MPAA COMMENTS, 5/29/2002, TO THE

BPDG REPORT TO CPTWG

1. Background

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1.2 Work undertaken by the CPTWG beginning in 1996 focused primarily upon means for content owners to protect physical media distributed to the public in encrypted form, and means by which consumer electronic and computing devices could perpetuate protections over encrypted content delivered to the consumer by such physical media and by cable and satellite transmission. Under current FCC regulations, most digital terrestrial television broadcasts are delivered in unencrypted form ("in the clear"). Thus, unlike prerecorded encrypted digital media such as DVD, or premium digital cable and satellite video transmissions delivered via conditional access, there may not be any licensing predicate (*i.e.*, no technology license is needed to decrypt content) to establish conditions for the secure handling of such content. Consequently, consumer products can be legally made and sold that allow this unprotected DTV content to be redistributed (including unauthorized redistribution over the Internet ~~*e.g.*, over the Internet~~) without authorization from the copyright holders.

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2.8 The Co-Chairs express their deep appreciation to all BPDG participants who have extended truly extraordinary efforts to support the rapid conclusion of this project. The Co-Chairs recognize that the work of the BPDG has been undertaken in a highly compressed timeframe, reflecting the concern of certain members of Congress that the transition to DTV has stalled and the assertion by certain content providers that broadcast protections would ~~spur~~ contribute to the more timely deployment of high value content over DTV. Although consensus was rapidly reached in support of the fundamental elements of the proposal, addressing many of the detailed aspects of implementing the proposal proved to be more challenging and, therefore, time-consuming. Consequently, it has been difficult for those making technical and drafting proposals to unfailingly meet the targeted dates for distribution of such proposals, so as to give all participants ample advance opportunity to fully consider the proposals to be discussed. We recognize that this process at times has been imperfect; and that, with more time or additional resources, perhaps we could have enhanced the timing and operation of the project. Nevertheless, the Co-Chairs commend all parties for their good faith efforts to work within the bounds of this expedited process, and believe that the process ultimately has given all participants a fair opportunity to express their views through the reflector, in telephone conferences and in meetings.

3. The Work Product of the BPDG

3.1 The BPDG recognized the need for requirements defining how compliant systems should implement the proposal on an architectural level, and how the implementation of such systems could be made robust against ~~consumer~~ hacking. On the December 18, 2001, conference call, a number of companies that had experience in drafting analogous documents for digital protection technologies already in the marketplace volunteered to form a small drafting task force to prepare, for discussion by the BPDG, a draft of such Compliance and Robustness Requirements. This drafting group included representatives from the Computer Industry Group, Fox, Hitachi, Intel, MPAA, Sony, Sony Pictures, Viacom and Warner Brothers.

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3.6 The initial draft of the Compliance and Robustness Requirements included, for frame of reference, two alternative proposals for section X.2, each of which described which devices would be required to comply with the Compliance and Robustness Requirements prior to being sold or distributed. The two different proposals for section X.2 were submitted respectively by certain Motion Picture Association of America member company representatives, attached at Tab E, and by representatives of member companies of DTLA and Computer Industry Group, attached at Tab F. The BPDG briefly reviewed these documents for purposes of understanding the proposed methods of assuring implementation of the proposed Compliance and Robustness Requirements, but it was

understood that any proposals for section X.2 would receive further discussion and appropriate consideration by the ~~parallel~~ policy group.[1]

4. Summary of Conclusions

The discussions to date have yielded substantial agreement among the BPDG participants concerning the technology to be used to signal protection for DTV content, and the requirements to be imposed upon certain devices that handle DTV content that is to be protected.[2] These fundamental points of agreement among the BPDG are set forth in the final draft Compliance and Robustness Requirements, and are summarized below:

4.1 An approach based on a "broadcast flag" is technically sufficient for the purpose of signaling protection of DTV content in digital form, beginning at the point of demodulation, against unauthorized redistribution.[3]

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4.11 Satellite services can encrypt DTV signal retransmissions, so may not need to implement a Broadcast Flag-based solution. However, the ~~parallel~~ policy group should discuss requirements necessary to ensure that such content is protected when retransmitted in encrypted form.

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5.1 The scope of protection to be accorded to DTV content has been described in the BPDG meetings and documents in various ways, such as, "protection against unauthorized redistribution (including the Internet)," or "unauthorized redistribution outside the home or personal digital network environment," or outside the "home or other similar local environment," and so forth. Notwithstanding, all statements of the scope of the BPDG project have included redistribution over the Internet as an example of such protection. A few participants contend ~~that~~ that the scope of protection now should be limited to unauthorized redistribution only over the Internet. Others suggest that the ~~parallel~~ policy group consider a more precise definition of the contours of such protection, so as to clarify that the protection would limit redistribution of DTV to "personal" environments, which they described as including the home, automobile, personal portable devices, and communications between primary and secondary residences.

