

September 11, 2002

VIA ELECTRONIC FILING

W. Kenneth Ferree
Chief, Media Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Written *Ex Parte* Presentation: CS Docket No. 97-80 (Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices); PP Docket No. 00-67 (Compatibility Between Cable Systems and Consumer Electronics Equipment)

Dear Mr. Ferree:

The Consumer Electronics Association (“CEA”) is pleased to provide the Commission the consensus position of the consumer electronics (“CE”) industry regarding the regulations needed to enable implementation of the Communications Act requirements for competitive availability of cable navigation devices, such as set-top boxes and televisions with integrated digital cable receivers. In the view of the CE industry, FCC regulations are necessary at this time to ensure full, timely support by cable operators nationwide for the technical standards that will allow cable subscribers to obtain and use navigation devices from competitive retail sources.

Technical experts in the CE and cable industries have developed the necessary minimal standards for digital cable-compatible products. The two industries have also engaged in public and private negotiations concerning the terms and conditions for implementing the standards. We have discussed, among other issues, the licensing terms for conditional access security technology; product testing and certification procedures; protection of consumers’ home recording rights; the provision of program navigation data to navigation devices through the cable system; and the potential specifications for advanced cable compatible devices that could be made available at retail in the longer term.

Although our industries remain far apart on some issues, we have made progress on others. It is our hope that regulations put in place by the Commission will ensure nationwide support for a minimal level of cable compatibility. Meanwhile, our industries will continue to make progress on the longer-term issues related to more advanced technologies.

The outline of Commission regulations is accompanied by two other documents that reflect a consensus position of CE manufacturers: the first is an alternative, non-exclusive POD-Host Interface License Agreement (“PHILA”); the second is a section-by-section analysis of the alternative PHILA. These documents are not offered as a binding proposal regarding specific PHILA provisions, but as a framework for multi-party industry discussions that should be encouraged and guided by the Commission. Individual companies may have comments or concerns about specific provisions of the alternative PHILA that they will bring to your attention.

Notice of this presentation is provided pursuant to Section 1.1206 of the Commission’s Rules, 47 C.F.R. § 1.1206. A copy of this notice is filed electronically to be included in the record of the above-referenced proceedings. Please contact me or counsel if you have any questions.

Sincerely,

/s/ Michael Petricone
Michael Petricone
Vice President, Technology Policy

Of counsel:
David Alan Nall
Squire, Sanders & Dempsey L.L.P.

cc: The Hon. Michael Powell, Chairman
The Hon. Kathleen Abernathy, Commissioner
The Hon. Michael Copps, Commissioner
The Hon. Kevin Martin, Commissioner

Marlene H. Dortch, Secretary
William Johnson, Deputy Chief, Media Bureau
Rick Chessen, Associate Bureau Chief, Media Bureau
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Mary Beth Murphy, Chief, Policy Division, Media Bureau
Tom Horan, Legal Advisor to Chief, Media Bureau
Susan Mort, Attorney Advisor, Media Bureau
John Wong, Chief, Engineering Division, Media Bureau
Michael Lance, Deputy Chief, Engineering Division, Media Bureau
Bruce Franca, Deputy Chief, Office of Engineering & Technology
Robert Pepper, Chief, Office of Plans and Policy
Amy Nathan, Senior Legal Counsel, Office of Plans and Policy
Jonathan Levy, Deputy Chief Economist, Office of Plans and Policy

Attachments

Digital Cable Compatibility: Needed FCC Regulations

September 11, 2002

Preamble:

1. Cable compatibility is required by law and has great market potential, but that market potential has been stymied by cable operators.

The Commission has relied upon private industry negotiations to effect digital cable compatibility for devices that consumers use to navigate cable programming, as required in Section 629 of the Communications Act; but this process has not proved successful. Consumer electronics manufacturers want very much to include digital cable receivers within our products (*e.g.*, TVs, digital video recorders), so consumers can enjoy “plug and play” convenience for digital cable TV. Half of cable TV subscribers currently have no set-top box, and we expect this will remain their preference after the digital transition; therefore, there is a strong market potential for cable-compatible products. However, the terms imposed by the major cable operators and CableLabs are unworkable for consumers and consumer electronics manufacturers. FCC action is needed urgently to ensure that the agreed technical standards are supported fully by all cable operators nationwide and that acceptable terms apply for implementation of the standards in retail consumer navigation devices.

2. Cable compatibility is critical for the nation’s transition to over-the-air digital TV broadcasting.

For consumers who rely on cable for the primary TV signal—70 percent of U.S. households—a digital broadcast-only tuner would be far less useful than a tuner that could be used for both broadcast and cable TV and thus could receive a far greater number of channels. Because the electronic components for digital cable tuners (*e.g.*, high definition digital decoders, memory chips) are almost identical to those for digital broadcast tuners, manufacturers could include combination broadcast and cable tuners in their products at a cost that would be little greater than the cost of either a broadcast-only tuner or a cable-only tuner. By addressing the preferred TV delivery mechanism of most U.S. households, cable compatibility for retail navigation devices would stimulate market demand dramatically for cable tuners, and in the process it would also dramatically stimulate the deployment of tuners which can receive both broadcast and cable signals.

3. Regulations specifying a minimum threshold of digital cable compatibility are needed.

Cable operators should be required to support consumers’ retail navigation equipment that complies with this threshold. This threshold:

- (a) would enable consumers, using unidirectional (downstream-only) retail equipment and a cable operator-provided Point of Deployment (“POD”) security card, to receive and navigate cable programs that require specific authorization (*e.g.*, premium channels), view a simple program guide with

accurate data, and take advantage of simple impulse pay-per-view (“IPPV”) functionality—collectively, the minimal necessary attributes for a marketable product in the near term;

- (b) would enable nationwide portability of consumer equipment—essential for consumers to retain the value of their investment when they move;
- (c) would provide increased protection for the cable network from harm and theft of service;
- (d) would be based on consensus technical standards set by American National Standards Institute (“ANSI”) accredited consensus standards developers, such as the Society of Cable Telecommunication Engineers (“SCTE”) and the Consumer Electronics Association (“CEA”), which follow due-process procedures that offer all interested sectors an equal opportunity to determine the consensus;
- (e) would evolve to keep up with technological change, with a balanced industry council to advise the FCC about updating the references to required consensus standards as necessary;
- (f) would be used by cable operators in the equipment they lease to consumers (starting no later than the date when integrated security is phased out, currently scheduled by the FCC for 2005);
- (g) would provide that the FCC-mandated right of attachment¹ for retail navigation devices includes the right of manufacturers to incorporate POD security interface technology into such devices, subject to reasonable licensing terms and manufacturers’ self-certification of compliance with cable compatibility standards;
- (h) would not preclude cable operators and manufacturers (both consumer electronics manufacturers and proprietary suppliers of equipment to cable operators) from agreeing to exceed the threshold voluntarily—for example, by implementing more fully featured forms of cable compatibility such as the Open Cable Application Platform (OCAP).

¹ The FCC, in its Navigation Devices Report and Order, June 1998, stated, “...we mandate that subscribers have a right to attach any compatible navigation device to an MVPD system, regardless of its source, subject to the proviso that the attached equipment not cause harmful interference, injury to the system or compromise legitimate access control mechanisms.” . However, CableLabs has used its licensing authority for POD technology to require manufacturers who wish to incorporate the POD technology to agree to CableLabs certification of attributes of POD-enabled products unrelated to “harmful interference, injury to the system or compromis[ing] legitimate access control,” and also to require compliance with an overly broad, ever-changing list of CableLabs-produced specifications. This practice has precluded any meaningful right of attachment for retail navigation devices.

Outline of specific regulations:

The consensus technical standards for minimal cable compatibility are complete. However, progress on digital cable compatibility still requires: (a) full nationwide implementation by cable operators of the agreed technical standards on a set schedule; (b) removal of onerous and unlawful terms in the CableLabs license agreement necessary to implement the standards; and (c) provision of program data to consumers' navigation devices in a standard format so consumers can navigate cable programming.

These requirements can be achieved by the FCC's issuance of regulations outlined as follows:

1. List of required consensus technical standards that cable systems must implement by July 1, 2004. This list defines the minimal compatibility threshold. The list includes standards applicable to the cable network and the Point of Deployment ("POD") security module.

(See Part 1 of Attachment for the list of required cable network and POD standards.)

2. Process for amending the list of required standards as technology evolves and new or revised standards are completed by industry consensus, with a level playing field for all affected industries to influence changes to the list. For example, the FCC could be advised on the evolution of the standards list by an industry council comprised of equal representation from the ANSI-accredited standards organizations, SCTE and CEA.
3. Requirement that cable operators support the technical standards by July 1, 2004, by (a) implementing the applicable cable network standard(s) and (b) making available to consumers upon request PODs that adhere to the POD standard(s) and function fully within consumer retail navigation equipment that adheres to the applicable standards for unidirectional navigation equipment. To "function fully" includes supporting conditional access to scrambled programming, providing program information in a nationwide standardized format, and supporting simple (unidirectional) impulse pay per view ("IPPV") functionality through the POD—all of which are features defined within the current standards.
4. Requirement that cable operators rely on these network and POD standards in equipment they lease to cable customers by January 1, 2005.
5. Requirement that CableLabs supply to the FCC by January 1, 2003, a version of the POD-Host Interface License Agreement ("PHILA") for public comment that:
 - (a) protects consumer freedoms by including encoding rules modeled on Section 1201(k) of the Digital Millennium Copyright Act and existing industry agreements (e.g., the 5C license) to govern the application of

copy protection technologies mandated in the PHILA, if necessary by adding content providers as parties to the PHILA through an annex to the agreement;

- (b) does not hold manufacturers to any requirements (whether in the license itself or in specifications or testing procedures incorporated in the PHILA by reference) other than those necessary to implement the threshold compatibility standards in a robust manner that prevents theft of service and does not harm the cable network or the services delivered by the cable operator;²
 - (c) does not require manufacturers to obtain product certification by CableLabs or any other third party laboratory; and
 - (d) does not require a non-disclosure agreement that precludes industry or public discussion of the PHILA's terms and conditions.
6. Provision that the right of attachment includes, but is not limited to, the right to attach equipment that manufacturers self-certify as compliant with the specific, applicable cable-compatible receiver standard.³

(See Part 2 of Attachment for the applicable receiver standard.)

7. Requirement that cable operators provide consumers' retail navigation devices with accurate navigation information (both tuning information and program schedule information) about all programming carried on the cable system, using the methods specified in the referenced compatibility standards.

