologies that claim to be downloadable, actually comply with Section 76.1204, but instead asked for more information on which to base such a finding. JetBroadband and

[1] FCC Public Notice, CS Docket No. 97-80, Commission Reiterates That Downloadable Security Technology Satisfies the Commission's Rules on Set-Top Boxes and Notes Beyond Broadband Technology's Development of Downloadable Security Solution, DA 07-51 (rel. Jan. 10, 2007).

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BBT have provided no new information beyond what JetBroadband put in the record with its reply comments of April 16, 2007.[2]

Specifically, neither JetBroadband nor BBT has given the Commission any information regarding whether BBT's technology involves proprietary hardware integrated with the navigation device, whether the terms of its license agreement conform to Commission rules, and whether the technology can be used on both large and small cable systems. If the Commission's set-top box rules are to have any meaning, these are the issues that BBT must respond to, publicly, before its technology can be deemed compliant.

The purpose of Section 76.1204 is to achieve the goal set out by Congress in Section 629 of the Telecommunications Act of 1996: to ensure commercial availability of competitive video navigation devices available at retail.[3] This goal should guide interpretation of the Commission's rules. Obviously, a conditional access technology with a downloadable component that relies on specific hardware built into navigation devices is *not* separable security. If equipment manufacturers must build in a different chip for each different security technology that a cable system might use, then we have returned to the status quo of integrated devices. It also follows from the goal of Section 629 that a security protocol developed without manufacturer input, or subject to license terms that violate Commission rules, or subject to arbitrary denial of certification by the technology vendor, is unlikely to lead to competitive availability. Obviously, it is not enough that a protocol be "readily available" if in practical terms it is infeasible for products sold nationwide. Therefore, the protocol must meet minimum criteria for commercially viable adoption by manufacturers. In response to BBT's earlier *ex parte* filing, CEA proposed the following common-sense criteria:

> (1) a national interface so that a DTV television receiver or competitive product can be nationally marketed and moved by the consumer from one local system to another,
>
> (2) manufacturer input into the specification and any planned changes, and review prior to final adoption,
>
> (3) reasonable host device implementation specifications and support for competitive home networks,
>
> (4) self-certification of implementation,
>
> (5) true renewability to the software, including updates to the host end of the interface via firmware,

[2] *In the Matter of JetBroadband, VA, LLC and JetBroadband WV, LLC Emergency Petition for Deferral of Enforcement of July 1, 2007 Deadline,* 47 C.F.R. § 76.1204(a)(1), Reply Comments of Beyond Broadband Technology, CSR-7131-Z, CS Docket No. 97-80 (Apr. 16, 2007).
[3] 47 U.S.C. § 549(a).

> (6) licensing terms that comport with FCC regulations limiting MSO control over devices to assurance against theft of service and harm to the cable network, and
>
> (7) compliance with all other FCC regulations pertaining to cable systems and competitive availability of devices.[4]

These attributes are neither novel nor radical. They flow directly from Section 76.1204's common reliance and open interface requirements in light of the congressionally mandated purpose of the rules. The CableCARD, if adequately supported under the existing DFAST license, already fulfills all of these criteria. BBT has explicitly rejected point (2),[5] and offers no evidence that it comports with the other criteria. BBT has not even made clear whether its technology is in fact non-integrated; i.e., whether it requires hardware built into the host device.

Rather than provide this information, BBT apparently insists that any public discussion of its specifications would fatally compromise their security, and that security protocols cannot be developed through open processes such as IEEE's. BBT's contention is misleading. The DFAST license, which BBT claims served as a model for its own secret license, permits use of a patent in the SCTE 41 standard for the CableCARD security interface. That standard *was* developed through a public, ANSI-accredited process, and the resulting 78-page protocol is available for free to the public at http://scte.org/documents/pdf/ANSISCTE412004.pdf. Only the actual cryptographic keys are held as a secret, subject to nondisclosure agreements. BBT's contention about the requirements of security in fact contradicts a major tenet of electronic systems security: a robustly secure system does not depend on total secrecy to maintain its security. Only "core secrets" such as key data need remain secrets. Systems which depend on total secrecy for their security are inherently fragile. *See* Bruce Schneier, *Secrets & Lies: Digital Security in a Networked World* 343-44 (2d ed. 2004). BBT's own example, DFAST, shows that an open standards process can create secure protocols, excepting only the core secrets.

Protocols developed by small consortia, rather than in a public standards process, are appropriate in situations such as DOCSIS, where Congress has neither identified a market failure nor asked the Commission to take remedial action. When unilateral control of protocols *has* prevented the formation of a competitive market, as with navigation devices, a truly open development process is required to counteract that control. Being able to enter a nondisclosure agreement with BBT does not solve this problem. If CEA were to enter such an agreement, it could not discuss BBT's system with the Commission or anyone else, and

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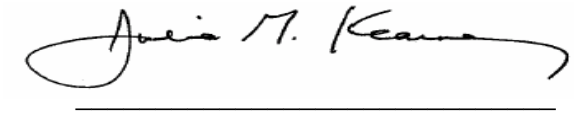
[4] *See, Commercial Availability of Navigation Devices*, CS Docket 97-80, CSR-7131-Z, Letter from Julie M. Kearney, Sr. Dir. and Reg. Counsel, CEA to Marlene Dortch, Sec., FCC Re: Ex Parte Presentation at 9-10 (Apr. 24, 2007).

[5] *Commercial Availability of Navigation Devices*, CS Docket 97-80, CSR-7131-Z, Letter from William D. Bauer, CEO, BBT to Nicole Paolini-Subramanya, Counsel to JetBroadband, at 2, attached to Letter from Nicole Paolini-Subramanya, Counsel to JetBroadband to Monica Shah Desai, Chief, Media Bureau, FCC Re: JetBroadband VA, LLC and JetBroadband WV, LLC (Aug. 7, 2007).

the Commission would still have no more information on which to evaluate BBT's "openness" (and its compliance with regulations, in general).

CEA applauds the Commission for seeking a more complete record before ruling definitively on whether BBT and other "downloadable" technologies comply with applicable regulations. As BBT has provided no new information on which to base such a ruling, the Commission should not rule on BBT's protocol at this time.

Respectfully submitted,



Julie M. Kearney
Senior Director and Regulatory Counsel
Consumer Electronics Association
1919 S. Eads St.
Arlington, VA 22202
Tel: (703) 907-7644

Of counsel
Robert S. Schwartz
Mitchell L. Stoltz
Constantine Cannon LLP
1627 Eye Street, N.W.
10th Floor
Washington, D.C. 20006
Tel: (202) 204-3508

cc: Nicole Paolini-Subramanya,
Counsel, JetBroadband VA, LLC and JetBroadband WV, LLC
William Bauer,
CEO, Beyond Broadband Technology