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5.3 The draft Compliance Requirements would permit ~~personal~~ computer products to continue to deliver protected DTV content through unprotected DVI outputs, at MPEG-2 main profile @ main level video quality. This provision is designed to accommodate legacy computer monitors that receive content only through DVI. A few participants have suggested that this capability also should apply to consumer electronics products, inasmuch as some manufacturers might wish to market devices, such as cable or satellite set-top boxes, that would be capable of delivering DTV to such ~~personal~~ legacy computer monitors.

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[1] A small number of companies expressed concern that drafting of Compliance and Robustness Requirements could not be meaningfully completed until the parties determined under what circumstances its provisions apply (i.e., until section X.2 was completed and agreed upon).

[2] As noted above in footnote **Error! Bookmark not defined.**, a policy group has been constituted to address means by which any Compliance and Robustness Requirements applicable to the Broadcast Flag solution could be implemented and enforced through legislative and/or regulatory action. The points of consensus reported in this document are to be understood as proposals for such governmental action.

[3] While certain participants have suggested consideration of additional technologies, such as a "broadcast watermark," to perform this particular signaling function in a second phase implementation, there is no current plan for such a second phase ~~as there is no consensus that it is necessary~~.

5.4 The draft Compliance Requirements would permit the use of a self-certified "Robust Method" for outputs only where the DTV content was unaltered Unscreened Content (e.g., Unscreened Content that had not yet been transport stream processed). A few participants requested that a self-certified Robust Method ~~could be used~~ be permitted for all Unscreened Content and Marked Content.

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5.6 Philips submitted a presentation describing a potential method whereby unencrypted recordings of broadcast content could be protected by an alternative "flag preserving" mechanism. Protection in this scheme would derive from "compliance" rather than "self-protection." Technical and related policy questions and comments for and against the proposal were discussed at length in BPDG meetings and conference calls. Several favored the proposal because it would permit content recorded in unencrypted form on the DVD+RW format to be played on certain legacy DVD players. The MPAA member companies have ~~stated objections~~ objected to the proposal on the grounds that it provides~~based upon the perceived~~ inadequate technical security ~~provided under the proposal~~, particularly with respect to legacy devices. There were other objections to the broader scope of legislation that would be necessary for purposes of enforcement. Others observed that this proposal benefited a particular DVD recording format, yet would impose technical and legal mandates upon DVD players and drives of all formats. In response to inquiries at two meetings, the BPDG participants voiced insufficient interest in further pursuing the proposal within the BPDG.

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6. Matters Suggested for Referral to the ~~Parallel~~ Policy Group

In the course of the BPDG discussions, several issues arose that related to policy issues rather than technical issues. The BPDG therefore recommends that the ~~parallel~~ policy group should consider the following issues:

6.1 It is the understanding of the BPDG that the ~~parallel~~ policy group will consider means of enforcement of broadcast protection requirements, including by legislative or regulatory means. As noted above, two approaches have been proposed in drafts of section X.2, setting forth concepts as to how the Compliance and Robustness Requirements might be implemented and enforced. The BPDG recommends that the ~~parallel~~ policy group give consideration to these and potentially other proposed approaches for section X.2.

6.2 As noted in paragraph 5.1 above, certain BPDG participants recommend that the ~~parallel~~ policy group consider language that might better define the scope of limitation upon the unauthorized redistribution of DTV content.

6.3 The proposed definition of "Downstream Product" includes a provision whereby the manufacturer of such product "has committed in writing that such product will comply with the Compliance Requirements and be manufactured in accordance with the Robustness Requirements, such that such product shall be a Covered Product." The BPDG suggests that the ~~parallel~~ policy group consider the nature of the requisite written commitment.

6.4 The BPDG recognized that certain cable and satellite systems might retransmit to the home in encrypted form content that initially was broadcast as Unencrypted Digital Terrestrial Broadcast Content. The BPDG recommends that the ~~parallel~~ policy group should discuss any requirements necessary to ensure that such content is protected when retransmitted in encrypted form.

6.5 Consistent with industry practice, the BPDG acknowledges that some period of time must be given before manufacturers must produce products in compliance with any ~~regulation~~ instrument that implements the Compliance and Robustness Requirements. The BPDG requests the ~~parallel~~ policy group to consider a reasonable time, taking into account both the goals of promptly implementing broadcast protection, and practical considerations relating to the development and licensing of technical methods that comply with the ~~regulations~~particular instrument, the design, manufacture and distribution in sufficient quantities of compliant products, and the sale of products manufactured before such ~~regulation~~ instrument took effect.

6.6 The BPDG requests that the ~~parallel~~ policy group consider proposed criteria that could be used to determine whether a particular technology should be "authorized" as a digital output protection technology or recording method. Three proposals were presented to the BPDG. Two proposals coalesced into a single proposal offered by companies of the Motion Picture Association of America, DTLA and Computer Industry Group, which was part of an overall proposal that included amendments to the Compliance and Robustness Requirements (the "Tri-Group" proposal). That proposal is attached to this Report at Tab G. The other proposal for criteria, offered by Philips, is attached to this Report at Tab H. The two approaches can be summarized as follows:

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6.6.1.2 Separate submissions were made by Digital Content Protection, LLC in support of the HDCP technology, the 4C Entity in support of the CPRM technology, and JVC in support of the D-VHS technology. These submissions are attached at Tabs J, K and L, respectively. Each of these companies proposed "Associated Obligations," which also are included in the attachments to the Tabs identified above.