(See Part 3 of Attachment for the technical requirements for provision of navigation information.)

² Note this does not prevent cable operators and manufacturers from agreeing to support additional requirements voluntarily, to meet perceived market demands. For example, CableLabs could promote a voluntary "CableLabs certified" program and certify equipment that performs to CableLabs quality and performance specifications, or a voluntary "OCAP compliant" program for OCAP-compliant products. However, such programs must be voluntary; cable operators could not require such voluntary certification programs as a condition for products to incorporate the POD technology or for products to be authorized and activated as POD-enabled consumer equipment.

³ To promote interoperability, manufacturers and cable operators are encouraged to work together on "plug fests" and similar voluntary activities.

ATTACHMENT

Cable Compatibility Technical Requirements

1. Network and Point of Deployment (“POD”) Module Standards

As of July 1, 2004, unless otherwise noted, the following requirements apply to the output of a cable television system as measured at any subscriber terminal equipment with matched impedance at the termination point. The requirements are applicable to any cable system delivering digital video.⁴

- (a) Cable television systems that transmit QAM-modulated digital signals to subscriber premises equipment shall transmit these signals to subscriber premises equipment in accordance with SCTE 40 2001, “Digital Cable Network Interface Standard.” Cable television systems that transmit VSB-modulated digital signals to subscriber premises equipment shall transmit these signals to subscriber premises equipment in accordance with the normative requirements of Part I, “Minimum Requirements For Receiver-Compatible Digital Cable TV Systems” of EIA/CEA-818-D, “Cable Compatibility Requirements.”
- (b) Point of Deployment (“POD”) modules provided by cable television system operators to subscribers shall comply with ANSI/SCTE 28 2001, “HOST-POD Interface Standard” and ANSI/SCTE 41 2001, “POD Copy Protection System.” POD modules shall support Section 8.10, “Generic IPPV Support” of ANSI/SCTE 28 2001.
- (c) Closed captions for digital television programs shall be encoded in accordance with EIA-708-B, “Digital Television Closed Captioning (DTVCC) (December 1999) and/or EIA/CEA-608-B, Line 21 Data Service (October, 2000) and shall be transported as picture user data in accordance with ATSC A/53B.
- (d) Cable television systems shall support Emergency Alert Service in accordance with SCTE 40 2001, Digital Cable Network Interface Standard, Section 5.7. Such Emergency Alerts shall be signaled on all Transport Streams that carry one or more programs in-the-clear (unscrambled) by sending an emergency alert message in accordance with EIA/CEA-814, Emergency Alert Message for Cable (February, 2002). For scrambled programs, Emergency Alerts shall be signaled out-of-band using the Forward Data Channel. Such out-of-band messages, when processed by the cable-system operator-supplied POD module, shall be transferred to the subscriber receiving equipment over the Extended Channel as an MPEG table section conforming to EIA/CEA-814.

⁴ The FCC may find it convenient to consult Part I, “Minimum Requirements For Receiver-Compatible Digital Cable TV Systems”, of EIA/CEA-818-D “Cable Compatibility Requirements,” which compiles these references to the SCTE and EIA/CEA standards along with explanatory information.

2. Receiver Standards

The presumption of the right of attachment is specifically, but not solely, granted with respect to receivers that the manufacturer has tested and self-certified as complying with the normative requirements of Part II, "Minimum Requirements For Cable-Compatible Digital TV Receivers", of EIA/CEA-818-D "Cable Compatibility Requirements."

3. Provision of Navigation Information

Beginning July 1, 2004, MSOs shall transmit accurate, standard-format navigation information (including both tuning information and program schedule information) about current and upcoming programming, and shall ensure that such data is available to consumers' retail navigation devices.

(a) Required information:

At a minimum, the navigation information provided shall include tuning information (channel number and channel name); program schedule information (the current and upcoming 9-12 hours' program names, and, when the information is available, program description); Caption Service Descriptor (for closed captioning); AC-3 Audio Descriptor (for video description for blind, multi-channel sound, etc.); and Content Advisory Descriptor (for V-Chip).

(b) Means of providing the required information:

- (1) For digital programming provided in the clear: Cable operators shall provide consumers' retail navigation devices with in-band navigation information, including both tuning information and program schedule information, in conformance to the ATSC A/65A Program and Service Information Protocol (PSIP) standard, May 31, 2000, as amended by Amendment 2 approved August 2002.⁵ PSIP tables provided on each Transport Stream shall include those listed in A/65A Sec. 5.2 plus the first four Event Information Tables (EIT-0, EIT-1, EIT-2, and EIT-3) and, when the information is available, the first four Extended Text Tables (ETT-0, ETT-1, ETT-2, and ETT-3).
- (2) For scrambled digital programming and for all analog programming: The POD modules distributed to consumers by cable operators shall provide consumers' retail navigation devices with navigation information (including tuning information, program schedule information, and, when the information is available, program description) using the methods defined in the out-of-band system information standard ANSI/SCTE 65 2002 and the POD-Host Interface standard ANSI/SCTE 28 2001.

⁵ The FCC may wish to update this reference if a new edition of the standard, incorporating Amendment 2, is published by the time the FCC issues a rule.

(c) Subscriber fee for program schedule information:

If a cable operator chooses to assess a charge to subscribers for program schedule information that is supplied out-of-band via the POD module, the cable operator shall apply the same charges and conditions to subscribers who lease a navigation device that receives program schedule information as are applied to subscribers who use a retail navigation device to receive program schedule information.

Alternative Non-Exclusive Pod-Host Interface License Agreement

**NONEXCLUSIVE
POD-HOST INTERFACE LICENSE AGREEMENT**

THIS NONEXCLUSIVE POD-HOST INTERFACE LICENSE AGREEMENT (the “**Agreement**”) is entered into this ___ day of _____ (the “**Effective Date**”), by and between _____, having a place of business at _____ (“**Licensee**”) and Cable Television Laboratories, Inc., having a place of business at 400 Centennial Parkway, Louisville, Colorado USA 80027-1266 (“**CableLabs**”).

RECITALS

WHEREAS, Section 304 of the Telecommunications Act of 1996 requires that the competitive commercial availability of navigation devices for receipt of cable television and other services be assured pursuant to the regulations of the Federal Communications Commission;

WHEREAS, Part 76.1201 of the rules of the Federal Communications Commission requires cable television operators to support a "right to attach" commercially competitive navigation devices without limitation by the cable operator, save for considerations in furtherance of preventing physical or electronic harm to the cable network or unauthorized receipt of cable services for which authorization is required;

WHEREAS, CableLabs is a research and development company funded by the cable television industry;

WHEREAS, Licensee is a business intent on exercising rights assured by Section 304, Part 76.1201, and other applicable U.S. law, and (in the case of a manufacturer of conditional access devices or devices for network use) may be intent on designing, developing, manufacturing and distributing components for use in the cable television industry;

WHEREAS, CableLabs has the rights to DFAST scrambling technology, portions of which are embodied in a U.S. patent and foreign equivalents, which rights are necessary to exercise of the right to attach in a manner that furthers cable operators' interest in protecting against unauthorized receipt of service by consumers;

WHEREAS, CableLabs desires to grant licenses to the DFAST scrambling technology to allow (1) manufacturers to create POD Modules in support of commercially competitive navigation devices, and (2) manufacturers to create and market compatible Host Devices in furtherance of their rights as guaranteed by Part 76.1201;

WHEREAS, CableLabs desires to condition the grant of a license hereunder on the right of cable operators, as represented herein by CableLabs, to protect cable networks from harm and unauthorized access;

NOW THEREFORE, in consideration of the terms and conditions set forth in this Agreement, the parties hereby agree as follows:

AGREEMENT

1. Definitions.

1.1 “**Cable Operator**” means any cable operator that CableLabs identifies on its <www.cablelabs.com> website as a member, or which relies on or is a beneficiary of the terms of this license.

1.2 “**CableLabs-Referenced Technology**” means:

(a) the Digital Cable Network Interface Standard (SCTE 40 2001), the Host-POD Interface Standard (SCTE 28 2001), and the POD Copy Protection Standard (SCTE 41 2001), provided however, that CableLabs-Referenced Technology does not include any third party proprietary technology referenced in or required by these standards, such as DES, DTCP, or MPEG-2; and

(b) user manuals and other written materials (whether in print or electronic form) that relate to the DFAST Technology that have been provided by CableLabs hereunder, including materials for design (for example, flow charts and principles of installation, configuration, administration, and operation) and machine readable text or graphic files subject to display or print-out (“**Documentation**”).

1.3 “**Compliance Rules**” mean the rules described on Exhibit B hereto which apply to POD Modules and Host Devices consistent with Parts 76.1201 and 76.1204 of the regulations of the Federal Communications Commission.

1.4 “**Controlled Content**” means content that has been transmitted from the headend with the encryption mode indicator (“EMI”) bits set to a value other than zero, zero (0,0).

1.5 “**Derivative Work**” means any work that is based upon DFAST Technology, other than CableLabs-Referenced Technology, such as a revision, improvement, enhancement, modification, translation, abridgment, condensation, expansion, collection, compilation or other form in which such DFAST Technology may be recast, transformed, ported or adapted and that, if prepared without authorization of CableLabs, would constitute infringement of the CableLabs Technology.

1.6 “**DFAST Technology**” means the Licensed Patent(s) collectively with the Licensed Know-How.

1.7 “**Essential Patent Claim(s)**” means claims of a patent or patent application, issued now or in the future, that are necessarily infringed in order to implement DFAST Technology as referenced in the CableLabs Referenced Technology, only

by those portions of Licensed Products that implement the DFAST technology, and solely to the extent such technology is disclosed with particularity in CableLabs-Referenced Technology as of the date of execution of this License. Essential Patent Claims do not include (a) any claims relating to semiconductor manufacturing technology; (b) claims relating to aspects of any standard that is not itself part of the CableLabs-Referenced Technology (including by way of example, CSS, MPEG, IEEE 1394 and analog copy protection systems) even though such standard may otherwise be mentioned or required by the CableLabs-Referenced Technology; (c) claims which, if licensed, would require a payment of royalties by the licensor to unaffiliated third parties; (d) claims relating to any technology introduced into the CableLabs-Referenced Technology, Exhibit A or Exhibit B pursuant to changes made in accordance with Section 3.2, 3.3 or 3.4; or (e) any claim other than an Essential Patent Claim, even if contained in the same patent as an Essential Patent Claim.

