Natalie-

Per this week's phone conversation, I wanted to provide the FCC team some advance information regarding DivXNetworks, Inc. FCC Broadcast Flag update response to the MPAA objection dated September 13, 2004. DivXNetworks posted a response on September 23, 2004, and has worked with the MPAA since that time to formulate a strategy to effectively address MPAA objections with updated robustness and compliance rules adding further effect to the FCC Broadcast Flag via DivX DRM Technology. I would like the attached presentation to serve as the primary discussion topic for our visit to the FCC Media Bureau facility next Friday (2-25-05). The letter below is intended to serve as added explanation to the "FCC-DivX DRM Update" presentation. We look forward to speaking with you and the team.

-Tim Windsor,
DivXNetworks, Inc.

LETTER FROM DIVX NETWORKS, INC (DXN) TO THE FCC

Per recommendations made by the MPAA, DXN makes added clarifications and changes to address the original concerns expressed in the MPAA Opposition dated September 13, 2004. These include re-addressing the four areas identified in the MPAA opposition and adding additional robustness and compliance rules for DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Devices. As stated in the original DXN FCC submission, the primary goal of DivX DRM encoding technology is to give effect to the FCC Broadcast Flag. The secondary goal to ensure that cryptographically recorded content will play back on existing DivX Certified Decoder products as well as future products registered to user accounts containing DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Devices. There are tens of millions of DivX Certified Decoder products now selling through consumer channels. Because of this, new technologies developed by DXN (including DivX DRM Encoding Technology) must not break interoperability standards with existing certified devices. All DivX Certified Playback devices support DivX DRM. This response addresses all of the issues raised within the MPAA Opposition through means of the following clarifications and changes: (1) device limits are more carefully specified with new hard limits; (2) compliance and robustness rules are reinforced with additional robustness rules; (3) new digital output rules; and (4) binding DXN to compliance via DivX ATSC Demodulator DRM Hard Drive / DVD Recorder Device certification.

REASONABLE AND AFFIRMATIVE CONSTRAINTS ON REDISTRIBUTION OF CONTENT

Per feedback from the MPAA, DXN has reinforced support/protection of FCC Broadcast Flag "marked content" via DivX DRM technology and compliance rules. This is accomplished via the combined effect of DivX DRM/Encoding technology and compliance/robustness rules enforced via DRM initiatives and ATSC Demodulator DRM Hard Drive / DVD Recorder Device Certification It was determined with the MPAA that the maximum number of compliant device limit is a sufficient control mechanism for preventing indiscriminate redistribution, and DXN acknowledges that if not carefully crafted it could lead to abuse. Because of this, hard limits were put in place, limiting the amount of devices that can be registered to a single DivX DRM user account. In addition to limiting device registration within a user account, DXN has invoked added compliance/robustness rules to add effect the FCC Broadcast Flag "marked" content. These rules included ATSC Demodulator device activation rules, Double Disk Barrier with 24 hour exportation delay, and Digital Output Protections.

Hard Limits to Device Registration within a User Account

A certain family or affinity group is expected to include more than one digital multimedia playback product. Consumer electronic products are assumed to continue to be inexpensive, and people will expect content will play on more than one product within the home in a seamless fashion. This is the fundamental principal of DivX Decoder Certification programs in place, and the interoperable DivX device "ecosystem". With that said, it is understood that enforcing a hard limit of device certification per user account (family) at 6 units will provide and acceptable user experience and also prevent indiscriminate distribution of DivX Cryptographically encoded content per the FCC Broadcast Flag mandate.