6.6.1.3 Microsoft submitted a statement that the Windows DRM satisfies one or more of these criteria. This submission is attached at Tab M. Microsoft did not include specific "Associated Obligations," but did provide a description of how its Windows DRM could protect~~s~~ content through renewability of compromised security components, enforcement of revocation and other means.

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6.6.3 Proponents and opponents of each approach described specific concerns and objections at length in several meetings, and particularly in the meetings on April 3 and April 29. Inasmuch as issues surrounding the appropriateness of each approach, or of particular criteria, implicate policy considerations, the BPDG recommends that this issue be considered further by the ~~parallel~~ policy group.

6.7 The Tri-Group proposal suggested that several additional issues be referred to the ~~parallel~~ policy group:

6.7.1 The Tri-Group believes that adding to Table A technologies that satisfy the proposed criteria should be as seamless and transparent as possible. Accordingly, the Tri-Group requested that ~~parallel~~ policy group undertake the task of creating a straightforward process under Criteria One and Two, whereby a proponent would give notice that one or more of the criteria are satisfied (which notice would, where applicable, specify which companies have used or approved a technology), and an adequate opportunity would be given to each company named in such notice to dispute the claim that it used or approved the technology. If no such dispute were forthcoming, the proposed technology would be added to Table A. The process would need to provide a speedy process to resolve any such disputes.

6.7.2 Some determinations of whether a company has "used or approved" a technology may be capable of resolution only through information in the hands of the entity that has used or approved it. Accordingly, the Tri-Group requests the ~~parallel~~ policy group to consider a process whereby a company that proposes a technology for addition to Table A may obtain information regarding whether such an entity has used or approved the technology.

6.7.3 When a technology has been "significantly compromised" in relation to its ability to protect Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution) it may no longer be used as a comparison metric under Criterion Three for technology proposed to be added under this criterion. Accordingly, the Tri-Group requests the ~~parallel~~ policy group to consider a process for determining whether such a compromise has occurred.

6.7.4 If a technology has been compromised, and the compromise is substantially higher than "significantly compromised" noted above, the Tri-Group requests the ~~parallel~~ policy group to consider a standard for removing a technology from Table A. Such a standard should take into account the protection of Unscreened

Content and Marked Content from unauthorized redistribution, as well as the impact on content owners, consumers, and manufacturers that would result from removal of a technology from the list and the continued use of such compromised technology. The Tri-Group also requests that the ~~parallel~~ policy group address a process by which (a) requests can be made to remove a technology from Table A on the basis that such standard has been met; (b) interested parties can object to such requests for removal; and (c) a timely determination would be made as to whether or not such technology will be removed from Table A (after a reasonable grace period).

6.8 Computer Industry Group companies have requested that the ~~parallel~~ policy group consider the establishment of additional or variations of the objective criteria proposed by the Tri-Group in Criterion Three, and other implementers have requested that additional or variations of the objective criteria be added as separate criteria. As noted, the Tri-Group proposed Criterion Three contains tests for a technology which is proposed to be added to Table A without direct content owner "use or approval." Computer Industry Group Companies believe that the ~~parallel~~ policy group could examine such Criterion in light of the limits of the BPDG goals as stated in the work plan for the BPDG: "to prevent unauthorized redistribution of unencrypted digital over-the-air broadcast content." Those companies believe that some of the criteria could be altered or additional criteria substituted that would permit a technology to be added to the list consistent with those goals and consonant with the Compliance and Robustness Requirements. ~~Those companies were concerned that some parts of Criterion Three may not be interpreted to be objective, and that comparing the technical effectiveness of the technologies should be an objective measurement.~~ Their concern was, however, that comparing license terms relating to security (*i.e.*, output and recording controls), enforcement and Change Management might not be objective. Those companies believe that (a) it should not be difficult, in the context of protecting over-the-air digital television, to create alternatives or variations of those criteria that both are objective and are consistent with the robustness and compliance provisions of the Compliance and Robustness Requirements and (b) it is critical that the requirements be objective and readily understood by a manufacturer proposing a technology to be added to the list. Other members of the Tri-Group believe that the Tri-Group proposal meets all of these conditions.

6.9 Computer Industry Group companies requested that the ~~parallel~~ policy group determine that the Compliance and Robustness Requirements not go into effect until a minimum number of technologies have been included in Table A under the Tri-Group proposed criteria. Those companies view this as an important precondition to compliance obligations for two reasons: (a) since compliance will be a new government mandate, there should be a reasonable number of technologies to select from in order to ensure that no manufacturer is forced to adopt one of a small number of alternatives; (b) Criterion Three of the Tri-Group proposal only functions adequately if there are a sufficient number of technologies to compare a technology proposed to be included on the list. Other members of the Tri-Group believe that the Tri-Group proposal meets all of these conditions.

[END]