- 1.8 “**Host Device**” means a cable navigation device covered by Part 76 of the rules of the Federal Communications Commission, other than a **POD Module**.
- 1.9 “**Intellectual Property Rights**” means all intellectual property rights worldwide arising under statutory law, common law or by contract, and whether or not perfected, including, without limitation, all (a) patents, patent applications and patent rights, (b) rights associated with works of authorship including copyrights, copyright applications, copyright registrations, mask work rights, mask work applications, mask work registrations, and Derivative Works of the foregoing (c) rights relating to the protection of trade secrets and confidential information, (d) trademarks, trade dress, trade name, design patent and service mark rights, whether or not registered and (e) divisions, continuations, continuations in part, renewals, reissues and extensions of the foregoing (as and to the extent applicable) now existing, hereafter filed, issued or acquired.
- 1.10 “**Licensed Components**” means component products which utilize the DFAST Technology and which are designed for incorporation into Prototypes, Host Devices and/or POD Modules.
- 1.11 “**Licensed Know-How**” means all know-how, associated technology, trade secrets, copyrighted works, reference source code implementations, shared secret keys, Diffie-Hellman system parameters, encryption and decryption keys, software development tools, methodologies, processes, technologies or algorithms, test data sets and test cases and other implementations of technology that CableLabs shall deliver to Licensee to assist in incorporating the DFAST Technology into Host Devices or POD Modules.
- 1.12 “**Licensed Patents**” means U.S. Licensed Patent 4,860,353, any application, division, continuation or continuation in part of the foregoing patent, any patent reissuing on or reissuing pursuant to a reexamination of the foregoing patent and

all foreign equivalents, together with any application or patent containing one or more Essential Patent Claims that may be licensable by CableLabs in the future.

- 1.13 **“Licensed Product”** means the Licensee’s POD Module and/or Host Device, or either or both, and includes Licensed Components.
- 1.14 **“Prototype”** means a pre-production model of a Host Device or a POD Module.
- 1.15 **“POD Module”** means an individual addressable device for authorizing and de-authorizing the decryption or descrambling of Services and individual programs and events delivered through the Host Device.
- 1.16 **“Robustness Rules”** mean the rules described on Exhibit A hereto which apply to POD Modules and Host Devices and are for the purpose of resisting the specified attempts to modify POD Modules or Host Devices.
- 1.17 **“Service”** means any service, delivered over cable, contemplated under Part 76 of the Rules of the Federal Communications Commission, including video, audio, or data signals (other than signals delivered via DOCSIS protocols), whether in analog or digital format, transmitted over the cable system to or from the Host Device, for the purposes of effectuating the reception or transmission of information, entertainment, or communications content.
- 1.18 **“Test Tools”** means devices which have the capability to utilize the DFAST Technology and which have as their purpose the testing or verification of the performance of Host Devices and/or POD Modules and their prototypes.

2. Licenses Grants and Restrictions.

- 2.1 **License for DFAST Technology.** Subject to the terms and conditions set forth herein, CableLabs hereby grants to Licensee, and Licensee hereby accepts from CableLabs, a non-exclusive, non-transferable (except as set forth in Sections 2.2, 2.3 and 11.7 hereof) world-wide license under CableLabs’ Intellectual Property Rights in the DFAST Technology to:

(a) possess and use the DFAST Technology to develop and test Prototype Host Devices and/or POD Modules, Test Tools, and Licensed Components which are designed for incorporation into Prototypes,

(b) distribute the Test Tools and Licensed Components referred to in (a) only to entities who have obtained a license from CableLabs for the use of the DFAST Technology,

(c) exchange information about and test interoperability with the DFAST Technology only with other DFAST Technology licensees,

(d) distribute Prototypes to Cable Operators and other cable television multiple system operators in North America for the purpose of field trials and technology evaluation and not for retail,

(e) make, have made, use, sell, offer to sell, import and otherwise distribute Host Devices and/or POD Modules utilizing the DFAST Technology;

(f) practice any method or process under the DFAST Technology for manufacture or use of products using CableLabs-Referenced Technology;

(g) make, have made, use, sell, offer to sell, import and otherwise distribute Derivative Works made by Licensee of the DFAST Technology, *provided that* Licensee's rights under this Section 2.1(g) shall be exercised solely in connection with the creation, manufacture and distribution of the Host Devices or POD Modules;

(h) use and reproduce the Documentation in order to modify the Documentation as reasonably required in connection with Licensee's creation of Derivative Works in accordance with this Agreement;

(i) distribute the modified Documentation directly to customers in connection with the distribution of Host Devices or POD Modules in accordance with this Agreement, provided that such modified Documentation shall not reveal any confidential information contained in the DFAST Technology; and

(j) use CableLabs brands or legends as designated by CableLabs for devices supported under Part 76.1201 of Federal Communications Commission regulations, conditioned on compliance with CableLabs Referenced Technology and the Compliance and Robustness rules.

2.2 Limited Right for Test Tools. In addition to rights granted under Section 2.1

(a) and (b), Licensee shall have the limited right to make, have made, use, sell, offer to sell and otherwise distribute Test Tools, subject to the following limitations:

(a) Licensee shall distribute the Test Tools containing the DFAST Technology only to DFAST Technology licensees. Licensee must separately maintain records of sales of Test Tools, and Licensee shall provide the names and addresses of each purchaser to CableLabs. Copies of such contracts for the distribution of Test Tools must be available for inspection by CableLabs with respect to the provisions relevant to the requirements of this Section 2.2.

(b) Licensee shall limit the use of Test Tools for the purposes of ensuring proper operation, testing, debugging, integration and tuning. For the purposes of this Section 2.2 (b), (i) "testing" shall mean a process of evaluating a Prototype to ensure proper operation; (ii) "debugging" shall mean a process of finding the cause of an error in a Prototype or Licensed Product, including analysis for the purpose of exposing possible design flaws; (iii) "integration" shall mean a process of evaluating the performance of a Prototype or a Licensed Product with a

POD Modules (in the case of a Host Device Test Tool) or Host Devices (in the case of a POD Module Test Tool), as the case may be, to ensure that they properly operate together; and (iv) “tuning” shall mean a process of evaluating and improving a Prototype or Licensed Product to work more efficiently with a POD Module or a Host Device, as the case may be.

2.3 Limited Right for Licensed Components. In addition to rights granted under Section 2.1 (a) and (b), Licensee shall have the limited right to make, have made, use, sell, offer to sell, import and otherwise distribute Licensed Components, subject to the following limitations:

(a) Licensee shall distribute the Licensed Components containing DFAST Technology only to DFAST Technology licensees. Licensee must separately maintain records of sales of Licensed Components, and Licensee shall provide the names and addresses of each purchaser to CableLabs. Copies of such contracts for the distribution of Licensed Components must be available for inspection by CableLabs, or, at Licensee’s option and expense, by a third-party auditor mutually agreeable to Licensee and CableLabs, with respect to the provisions relevant to the requirements of this Section 2.3. Obligations under this Section 2.3 shall not apply to sale of Licensed Products or to products incorporating Licensed Components.

(b) The Licensed Components shall, where possible, conform to Exhibit A and Exhibit B.

2.4 No Other Licenses Granted. Except as provided herein, no license is granted by CableLabs, either directly or by implication, estoppel, or otherwise, and any rights not expressly granted to Licensee hereunder are reserved by CableLabs.

3. Delivery of DFAST Technology, Changes.

3.1 Delivery of DFAST Technology. CableLabs agrees to deliver to Licensee one copy of the Licensed Know-How and the associated Documentation upon execution of this Agreement. Upon the request of Licensee, CableLabs shall supply Licensee with one or more additional copies of the Licensed Know How and such associated Documentation as may be required for Licensee’s operations. Except as provided in Section 2.1(h), Licensee shall not make further copies of any Licensed Know How or Documentation provided pursuant to this Section 3.1, and shall treat all such information strictly in accordance with the provisions of Section 5.2. CableLabs reserves the right to charge an administrative fee in connection with such additional copies.

3.2 Minor Changes To CableLabs-Referenced Technology Or Compliance And Robustness Rules. Minor changes to CableLabs-Referenced Technology that do not alter the existing requirements or add new requirements may be made from time to time by CableLabs, only for the purpose of correcting any errors or omissions or for clarifying, but not materially amending, altering or expanding the same. Such minor changes may become effective upon 60 days’ notice to Licensee. Otherwise, Licensee shall have a reasonable time to comply, in

accordance with practices or recommendations of the Society of Cable Television Engineers ("SCTE").

- 3.3 **Changes To CableLabs-Referenced Technology.** Except for a minor change, any change in CableLabs-Referenced Technology shall occur only through final action of the SCTE. Licensee shall be obliged to conform its products beginning with products manufactured 18 months after such final adoption.
- 3.4 **Changes To Compliance And Robustness Rules.** Except for a Minor change, or a selection or agreement by CableLabs pursuant to Section 2.2 of Exhibit B, approval of the Federal Communications Commission, pursuant to petition in CS Docket No. 97-80, shall be required for any change in the Compliance and Robustness Rules.

4. Payments; Accounting Requirements.

- 4.1 **License Fee.** As consideration for the licenses granted hereunder, Licensee agrees to pay CableLabs a one-time, non-refundable license fee of \$5,000 (the "License Fee") within thirty days of the Effective Date. If Licensee has previously paid a fee to CableLabs for evaluation purposes, the total amount of such previous payment shall be applied to the License Fee.
- 4.2 **Applicable Taxes.** CableLabs is exempt from income tax in the United States under Section 501(c)(6) of the Internal Revenue Code. The License Fee owed by Licensee to CableLabs is exclusive of, and Licensee shall pay, all sales, use, value added, excise, income tax, and other taxes that may be levied upon either party by taxing authorities other than the United States in connection with this Agreement, except for taxes based on CableLabs' employees.