After broadcast flag detection via the ATSC Demodulation, and resulting DivX Video compression process, content is cryptographically bound to a user account ID. This ID is designed to be limited to a single family. As previously stated the device limit that defines a single family is the core of the redistribution control mechanism and set to a maximum of six (6) devices. To address the MPAA objection, DXN has reduced the device limit to 6 in order to add reasonable constraints on the redistribution of content. DXN is also making the case that the number of devices registered to a family adequately limits sharing of broadcast content between separate families that are not in resident proximity. Separate and out of proximity families will have several barriers to overcome, which both the MPAA and DXN assert will limit redistribution to reasonable levels. This is reinforced by the DivX device limit rule which prohibits device swapping and transfer of device registration between user accounts. Once a user account has reached a

limit of 6 devices no other devices can be registered to that account. No devices can be removed from a use account outside of special circumstances requiring a call to DivX technical support. An example of this would be when a DivX Certified playback device is damaged or returned to the factory for warranty replacement.

DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Device Registration Rules

There are three primary rules that control the number of device registrations. These include mandatory ATSC Demodulator device registration before recording functionality is invoked, IP address geographic filtering to ensure ATSC Demodulator location in USA, and user identity/email verification required for registration of ATSC Demodulator devices.

RULE 1 ***Registration before DivX Encode Rule***: In order to record terrestrial broadcast content to local hard drive, DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Device must be registered and activated. This means a user must access the DivX registration server and set up an account, if one does not exist already. The user will retrieve a registration code from the ATSC Demodulator user interface and use that to register the demodulator to the user account. The user will then retrieve an activation file (video file) that must be burned to CD or DVD optical media and played on the device to activate the DRM encoding functionality. At this point, the DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Device will bind FCC "marked" content to that account and prevent indiscriminant distribution in usable format outside of the registered user group of devices (6). Before the ATSC Device registration process, record capabilities will not be functional for "marked" or "unmarked" terrestrial broadcast content. Compliance to this rule will be tested and enforced via the DivX ATSC Demodulator DRM Hard Drive / DVD Recorder Device certification process.

RULE 2 ***Geographic Location Rule***: During the DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Devices registration process, IP address geographic filtering will be invoked by the DivX registration server to ensure that the ATSC demodulator device is registered by a U.S.-based IP address. Any IP address outside the U.S. associated with the registration of a DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Device will be denied. No activation file will be granted, and DivX Encoding functionality will not be invoked for "marked" or "unmarked" broadcast content. This is a function of the DivX registration server independent of ATSC device certification in support of the FCC Broadcast Flag.

RULE 3 ***Email Identity Confirmation rule***: For DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Devices, the identity of the registrant will be confirmed via email, meaning the email address of the registrant is verified as part of the ATSC demodulator devices registration process. In the past, anonymous device registration was supported unless the registrant additionally purchased premium downloadable content offered on www.divx.com/movies, in which case additional user/billing registration is required.

If a user account is established for use with a DivX Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Devices absent the purchase of premium downloadable content, then email verification will be required to register the ATSC demodulator device in an effort to prevent anonymous registration. A preferred scenario would be that this registration process be treated as an electronic sell through (EST) point of sale for premium content. The idea of offering premium downloadable content access to ATSC demodulator registrants is being strongly considered by DXN. This would increase the likelihood of premium downloadable content purchase as part of the device registration. In this case, DivX registrations would have billing information of the registrant at minimal consumer "hassle-factor", as the registration process is paired with consumer acquisition of premium content, and a positive on-line experience.

The Double Disk Burn Barrier

Once a registered and activated DivX-Certified ATSC Demodulator DRM Hard Drive / DVD Recorder Device encodes "marked" content from terrestrial signals, the content is bound to the local hard disk drive of the ATSC demodulator for a mandatory 24-hour period. During this mandatory time period, the content can be viewed by the user without limit. However, the cryptographically bound data cannot be exported to optical disk or output by any digital means other than HDCP-compliant viewing displays for the mandatory time period. The 24-hour time period is a function of the ATSC Device system's RTC (real time clock) and subject to test/verification at DXN test facilities as part of the DivX ATSC Demodulator DRM Hard Drive / DVD Recorder Device certification process.