5. Ownership and Confidentiality of DFAST Technology.

- 5.1 **Ownership.** All Intellectual Property Rights (except for Derivative Works made by Licensee which shall be owned by Licensee) in the DFAST Technology shall be and remain the sole property of CableLabs or such companies that have licensed the DFAST Technology to CableLabs, and Licensee shall have no rights or interest in such DFAST Technology other than the rights granted to Licensee under this Agreement. CableLabs retains all right, title and interest in and to the Licensed Know-How used in connection with the DFAST Technology that are trade secrets or proprietary information of CableLabs or its licensors, members, or affiliates, or are otherwise owned or licensed by CableLabs. Licensee will take all reasonable measures to protect the confidentiality of CableLabs' Intellectual Property Rights in the DFAST Technology.
- 5.2 **Confidentiality.** All of the Licensed Know-How is confidential and proprietary to CableLabs or the companies that have licensed to CableLabs. Licensee agrees that the Licensed Know-How shall be kept confidential with the same degree of

care that Licensee exercises as to its own confidential information (except as otherwise permitted by this Section 5.2), and shall not be used other than in connection with the rights granted in Section 2 hereof. Moreover, the Licensee shall agree to transmit the information only to its affiliates, subcontractors, consultants, agents, employees, customers and representatives who need to know the information, who are informed of the confidential nature of the information, and, in the case of customers, subcontractors and consultants who have agreed in writing to abide by the terms and conditions of this Section 5.2 and who have been identified to CableLabs by advance notice. However, Licensed Know-How does not include, and no obligation is imposed on, information which (i) is already in or subsequently enters the public domain through no breach of Licensee's obligations hereunder and which CableLabs failed to remove from public availability or to enjoin such public disclosure within 90 days after the date such information is or becomes generally known as set forth above; (ii) is known to Licensee or is in its possession (as shown by tangible evidence) without conduct which would constitute a breach of Licensee's obligations hereunder prior to receipt from CableLabs; (iii) is developed independently by Licensee (as shown by tangible evidence) by persons who have not had, either directly or indirectly, access to or knowledge of Licensed Know-How; (iv) is lawfully received by Licensee from another party without a duty of confidentiality to CableLabs; or (v) is disclosed by Licensee pursuant to the order or requirements of a governmental administrative agency or other governmental body. Licensee will inform CableLabs of any such obligation and cooperate with CableLabs in obtaining a protective order as may be reasonably necessary. The obligations under this Section 5.2 shall terminate three years after the last commercial use of the DFAST Technology by Licensee or any CableLabs licensee of the DFAST Technology, whichever is later.

6. Term and Termination.

- 6.1 Term.** The term of this Agreement shall be the life of U.S. Licensed Patent 4,860,353, and shall be extended automatically thereafter indefinitely on a year by year basis unless earlier terminated according to its terms; provided that under no circumstances shall the term of the license for the Licensed Patents granted pursuant to Section 2 of this Agreement exceed the patent term of the last of the Licensed Patents to expire.
- 6.2 Termination of Licenses for Cause.** CableLabs may terminate the licenses granted hereunder for any specific model Host Device or POD Module that is in material breach of Exhibit A or Exhibit B where Licensee's failure subjects Controlled Content to an unreasonable risk of unauthorized copying or exposes DFAST Technology to compromise. However, CableLabs may only terminate the licenses pursuant to this Section 6.2 after the potential for a cure at low cost at the headend for the relevant service has been evaluated as a reasonable alternative, and CableLabs has (a) thoroughly evaluated the potential breach with respect to the relevant Host Device or POD Module, (b) consulted with Licensee

regarding the problem, (c) given notice to Licensee of CableLabs' intent to terminate the license, and (d) provided Licensee with 30 days to commence commercially reasonable efforts to cure the breach (where such breach is capable of being cured). Upon receiving such notice, Licensee shall commence, and thereafter at all times diligently pursue, commercially reasonable efforts to cure as soon as possible thereafter.

- 6.3 Termination of Agreement for Cause.** CableLabs may terminate this Agreement in the event that CableLabs provides notice of Licensee's material breach of any representation, warranty or covenant set forth in Section 2.3, 4.1, 5.2 or 7.2 hereto and (where such breach is capable of being cured) such breach remains uncured sixty days following the date of such notice.
- 6.4 Termination by Licensee.** Licensee may terminate this Agreement at any time, upon notice to CableLabs.
- 6.5 Effect of Termination.** Upon the termination of the licenses granted hereunder for any specific model Host Device pursuant to Section 6.2, Licensee may no longer be considered licensed under DFAST Technology to make, have made, use, sell, import or distribute such model Host Device, use the DFAST Technology therewith, or use a brand as specified pursuant to Section 2.1(j) in connection with such model Host Device, except that, if the termination did not result from Licensee's failure to satisfy the requirements of Exhibit A or Exhibit B as to a particular model Host Device, Licensee may sell or distribute remaining manufactured or partially manufactured stock of that Host Device model. Upon the termination of the licenses granted hereunder for any specific POD Module pursuant to Section 6.2, Licensee is no longer licensed to make, have made, use, sell, import or distribute such POD Module, use the DFAST Technology therewith, or use a brand specified pursuant to Section 2.1(j) in connection with such POD Module. Unless Licensee remains licensed with respect to Host Devices, Licensee shall immediately return all copies of the DFAST Technology to CableLabs, or destroy all such copies to the reasonable satisfaction of CableLabs. Licenses properly granted by Licensee in conjunction with the sale or distribution of a Certified Host Device or POD Module by Licensee pursuant to Section 2.2 prior to the date of termination shall remain in full force and effect. Unless otherwise stated herein, no termination of this Agreement, whether by CableLabs or by Licensee, or termination of any license granted hereunder shall relieve either party of any obligation or liability accrued hereunder prior to such termination, or rescind or give rise to any right to rescind anything done by either party prior to the time such termination becomes effective nor shall the survival provisions of Section 11.13 be affected by such termination.

7. Representations, Warranties, Covenants and Disclaimers.

- 7.1 CableLabs.** CableLabs represents and warrants that:

(a) CableLabs owns all right and title to the DFAST Technology, or otherwise has the right to grant the license thereof, and to the best of CableLabs' knowledge, free of any claim or other encumbrance of any third party. None of the DFAST Technology is or ever has been declared invalid or unenforceable, or is the subject of a pending or threatened action for opposition, cancellation, declaration of invalidity, unenforceability or misappropriation or like claim, action or proceeding;

(b) Without investigation, it is not aware of any notice or claim, threatened or pending, that the use of the DFAST Technology in accordance with the terms of this Agreement infringes any third party's Intellectual Property Rights. Otherwise, the DFAST Technology is licensed on an "as is" basis;

(c) CableLabs has authorized the person who has signed this Agreement for CableLabs to execute and deliver this Agreement to Licensee on behalf of CableLabs; and

(d) This Agreement constitutes a valid and binding obligation of CableLabs, enforceable according to its terms.

7.2 Licensee. Licensee represents, warrants, and covenants that:

(a) Licensee has authorized the person who has signed this Agreement for Licensee to execute and deliver this Agreement to Licensee on behalf of Licensee; and

(b) This Agreement constitutes a valid and binding obligation of Licensee, enforceable according to its terms.

7.3 Defense of Intellectual Property Claims. In the event Licensee or its affiliates or contract manufacturers (each, a "Defendant"), is party to any claim, assertion, demand, or other action alleging that: (a) the DFAST Technology infringes the patent or other Intellectual Property Rights of another party; or (b) the manufacture, sale or use of Licensed Products or Licensed Components infringes the patent or other Intellectual Property Rights of another party – but solely to the extent any such claim, assertion, demand or other action is related to Defendant's implementation of the DFAST Technology; or (c) that Licensee's exercise of its rights under this Agreement result in a violation of applicable laws, rules or regulations {in each case under subsections (a), (b) and (c) of this Section 7.3, a "Claim"}}, then CableLabs will defend, indemnify and hold the Defendants harmless from and against any loss, cost, expense or liability (including reasonable attorneys' fees) to the extent arising from or in connection with such Claim. Defendants will provide CableLabs with prompt written notice of any Claims, and will provide reasonable support and assistance to Cablevision, at Cablevision's sole expense. Each Defendant shall give CableLabs authority to settle or defend any such Claim through counsel of CableLabs' own choice and under its sole direction and at its sole expense. However, unless Licensee's prior written consent is obtained, any such settlement shall not materially adversely impact the rights of Licensee.

- 7.4 Covenant of Non-Assertion.** Licensee, on behalf of itself and its affiliates, promises not to assert or maintain against CableLabs or other licensees, and accepts other licensees' promise not to assert or maintain, any claim of infringement under its or their respective Essential Patent Claims for (a) with respect to other licensees, the making, having made, use, import, offering to sell and sale of Licensed Products and Licensed Components where the asserted infringement resides in the implementation of the DFAST technology and (b) with respect to CableLabs, the use of DFAST Technology; provided that in each case (a) and (b) such covenant shall not extend to any aspect of a Licensed Product or Licensed Component which is not required to comply with the CableLabs-Referenced Technology or for which there exists a noninfringing alternative, and further does not extend to any person or entity which is asserting, or whose affiliate is asserting, an Essential Patent Claim against Licensee if Licensee is not willfully in material breach of its obligations under Section 5.2 of this Agreement or the Compliance and Robustness Rules.
- 7.5 Technology Substitution in the Event of a Claim of Infringement.** If CableLabs on the one hand or Licensee on the other hand receives notice that the DFAST Technology allegedly infringes a patent of a third party, then CableLabs may, at its sole option and expense, obtain for Licensee the right to use technology that is substantially equivalent to the DFAST Technology and does not infringe such patent.

8. Limitation of Liability.

In no event shall either party be liable to the other or to any Third-Party Beneficiary (as defined in Section 12.1) for consequential, incidental, special, indirect, punitive or exemplary damages of any kind, including without limitation loss of profit, savings or revenue, or the claims of third parties, whether or not advised of the possibility of such loss, however caused and on any theory of liability, arising out of this Agreement or based on the making, using, selling or importing any product that implements the DFAST Technology. In no event shall either party be liable to the other or to Third-Party Beneficiaries under any circumstances under this Agreement for any claims that, individually or in the aggregate with all other claims exceed the amount paid by Licensee to CableLabs pursuant to Section 4 herein. Notwithstanding the foregoing, the limitation of liability amount set forth above shall be replaced with \$1,000,000 if Licensee is in material breach of Exhibit A, Exhibit B, or any provision of Section 5.2 regarding the security or integrity of the Licensed Know-How.

For purposes of this Agreement, a breach shall be “material” only if it has resulted in or would be likely to result in commercially significant harm to CableLabs, or constitutes a threat to the integrity or security of DFAST Technology, or exposes Controlled Content to unauthorized copying. In addition, the following is a non-exclusive list of circumstances in which there is no material breach of the applicable provisions: (1) if no Licensed Know-How was released to a third party not permitted hereunder to have such information or could reasonably have been expected to have been released to such third party as a result of the breach; (2) if Licensee

maintains an internal program to assure compliance herewith (including a program to assure maintenance of inventory, samples, and confidentiality of information for purposes in addition to compliance with this Agreement), the breach was inadvertent or otherwise unintentional, and the breach did not have a material adverse effect on the integrity or security of the DFAST Technology; or (3) if Licensee brought the breach to CableLabs' attention in a timely manner as required by this Agreement and such breach did not have a material adverse effect on the integrity or security of DFAST Technology.

9. Infringement by Third Parties.

Each party shall promptly notify the other in writing of any apparent infringement of the Licensed Patent(s) by any third party that is known to or comes to the attention of such party. The notification shall include an identification of the suspected product and manufacturer or distributor, as the case may be, and shall further include sufficient information of which such party is then aware to enable the other party to establish a showing of infringement.

10. Publicity.

Following the execution of this Agreement, each party may disclose in media releases, public announcements and other public disclosures, including without limitation promotional or marketing materials, the execution of this Agreement and the fact that Licensee is licensing the CableLabs Technology for Host Devices and POD Modules, *provided that* such party first obtains the other party's written consent. Either party may disclose the existence of this Agreement when and as required by law or regulation.

11. Miscellaneous.

11.1 Grant of Rights to Third Party Beneficiaries. As part of the consideration granted herein, upon Activation, Licensee agrees Content Providers and Cable Operators (collectively, "Third-Party Beneficiaries") shall each be a third-party beneficiary of this Agreement and shall be entitled to bring a claim or action against Licensee to seek injunctive relief against the manufacture, distribution, commercial use and sale of Licensee's products that are in material breach of Exhibit A or Exhibit B that constitutes a threat to the integrity or security of the CableLabs-Referenced Technology. In any such claim or action, reasonable attorneys' fees may be awarded to the prevailing party. Such Third Party Beneficiaries may seek injunctive relief only after providing CableLabs and the Licensee with notice and consultation reasonable under the circumstances with respect to such third party claim, and the right to specify proposed cure shall remain with CableLabs, subject to Licensee's approval. Claims and actions under this Section 11.1 shall be made only for material breaches (i.e., breaches that constitute a threat to the integrity or security of the CableLabs-Referenced Technology) that are also willful and in bad faith.

11.2 Independent Contractors. The relationship established between the parties by this Agreement is that of independent contractors. Nothing in this Agreement

shall be construed to constitute the parties as partners, joint venturers, co-owners, franchisers or otherwise as participants in a joint or common undertaking for any purpose whatsoever.

- 11.3 No Trademark Rights Granted.** Except as expressly provided in this Agreement, nothing contained in this Agreement shall be construed as conferring any right to use in advertising, publicity, or other promotional activities any name, trade name, trademark or other designation of either party hereto (including any contraction, abbreviation or simulation of any of the foregoing).
- 11.4 No Patent Solicitation Required.** Except as expressly provided herein, neither party shall be required hereunder to file any patent application, secure any patent or patent rights, provide copies of patent applications to the other party or disclose any inventions described or claimed in such patent applications.
- 11.5 Law and Jurisdiction.** This Agreement shall be construed, and the legal relations between the parties hereto shall be determined, in accordance with the law of the state of New York, United States of America, without regard to its conflict of laws rules.
- 11.6 Compliance with Laws.** In connection with this Agreement, each party shall comply with all applicable regulations and laws, including export, re-export and foreign policy controls and restrictions that may be imposed by any government. Each party shall require its customers to assume an equivalent obligation with regard to import and export controls.
- 11.7 No Assignment.** Licensee shall not assign any of its rights or privileges under this Agreement without the prior written consent of CableLabs, such consent not to be unreasonably withheld or delayed. No consent shall be required for the assignment of this Agreement to any wholly-owned subsidiary of Licensee or for the assignment in connection with the merger of the sale of Licensee or Licensee's business unit provided that Licensee shall remain liable for its obligations hereunder. Any attempted assignment or grant in derogation of the foregoing shall be void.
- 11.8 Notice.** Any notices required or permitted to be made or given to either party pursuant to this Agreement shall be in writing and shall be delivered as follows with notice deemed given as indicated: (a) by personal delivery when delivered personally; (b) by overnight courier upon written notification of receipt; (c) by telecopy or facsimile transmission upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, five days after deposit in the mail. All notices must be sent to the address set forth below, or to such other address as the receiving party may have designated by written notice given to the other party:

(a) for CableLabs,

Attention: General Counsel
400 Centennial Parkway,
Louisville, CO 80027-1266
fax: 303/661-9199; and

(b) for Licensee,

Attention: _____
fax: _____

- 11.9 Amendments.** No amendment or modification hereof shall be valid or binding upon the parties unless made in writing and signed by both parties.
- 11.10 Waiver.** Any waiver by either party of any breach of this Agreement shall not constitute a waiver of any subsequent or other breach.
- 11.11 Severability.** If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be in any way affected or impaired thereby.
- 11.12 Headings.** The headings of the several sections of this Agreement are for convenience and reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.
- 11.13 Survival.** The following sections of the Agreement shall survive any termination of the Agreement: Sections 4.2, 5, 6.4, 6.5, 7.1, 7.2, 7.3, 7.4, 8, 10, 11.1, 11.8, and 11.13.
- 11.14 Entire Agreement.** This Agreement embodies the entire understanding of the parties with respect to the subject matter hereof and merges all prior discussions between them, and neither of the parties shall be bound by any conditions, definitions, warranties, understandings or representations with respect to the subject matter hereof other than as expressly provided herein.
- 11.15 Most Favored Status.** CableLabs shall make available to Licensee its substantial commitments or clarifications as to any POD-HOST Interface License Agreement (“PHILA”) made available to any and all manufacturers of POD Modules and Host Devices through notice to Licensee. CableLabs also commits to afford Licensee timely notice and the benefit of any modifications, clarifications or interpretations of language in such PHILA in accordance with this Section 11.15. Pursuant to this benefit, (1) where CableLabs agrees to make a change to a particular licensee’s PHILA, Licensee shall be given the option to upgrade to such revised agreement, and (2) where CableLabs has agreed to include language in a

particular PHILA that is more favorable than Licensee's PHILA, CableLabs shall not enforce the language in this Agreement with respect to Licensee to the extent that such language is less favorable than that language found in such other licensee's PHILA.

11.16 Conditions As To Licensee Obligations.

(a) No obligation on Licensee under this License shall be binding on or enforceable against Licensee unless the same obligation is required of all other manufacturers or distributors of any cable navigation device manufactured after January 1, 2004 and covered by Part 76 of the regulations of the Federal Communications Commission. For purposes of this provision, in the case of a product lacking a POD slot, all Compliance and Robustness rules shall apply to such product *mutatis mutandis*.

(b) No Compliance or Robustness obligation on Licensee under this License shall be binding or enforceable with respect to content of any Third Party Beneficiary unless the coding of such content does not prevent or limit consumer copying, except such prevention or limitation of copying as is set forth specifically at 17 U.S.C. section 1201(k)(2)(A) - (D). In the event that a transmission meets both the conditions set forth in subparagraph (A) and those set forth in subparagraph (B), the transmission shall be treated as a transmission described in subparagraph (A).

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly signed and to be effective as of the Effective Date above.

[Licensee] _____

Cable Television Laboratories, Inc.

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

LIST OF EXHIBITS:

- Exhibit A: Robustness Rules
- Exhibit B: Compliance Rules

Exhibit A

Robustness Rules for the POD-HOST Interface

1. Construction.

1.1 Generally. The Licensed Products as shipped shall meet Exhibit B and shall be designed and manufactured in a manner that is clearly designed to frustrate attempts to modify such Licensed Products to defeat the functions of the CableLabs-Referenced Technology and Exhibit B, according to the standards set forth below.

1.2 Defeating Functions. Licensed Products shall not include (i) switches, buttons, jumpers, or software equivalents of any of the foregoing, (ii) specific traces that can be cut, or (iii) service menus or functions (including remote-control functions), in each case by which the DFAST Technology, content protection technologies, analog protection systems, Reprotection, output restrictions, recording limitations, or other security-related provisions of the CableLabs-Referenced Technology or Exhibit B can be defeated or by which Controlled Content can be exposed to unauthorized copying. For the purpose of this exhibit, "Reprotection" shall mean the application of an approved protection technology, when required, to Controlled Content received from a POD Module that is to be output from the Host Device, and the integrity of the system and methods by which such application is assured.

1.3 Keep Secrets. Licensed Products shall be designed and manufactured in a manner that is clearly designed to frustrate attempts to discover or reveal (i) the unique number, of a specified bit length, assigned to each Host Device, or the numbers used in the process for encryption or decryption of Controlled Content (collectively, "Keys") and (ii) the methods and cryptographic algorithms used to generate such Keys.

1.4 Documents and Robustness Certification Checklist.

1.4.1 Before releasing any Licensed Product, Licensee must perform tests and analyses to assure compliance with this Exhibit A. A Robustness Certification Checklist is attached as Exhibit A-1 for the purpose of assisting Licensee in performing tests covering certain important aspects of this Exhibit A. Inasmuch as the Robustness Certification Checklist does not address all elements required for the manufacture of a compliant product, Licensee is strongly advised to review carefully the CableLabs-Referenced Technology, Exhibit B and this Exhibit A so as to evaluate thoroughly both its testing procedures and the compliance of its Licensed Products.

1.4.2 Licensee specifically acknowledges and agrees that it must provide copies of the CableLabs-Referenced Technology, Exhibit A, Exhibit A-1, and Exhibit B to its responsible supervisors of product design and manufacture in such manner and at such times as to induce compliance with such materials and completion of the Robustness Certification Checklist.

2. Controlled Content Paths. Controlled Content shall not be available on outputs other than those specified in Section 2 of Exhibit B, and, within such Licensed Product, Controlled Content shall not be present on any user accessible buses (as defined below) in non-encrypted,

compressed form. Similarly Keys used to support any content encryption and/or decryption in the Licensed Product's data shall not be present on any user accessible buses. Notwithstanding the foregoing, compressed audio data may be output to an external Dolby Digital decoder in the clear via the S/PDIF connector. This section shall not apply to navigation data contained in the Program Association Tables (PAT) or the Program Map Tables (PMT). A "user accessible bus" means a data bus which is designed for end user upgrades or access such as PCI that has sockets or is otherwise user accessible, SmartCard, PCMCIA, or Cardbus, but not memory buses, CPU buses, and similar portions of a device's internal architecture.