After the 24-hour delay, "marked" content can be exported to disk in DivX Encrypted form, unusable/unplayable by any device outside of the maximum 5 other DivX Certified Playback devices registered to the user account. In a scenario where the encrypted file is electronically transferred, the first "burn" takes place after the 24-hour time period. The file is uploaded to a PC and transferred to another PC across the Internet. At the receiving end, a second disk must be burned for playback on a DivX Certified device registered to that same user account. This is an unlikely user scenario, although it is an illustration of the hassle-factor involved with transferring "marked" content across the Internet. It should also be noted that FCC Broadcast Flag content is NOT playable via DivX Player on any PC.

DXN is currently investigating means of securely binding a PC to a user account. Until that technology is available, PC playback of "marked" content will be prohibited.

Digital Output Protection

As part of DivX ATSC Demodulator DRM Hard Drive / DVD Recorder Device certification, it is mandatory that cryptographically encoded "marked" content via DivX DRM be prohibited from playback on digital outputs except

for HDCP-enabled digital outputs. Specifically the "marked" content is to be "bound" to the ATSC demodulator devices via DXN compliance/robustness rules. Once the ATSC demodulator device is registered and activated, DivX recording functionality will commence. FCC Broadcast Flag "marked" content can be accessed/viewed by the consumer from the ATSC demodulator device without limit via digital (HD-ready) displays provided the digital display output is protected by HDCP. The "bound" content cannot be accessed via any other means, or exported outside of the "exportation to disk" mechanism, which can only be accomplished after a mandatory 24-hour delay.

Circumvention Scenarios and Redistribution Barriers

One hypothetical circumvention scenario is for a second family to register their devices using another family's ID, specifically for the purpose of sharing recorded content with each other. In order to share registrations in this way, both families must proactively share registration codes and possibly user accounts. However, whereas user accounts impose device limits, geo-filtering, and may include credit card and other billing information for the acquisition of premium digital content, there is significant disincentive against sharing accounts.

A device may only be bound to a single user account at a time. Therefore, in order for a family to play content they personally own or acquired, such as purchased premium content or FCC "marked" content, a shared device must be bound to their specific user account. Once the device is re-registered to their specific account, it loses all association with the shared account and no longer plays the illegally shared content.

Each time a device is re-registered, it is applied against the limit of six devices per account. In other words, even though the same device is being re-registered, it counts as if it is a new device. The limit on the number of registered devices is too low to justify the "hassle-factor" of sharing device registration information. The primary account creator would not want to share their limited registration because it jeopardizes their ability to register more devices in the future. Given these factors, there are significant barriers in place to stop the sharing of content between families.

DXN Compliance/Robustness Rules Mapping to Proximity Control

Both the MPAA and DXN feel that the combined effect of DivX DRM/Encoding technology and compliance/robustness rules enforced via DRM initiatives and ATSC Demodulator DRM Hard Drive / DVD Recorder Device Certification will give effect to the FCC Broadcast Flag. Robust support for the FCC Broadcast Flag is the primary goal of DivX DRM technology in embedded real-time encoding environments. The secondary goal of DXN DRM is ensure that cryptographically recorded content will play back on existing DivX Certified Decoder products as well as future products registered to user accounts. The architecture of DivX DRM is based on the principal of seamless user access to premium digital content within a secure domain of bound devices registered to a user account. The assertion made here by DXN, working in conjunction with the MPAA, is that the combination of compliance/robustness rules and associated DivX ATSC Encoder device certification will provide sufficient protections to FCC Broadcast Flag "marked" content which acceptably map to proximity control.

-End

Tim Windsor
Director of CE Product Management
IC Manufacturing
4780 Eastgate Mall
San Diego, CA 92121
(858) 882-0790 - (New) Direct Office
(858) 882-0603 - (New) Fax
(858 231-3393 (Mobile)
Mailto: twindsor@divxnetworks.com

Confidentiality Notice
##
This message contains confidential and/or proprietary material owned by DivXNetworks, Inc., and is intended only for the addressed named individual(s). The information contained in this message may not be copied or distributed without express written consent by an officer of the company. If the information contained in this email is communicated under a confidentiality or non-disclosure agreement with DivXNetworks, this email should be considered written communication for the purposes of those agreements. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail and related information from your system.