3. Methods of Making Functions Robust. Licensed Products shall use at least the following techniques in a manner that is clearly designed to frustrate attempts to defeat the functions and protections specified in this Agreement, including its Exhibits:

(a) Distributed Functions. The portions of the Licensed Product that perform authentication and decryption and the MPEG (or similar) decoder shall be designed and manufactured in a manner associated and otherwise integrated with each other such that Controlled Content in any usable form flowing between these portions of the Licensed Product shall be secure to the level of protection described in Section 3(e) below from being intercepted or copied.

(b) Software. Any portion of the Licensed Product that implements a part of the CableLabs-Referenced Technology in Software shall include all of the characteristics set forth in Sections 1 and 2 of this Exhibit A. For the purposes of this Exhibit A, "Software" shall mean the implementation of the functions as to which this Agreement requires a Licensed Product to be compliant through any computer program code consisting of instructions or data, other than such instructions or data that are included in Hardware. Such implementations shall:

(i) Comply with Section 1.3 by any reasonable method including but not limited to encryption, execution of a portion of the implementation in ring zero or supervisor mode, and/or embodiment in a secure physical implementation; and in every case of implementation in Software, using techniques of obfuscation clearly designed to disguise and hamper attempts to discover the approaches used;

(ii) Be designed to perform self-checking of the integrity of its component parts such that unauthorized modifications will be expected to result in a failure of the implementation to provide the authorized authentication and/or decryption function. For the purpose of this provision, a "modification" includes any change in, or disturbance or invasion of features or characteristics, or interruption of processing, relevant to Sections 1 and 2 of this Exhibit A. This provision requires at a minimum the use of "signed code" or more robust means of "tagging" operations throughout the code; and,

(iii) Meet the level of protection outlined in Section 3(e) below.

(c) Hardware. Any portion of the Licensed Product that implements a part of the CableLabs-Referenced Technology in hardware shall include all of the characteristics set forth in Sections 1 and 2 of this Exhibit A. For the purposes of this Exhibit A, "Hardware" shall mean a

physical device, including a component, that implements any of the functions as to which this Agreement requires that a Licensed Product be compliant and that (i) does not include instructions or data other than such instructions or data that are permanently embedded in such device or component; or (ii) includes instructions or data that are not permanently embedded in such device or component where such instructions or data have been customized for such Licensed Product or Licensed Component and such instructions or data are not accessible to the end user through the Licensed Product or Licensed Component. Such implementations shall:

(i) Comply with Section 1.3 by any reasonable method including but not limited to: embedding Keys, Key generation methods and the cryptographic algorithms in silicon circuitry or firmware that cannot reasonably be read, or the techniques described above for software;

(ii) Be designed such that attempts to remove, replace or reprogram Hardware elements in a way that would compromise the security or content protection features required by this Agreement in Licensed Products would pose a serious risk of rendering the Licensed Product unable to receive, decrypt or decode Controlled Content. By way of example, a component which is soldered rather than socketed may be appropriate for this means; and,

(iii) Meet the level of protection outlined in Section 3(e) below.

(d) **Hybrid.** The interfaces between Hardware and Software portions of a Licensed Product shall be designed so that the Hardware portions comply with the level of protection that would be provided by a pure Hardware implementation, and the Software portions comply with the level of protection which would be provided by a pure Software implementation.

(e) **Level of Protection.** The core encryption functions of the CableLabs-Referenced Technology (maintaining the confidentiality of Keys, Key generation methods and the cryptographic algorithms, conformance to Exhibit B and preventing Controlled Content that has been unencrypted from copying or unauthorized viewing) shall be implemented in a reasonable method so that they:

(i) cannot be defeated or circumvented merely by using general purpose tools or equipment that are widely available at a reasonable price, such as screwdrivers, jumpers, clips and soldering irons (“Widely Available Tools”), or using specialized electronic tools or specialized software tools that are widely available at a reasonable price, such as EEPROM readers and writers, debuggers or de-compilers (“Specialized Tools”), other than devices or technologies whether Hardware or Software that are designed and made available for the specific purpose of bypassing or circumventing the protection technologies required (“Circumvention Devices”); and

(ii) Can only with difficulty be defeated or circumvented using professional tools or equipment, such as logic analyzers, chip disassembly systems, or in-circuit emulators or other tools, equipment, methods or techniques not described in subsection (i) above

such as would be used primarily by persons of professional skill and training, but not including professional tools or equipment that are made available only on the basis of a non-disclosure agreement or Circumvention Devices.

(f) Advance of Technology. Although an implementation of a Licensed Product when designed and shipped may meet the above standards, subsequent circumstances may arise which had they existed at the time of design of a particular Licensed Product would have caused such products to fail to comply with this Exhibit A (“New Circumstances”). If Licensee has (a) actual Notice of New Circumstances, or (b) actual knowledge of New Circumstances (the occurrence of (a) or (b) hereinafter referred to as “Notice”), then within eighteen months after Notice Licensee shall cease distribution of such Licensed Product and shall only distribute Licensed Products that are compliant with this Exhibit A in view of the then-current circumstances.

4. Update Procedure.

CableLabs will meet with cable television system operators, equipment manufacturers and content providers on a regular basis to revise and update these rules to ensure that the POD-HOST subsystem remains secure.

Exhibit A-1

Robustness Checklist

Notice: This Checklist is intended as an aid to the correct implementation of Exhibit A for hardware and software implementations of CableLabs-Referenced Technology in a Licensed Product. This Checklist does not address all aspects of CableLabs-Referenced Technology and Exhibit B necessary to create a product that is fully compliant. Failure to perform the tests and analysis necessary to comply fully with the CableLabs-Referenced Technology, Compliance Rules or Robustness Rules could result in a breach of the POD-Host Interface License Agreement and appropriate legal action taken by CableLabs or other parties under the License Agreement.

DATE: _____

MANUFACTURER: _____

PRODUCT NAME: _____

HARDWARE MODEL OR SOFTWARE VERSION: _____

NAME OF TEST ENGINEER COMPLETING CHECKLIST:

TEST ENGINEER: _____

COMPANY NAME: _____

COMPANY ADDRESS: _____

PHONE NUMBER: _____

FAX NUMBER: _____

GENERAL IMPLEMENTATION QUESTIONS

1. Has the Licensed Product been designed and manufactured so there are no switches, buttons, jumpers, or software equivalents of the foregoing, or specific traces that can be cut, by which the content protection technologies, analog protection systems, output restrictions, recording limitations, or other security-related provisions of CableLabs-Referenced Technology or Compliance Rules can be defeated or by which Controlled Content can be exposed to unauthorized copying?

2. Has the Licensed Product been designed and manufactured so there are no service menus and no functions (such as remote-control functions, switches, check boxes, or other means) that can intercept the flow of Controlled Content or expose it to unauthorized copying?

3. Has the Licensed Product been designed and manufactured so there are no service menus and no functions (such as remote-control functions, switches, check boxes, or other means) that can turn off any analog protection systems, output restrictions, recording limitations, or other security-related provisions of the CableLabs-Referenced Technology or Compliance Rules?

4. Does the Licensed Product have service menus, service functions, or service utilities that can alter or expose the flow of Controlled Content within the device?

If Yes, please describe these service menus, service functions, or service utilities and the steps that are being taken to ensure that these service tools will not be used to expose or misdirect Controlled Content.

5. Does the Licensed Product have service menus, service function, or service utilities that can turn off any analog protection systems, output restrictions, recording limitations, or other mandatory provisions of the CableLabs-Referenced Technology or Compliance Rules?

If Yes, please describe these service menus, service functions, or service utilities and the steps that are being taken to ensure that these service tools will not be used to defeat the encryption features of DFAST (including compliance with Exhibit B and the CableLabs-Referenced Technology).

6. Does the Licensed Product have any user-accessible buses (as defined in Section 2 of Exhibit A)?

If so, is Controlled Content carried on this bus?

If so, then:

identify and describe the bus, and whether the Controlled Content is compressed or uncompressed. If such Data is compressed, then explain in detail how and by what means the data is being re-encrypted as required by Section 2 of Exhibit A.

7. Explain in detail how the Licensed Product protects the confidentiality of all keys.

8. Explain in detail how the Licensed Product protects the confidentiality of the confidential cryptographic algorithms used in DFAST.

9. If the Licensed Product delivers Controlled Content from one part of the product to another, whether among software modules, integrated circuits or otherwise or a combination thereof, explain how the portions of the product that perform authentication and decryption and the MPEG (or similar) decoder have been designed, associated and integrated with each other so that Controlled Content are secure from interception and copying as required in Section 3(a) of Exhibit A.

10. Are any DFAST functions implemented in Hardware?

If Yes, complete hardware implementation questions.

11. Are any DFAST functions implemented in Software?

If Yes, complete software implementation questions.

16. Describe the method being used to prevent commonly available debugging or decompiling tools (e.g., Softice) from being used to single-step, decompile, or examine the operation of the DFAST functions implemented in software.

17. Describe the method by which the Licensed Product self-checks the integrity of component parts in such manner that modifications will cause failure of authorization or decryption as described in Section 3(b)(ii) of Exhibit A. Describe what happens when integrity is violated.

18. To assure that integrity self-checking is being performed, perform a test to assure that the executable will fail to work once a binary editor is used to modify a random byte of the executable image containing DFAST functions, and describe the method and results of the test.

23. Describe the means used to prevent attempts to replace, remove, or alter hardware elements or modules used to implement DFAST functions?
24. In the Licensed Product, does the removal or replacement of hardware elements or modules that would compromise the content protection features of DFAST (including Exhibit B, the CableLabs-Referenced Technology, and Exhibit A) damage the Licensed Product so as to render the Licensed Product unable to receive, decrypt, or decode Controlled Content?

Notice: This checklist does not supersede or supplant the CableLabs-Referenced Technology, Compliance Rules, or Robustness Rules. The Company and its Test Engineer are advised that there are elements of the CableLabs-Referenced Technology, Exhibit A and Exhibit B that are not reflected here but that must be complied with.

SIGNATURES:

Signature of Test Engineer with Personal Knowledge of Answers Date

Printed Name of Test Engineer with Personal Knowledge of Answers

Exhibit B

Compliance Rules

Licensed Products must comply with the requirements set forth in this Exhibit and Exhibit A.

1. Definitions

1.1 “Consensus Watermark” means a watermark that has been identified on some industry or multi-industry basis, *e.g.*, in a notice to CableLabs from the Digital Transmission Licensing Administrator, LLC, and that has been identified in a notice by CableLabs to Licensee as the Consensus Watermark for purposes of this Agreement.

1.2 “Controlled Content” means content that has been transmitted from the headend with the EMI bits set to a value other than zero, zero (0,0).

1.3 “DTCP” means that method of authentication, encryption, decryption, key exchange and renewability that is described in the specification entitled “Digital Transmission Content Protection Release 1.1” as may be amended from time-to-time.

1.4 “HDCP” means that method of authentication, encryption, decryption, key exchange and renewability that is described in the specification entitled “High-bandwidth Digital Content Protection revision 1.0” as may be amended from time-to-time.

1.5 “Standard Definition Analog Form [or] Output” means a format or output that is not digital, is NTSC RF, Composite, S-Video, YUV, Y,R-Y,B-Y or RGB and has no more than 483 interlace or progressive active scan lines.

2. Outputs of Controlled Content

2.1 Standard Definition Analog Outputs. A Licensed Product shall not output Controlled Content, or pass Controlled Content to any output, in Standard Definition Analog Form except:

2.1.1 In any transmission through an NTSC RF, Composite, Y,R-Y,B-Y, or RGB format analog output (including an S-video output and including transmissions to any internal copying, recording or storage device) of a signal including Controlled Content, Licensed Products shall generate copy control signals in response to the instructions provided in the APS bits of the Copy Control Instruction message for Controlled Content (*i.e.* trigger bits for Automatic Gain Control and Colorstripe copy control systems, as referenced below). The technologies that satisfy this condition and are authorized hereunder are limited to the following:

(1) For NTSC analog outputs (including RF, Composite or S-Video), the specifications for the Automatic Gain Control and Colorstripe copy control systems (contained in the document entitled “Definition of the Default Settings of the Macrovision Antitaping Process

for DVD Products, Revision 1.0, July 5, 1997”) and the CGMS-A specifications contained in IEC 61880 (for inclusion on Line 20) and in EIA- /CEA 608B (for inclusion on Line 21), provided that all three of such technologies must be utilized in order to meet this requirement;

(2) For YUV or Y, R-Y, B-Y outputs, the appropriate specifications (i) for the Automatic Gain Control copy control system (contained in the document entitled “Definition of the Default Settings of the Macrovision Autotaping Process for DVD Products, Revision 1.0 July 5, 1997) and (ii) for the CGMS-A copy control system (contained in IEC 61880 (for inclusion on line 20 and in EIA/CEA 805 for 480p (for inclusion on Line 41), provided that both of these technologies must be utilized in order to meet this requirement;

(3) Except as provided in this Section 2.1, for Standard Definition Analog outputs not specified above, or as provided in Section 2.2, Licensed Products shall not transmit Controlled Content through such analog outputs until such time as this Exhibit is amended to permit same.

2.2 Digital Outputs. CableLabs shall approve digital outputs, and means of protection therefore, on a reasonable and nondiscriminatory basis. CableLabs shall not withhold approval of any digital output and protection technology that provides protection to Controlled Content against unauthorized interception, retransmission and copying, in accordance with Exhibit A and this Exhibit B. CableLabs may take into account the effectiveness of (a) the technology and (b) the license terms governing the secure implementation of the technology.. It is agreed by CableLabs and Licensee that if any negative determination by CableLabs as to an output and/or technology is the subject of a petition by the responsible party to the Federal Communications Commission, such petition should be considered a petition pertaining to a provision in this License.

2.2.1 A Licensed Product that passes Controlled Content using DTCP shall:

- a. Carry DTCP System Renewability Messages (SRM) from the POD to the DTCP source function;
- b. Map the POD-HOST EMI to the DTCP EMI and the DTCP_CCI field of the DTCP Descriptor;
- c. Map the POD-HOST interface APS bits to the APS field of the DTCP Descriptor;
- d. Map the POD Image Constraint Trigger to the DTCP Image Constraint Token field of the DTCP Descriptor;
- e. Map the Non-Assertion Bit (to be defined in the CableLabs Specification) to the DTCP EPN field;
- f. Map the Pause State Indicator from the POD to the DTCP PSI field (to be defined in the DTCP Specification); and,

- g. Perform such additional functions as may be added by amendment.

2.2.2 A Licensed Product that passes Controlled Content using HDCP shall:

- a. Carry any HDCP System Renewability Message delivered in association with such content to the HDCP Source Function; and
- b. Verify that the HDCP Source Function is fully engaged and able to deliver protected content, by verifying that--
 - i. HDCP encryption is operational on such output,
 - ii. Processing of the valid received HDCP System Renewability Message associated with such content, if any, has occurred as defined in the HDCP Specification, and
 - iii. There is no HDCP Display Device or Repeater on such output whose Key Selection Vector is in such HDCP System Renewability Message.

2.2.3 A Licensed Product that passes Controlled Content using a technology other than DTCP or HDCP shall be governed by implementation requirements, in the nature of those set forth in 2.2.1 and 2.2.2, as mutually agreed by CableLabs and the responsible party as to the technology, and shall be informed to Licensee by CableLabs. Compliance by Licensee shall be subject to notice provisions, if reasonably necessary under the circumstances. It is agreed by CableLabs and Licensee that if a determination so informed to Licensee is the subject of a petition by Licensee to the Federal Communications Commission, such petition should be considered a petition pertaining to a provision in this License.

2.2.4 A Licensed Product shall permit the provision of Controlled Content through digital connections within the Licensed Product which fully integrates into a single physical device the source of the Controlled Content and a display.

2.3 Watermark Non-Interference.

2.3.1 Commencing twenty-four (24) months after CableLabs notifies Licensee of the Consensus Watermark, with respect to content delivered through the POD Module, Licensee (i) shall, in selecting among technological implementations for product features, take commercially reasonable care (taking into consideration the reasonableness of the costs of implementation, as well as the comparability of their technical characteristics, of applicable commercial terms and conditions, and of their impact on such content and on the effectiveness and visibility of the Consensus Watermark) that Licensed Products and components thereof do not strip, obscure or interfere with the Consensus Watermark; (ii) shall not design or produce Licensed Products or components thereof for which the primary purpose is to strip, obscure or interfere with the Consensus Watermark; and (iii) shall not knowingly market or knowingly distribute, or knowingly cooperate in marketing or distributing, Licensed Products or components thereof for the purpose of stripping, obscuring or interfering with the Consensus Watermark.

2.3.2 This Section 2.3 shall not prohibit a Licensed Product from incorporating legitimate features (i.e., zooming, scaling, cropping, picture-in-picture, compression, recompression, image overlays, overlap of windows in a graphical user interface, audio mixing and equalization, video mixing and keying, downsampling, upsampling, and line doubling, or conversion between widely-used formats for the transport, processing and display of audiovisual signals or data, such as between analog and digital formats, composite and component formats) that are not prohibited by law, provided that (a) Licensee shall take commercially reasonable care, in accordance with Section 2.3.1(i), that such features do not strip, obscure or interfere with the Consensus Watermark in content delivered through the POD Module, and (b) Licensee shall not knowingly market or knowingly distribute, or knowingly cooperate in marketing or distributing, such Licensed Products for the purpose of stripping, obscuring or interfering with the Consensus Watermark in such content.

3. Copying, Recording, and Storage of Controlled Content

3.1 General. Licensed Products, including, without limitation, Licensed Products with inherent or integrated copying, recording or storage capability shall not copy, record, or store Controlled Content, except as permitted in this Section.

3.2 Mere Buffer for Display. Licensed Products integrated with display devices may store Controlled Content temporarily for the sole purpose of enabling the immediate display of Controlled Content, provided that (a) such storage does not persist or cannot be accessed in usable form after the content has been displayed, and (b) the data is not stored in a way that supports copying, recording, or storage of such data for other purposes.

3.3 Copy No More. Licensed Products shall not copy, record or store Controlled Content that is designated as having been copied but not to be copied further (“Copy No More”), except as permitted in section 3.2.

3.4 Copy Never. Licensed Products, including, without limitation, a device with integrated recording capability, such as a personal video recorder or other bound recording medium (“PVR”), shall not copy Controlled Content that is designated as never to be copied (“Copy Never”) except as permitted in section 3.2 or section 3.4.1.

3.4.1 Pause. Licensed Products may, without further authorization, pause content as to which Copy Never control has been asserted up to 90 minutes from initial transmission (e.g., frame-by-frame, minute-by-minute, megabyte by megabyte, etc.). The “Pause State Indicator” may not be set to less than 90 minutes. Content that has been Paused shall be stored in a manner which is encrypted using keys which are uniquely and irreproducibly associated with the Licensed Product doing the storage, and in a manner that provides no less security than the encryption of the DFAST Technology.

3.5 Copy One Generation. Licensed Products may make a copy of Controlled Content that is designated as permissible to be copied for one generation (“Copy One Generation”), as provided in section 3.2 or provided that the copy is scrambled or is otherwise

made secure using one or more of the following methods, such that no further usable copies may be made thereof, or they may treat such Controlled Content as "Copy Never":

a. The copy is scrambled or encrypted using one generation copy protection which is identified by CableLabs. (It is anticipated that the JVC D-VHS Copy Protection and 4C Copy Protection for Recordable Media may be approved for this purpose.)

b. The copy is stored using an encryption protocol which uniquely associates such copy with a single device so that it cannot be played on another device or that no further usable copies may be made thereof, and provides no less security than 56-bit encryption.

c. Methods which may be approved by CableLabs in the future, which methods may involve or require encryption or scrambling. Any Copy One Generation copies must be marked or updated so as not to be further copied ("Copy No More") in a manner that is identified by an amendment to this Section 3.5, if any, and will be effective to prevent such further copies being made by devices capable of receiving a transmission of such marked data through the outputs identified in section 2.2. However, during the first 90 minutes from transmission (e.g., frame-by-frame, minute-by-minute, megabyte by megabyte, etc.), the content may be marked "Copy One Generation" in accordance with the requirements of this Section.

d. A Licensed Product that makes a copy of content marked in the CCI as "Copy No More" in accordance with this Section 3.5 may move such content to a single removable recording medium, or to a single external recording device, only when (a) the external recording device indicates that it is authorized to perform this Move function in accordance with the requirements of this Section, and to copy such Controlled Content in accordance with the requirements of this Section 3.5; (b) such content is marked for transmission by the originating Licensed Product as "Copy One Generation"; (c) the content is output over a protected output in accordance with Sections 2.1, or 2.2 of this Agreement; and (d) before the Move is completed, the originating Licensed Product recording is rendered non-useable and the moved content is marked "Copy No More." Multiple moves from one Licensed Product to another, consistent with these requirements, are permitted.

3.6 No Waiver. Licensee acknowledges that the provisions of this section 3 are not a waiver or license of any copyright interest or an admission of the existence or non-existence of a copyright interest.

Section by Section Analysis of the Alternative PHILA

Section By Section Analysis
Alternative PHILA Draft
With Reference To FCC Rules

This version of PHILA is a draft license, achievable today, that is consistent with the present scope of FCC regulations, Part 76.1201 and 1204, which define the licensing power to be exerted on behalf of cable operators. These sub-parts limit the exertion of such power over licensees to the interests of (1) preventing harm to the network and (2) preserving conditional access control over content.

It should not be inferred from provision of this license draft that we believe all additional objectives of cable operators are unreasonable or should not be accommodated. Rather, these should be addressed either in standards agreements or in amendments to Part 76. In providing this alternative license, we also state a willingness to join cable operators and CableLabs in pursuing either or both of these avenues, as necessary, in order to meet the legitimate needs of all parties and best serve the public convenience and necessity.

Recitals

Opening Recitals are added to reflect that the CableLabs licensing power derives from (1) Section 304 of the 1996 Telecommunications Act, which instructed the FCC, in consultation with standards organizations, to revise its regulations so as to assure the competitive availability of navigation devices from independent manufacturers and vendors, and (2) Part 76 of the FCC rules and the 1998 Report & Order in CS Docket No. 97-80, whereby responsibility to address standards and technology supporting a "right to attach" is delegated to the cable industry in general and to CableLabs in particular.

The Recitals make clear that power over Licensees is intended and allowed to be exerted only in furtherance of (1) protection of the network from harm, and (2) protection of conditional access regimes.

The Recital language that had indicated that Licensee is in the business of designing products "for use in the cable television industry" is clarified so as to refer only to PODs, and to recite that otherwise Licensee is intent on exercising the "right to attach" guaranteed by subpart 76.1201.

The Recital reference to a CableLabs "set of functional requirements and interfaces" is replaced with a reference to a license of DFAST intellectual property in a manner necessary to exercise the "right to attach" in accordance with permissible constraints on Licensees as set forth in Part 76. This is consistent with changes to definitions that also reference a DFAST intellectual property license and standards constituting "CableLabs Referenced Technology," rather than a broadly described set of "functional requirements and interfaces" that impose constraints going well beyond DFAST technology, protection of the network from harm, or conditional access considerations.

References to "verification" beyond protection of the network from harm and protection of conditional access are deleted.¹

1. Definitions

Reference to "Activation" and "Certification" are deleted as extending discretionary control by cable MSOs, through CableLabs, over competitive entrant Licensees, beyond any considerations as to harm to the network or conditional access.²

The definition of "Cable Operator" is clarified so as to include those cable system operators that are beneficiaries of the terms of the License but may not be a member of CableLabs. Otherwise, obligations under this License may easily be avoided by MSOs.

The terms "OpenCable HOST POD Specifications" and "Core Functional Requirements" are replaced with a new defined term, "CableLabs Referenced Technology." This is defined in terms of three standards of the Society of Cable Television Engineers ("SCTE"), a due-process standards setting organization. These cable industry standards provide sufficient reference for the manufacture and use of interoperable devices. By contrast, the "OpenCable HOST POD Specifications" include discretionary prescriptive elements that extend far beyond considerations of harm to the network or conditional access.³

The definition of "Compliance Rules," "Host Device," and "Service" are revised so as to refer to navigation device functions as set forth in Part 76 of the FCC rules, rather than to any additional, discretionary powers of CableLabs that would extend beyond permissible licensor powers.

2. License Grants and Restrictions

Consistent with the revisions to Recitals and Definitions, rights are granted in Intellectual Property as to DFAST Technology (with technical reference to CableLabs Referenced Technology) rather than to the broader, discretionary, and non-conforming "CableLabs Technology."

¹ As is indicated at the outset, the cable operator interest in interoperability and in attaining particular business objectives is not denied, but they are not appropriately pursued through this License. The entire purpose of the limitations in subparts 1201 and 1204, as derived from experience with telephone customer premises equipment deregulation, is to prevent cable business objectives from being elevated to gatekeeper status through the mechanism of licensing power over potential competitors. Such cable interests need to be resolved either in standards bodies or through amendments to Part 76.

² See note 1. Based on ongoing discussions, it is anticipated that a mutually acceptable certification regime, leading expeditiously to self-certification, can be negotiated without resort to amendment to FCC regulations.

³ See note 1. In this case as well, it is anticipated that adherence to standards on a voluntary basis should be sufficient; if necessary additional objectives could be addressed through mutual recommendations to the Commission for changes in Part 76.

The provisions related to the prior distinction between a license for a "limited development right" and a "full license" are removed because the "development" or "evaluation license" concept did not lead to avoidance or resolution of obstacles. These proved to be inherent in the overly broad "CableLabs Technology" approach itself. Conditions to the basic grant as to observance of the Compliance and Robustness rules were also an artifact of the "development license" approach and are deleted because compliance is specifically required elsewhere. Conforming changes are made elsewhere (e.g., 3.1).

The scope of products licensed in 2.1(f) now refers to CableLabs Referenced Technology (SCTE standards), which is the technological framework for the license.

Section 2.1(j) is added to state a right to use brands or legends as designated by CableLabs. Formerly, provisions addressed the terms on which such a right may be lost, but it was never granted in the License.

3. Delivery of DFAST Technology; Changes

As noted in the discussion of Definitions, references to Activation and Certification are deleted. Accordingly, Section 3. addresses, primarily, provisions as to "changes" and the Change Process. These are conformed to the principles set out in the Recitals and Definitions:

- Consistent with Part 76, the scope of the Intellectual Property licensed is confined to Intellectual Property re DFAST technology, and the scope of the referenced technology is confined to the enumerated SCTE standards.
- Accordingly, any changes as to the SCTE standards that comprise CableLabs Referenced Technology should occur according to SCTE processes, rather than be discretionary with CableLabs. However, for sake of convenience of all, CableLabs is afforded discretion as to "minor changes," subject to notice provisions.
- The Compliance and Robustness rules, as we discuss below, are circumscribed by the scope of interest in conditional access that may be properly exercised through this license. The FCC, in September, 2000, determined that while this is a permissible subject to address in the license, the extent of discretionary authority exercised over Licensees (and hence consumer practices) must be determined on a case-by-case basis. Hence, this draft provides that any changes to the Compliance and Robustness rules must occur by petition in CS Docket No. 97-80.⁴

⁴ As in other cases, it is hoped that both the final formulation of the Compliance and Robustness rules and any amendment will occur as the result of private sector consensus.

[Former Section 4, "Testing, Certification and Branding," Is Deleted]⁵

4. [formerly 5.] Payments; Accounting Requirements

No significant changes are made.

5. [6.] Ownership and Confidentiality of DFAST Technology

Detail changes are made to the prior provision, so as to conform it to clauses more typical of arms length negotiation.⁶

6. [7.] Terms and Termination

References to Certification are deleted. In accordance with arms length practice, requirements as to material breach and time allowed for cure, and as to termination are addressed.⁷

7. [8.] Representations, Warranties, Covenants and Disclaimers

Redundant warranties by the Licensee are eliminated. Provisions as to defense and covenant of non-assertion are conformed to practice in arms-length negotiations.⁸

8. [9.] Limitation of Liability, 11 [12] Miscellaneous

Liability to multiple third party beneficiaries for same conduct is avoided.⁹

9. [10.] Infringement by Third Parties, 10. [11.] Publicity

No significant changes.

⁵ Original section 4, addressing certification, has been deleted and subsequent sections renumbered. It is by means of the power over certification, combined with the assumption of discretionary authority over licensee implementation beyond the limits of subparts 76.1201 and 1204, that CableLabs would require, *e.g.*, adherence to "selectable output control." As "selectable output control" is not demanded by content providers, such arrogation of power should be analyzed as a business imposition beyond the scope of FCC rules, rather than as an objectionable attempted extension of the power over conditional access.

⁶ No special circumstances are seen as applying in favor of CableLabs so as to justify such a deviation. Hence, deviation in favor of CableLabs is attributed to enhanced bargaining power based on the discretionary powers that are inconsistent with Part 76. In reforming those powers, this draft also reforms provisions such as 5.2 to conform with arms length practices.

⁷ See note 6.

⁸ See note 6.

⁹ See note 6.

11. [12.] Miscellaneous

The "most favored status" is clarified. Two crucial conditions are imposed on Licensee obligations:

- **11.16(a): Same obligations as to MSO devices.** No obligations on licensee are enforceable unless the same obligations are required of navigation devices distributed by MSOs. CableLabs has agreed to this outcome in principle but claimed that it cannot enforce obligations against its MSO owners. This provision provides a drafting solution that does so without requiring CableLabs to take enforcement measures against owners.
- **11.16(b): Encoding rules.** Similarly, at the FCC "Hoedown" re PHILA, CableLabs agreed in principle to encoding rules but cited enforcement against third party beneficiaries as a drafting issue. This provision provides the solution by conditioning Licensee obligations on compliance by third party beneficiaries.

Exhibit A [Exhibit B] Robustness Rules.

These are revised as to terminology.

Exhibit A-1 [Exhibit B-1] Robustness Checklist.

Conformed to revised terminology.

Exhibit B [Exhibit C] Compliance Rules

Revised as to terminology. Additionally, changes reflect considerations as to both (a) discretionary power over Licensee beyond that allowed by Part 76,¹⁰ and (b) extension of purported conditional access considerations beyond those defensible as proximately related to conditional access or reasonable as a matter of public policy:

- Former section 2.1 is deleted, so that constraints on products must be affirmatively stated.
- The "downres" provision [former 2.3] is deleted.
- A "pause" provision, 3.4.1, replaces the former 3.4.1, the "obliteration" provision.¹¹

¹⁰ See note 5.

¹¹ Both the "downres" provision and the "obliteration" provision contained language suggesting that once OCAP technology is available, Licensees are to be barred from using any other OpenCable navigation technology. This language was not carried forward into the revised draft because it is an imposition of business considerations on Licensees that is clearly impermissible under Part 76. See note 5.

- A "move" provision, 3.5(d), is added, providing (in conformance with the DTCP license) that no-more-copy content may be moved securely to an external recording device, provided that at the same time the copy made by the Licensed device is rendered non-usable.¹²

¹² This is a provision to which content providers have never had any objection. Failing to include it would be conspicuous discrimination against consumers who choose to store home recordings on external devices rather than on the set-top boxes distributed by MSOs. Hence, this issue is one of arrogated business discretion, rather than a question of scope of the power over conditional access. *See* note 5.