

Will the broadcast flag interfere with consumers ability to make copies of DTV content for their personal use, either on personal video recorders or removable media?

The proponents are using technicality-speech to obscure the issue. The existence of the flag does not "by definition" interfere. However, the USE of the flag set to "no copies" by definition *DOES* interfere.

How will a body of data "know" which use is legitimate? The answer is that it won't and can't. If the flag means "no copying/recording" the devices that look for the flag will, if they honor it, refuse to record/copy the information.

What that really means is "we, the people controlling when the flag is set, will set the flag only on things 'we know' have no 'legitimate personal use'."

Asked honestly, the question "does any potential receiver have any legitimate use in mind for a copy of this data?" would ALWAYS be "YES" and the flag would thus NEVER be set. If it is never to be set, why must it exist?

The fundamental problem is that, since the transmitter has no way to determine the individual needs of absolutely every receiver, and the existence of a single recipient with a legitimate need would demand the flag be left clear (e.g. not set/copying is allowed) the flag would have to be permanently set to "copying allowed". We all know this isn't going to happen.

The follow-on logic is that, in the minds of some content owners there *IS* no such thing as fair use. (c.f. David Isner, Disney Corp). To that mind set, if there is no such thing as fair use, then by definition this flag can't interfere with the non-existent "legitimate copying". This is the only mindset that could ever "legitimately" set the flag.

IF the flag exists it is certain that it will be misused by every content owner who believes that there is no "fair use" of the content.

This abuse is foreseeable, intrinsic to the capability, and there is no "legitimate" condition where some content can be "known" to have no legitimate use, so there is no legitimate, non infringing, reason for the flag to exist.

The flag therefore must not exist.

Further, if the flag will not interfere with copying, why does it exist?

Would the digital flag interfere with consumers ability to send DTV content across networks, such as home digital networks connecting digital set top boxes, digital recorders, digital servers and digital display devices? If the broadcast flag "would not limit consumers ability" to send (and in this case "send" means "copy across") content between their own devices, what *WOULD* this flag do?

The proponents position is again technicality-speak. The flag will prevent the content from being stored on the customers networks in the first place. The flag doesn't stop the post-never-allowed-to-save-it sending.

So yes, the customer can "copy anything he can save" but that is misleading.

The flag must not exist because the issues of Question 1 in this commentary make Question 2 mute.

Would the broadcast flag requirement limit consumers ability to use their existing electronic equipment (equipment not built to look for the flag) or make it difficult to use older components with new equipment that is compliant with the broadcast flag standard?

Question 3 is a red herring. If the theoretical "older equipment, not built to look for the flag" can still decode the new information then the flag would not interfere.

On the other hand, there are lots of ways to potentially "encode the flag" so that, on the older equipment, the image or sound is "damaged". For instance, if "the flag" is a big digital watermark splashed across the visual field, or an annoying tone in the sound track of the movie, then while the older equipment still "works" the flag has destroyed the image.

If the flag is innocently hanging around in the sidelines where it can be ignored by the old equipment, then it is in a place where a malicious abuser could "filter it out of existence."

If the flag is somewhere in the middle ground, taking up some otherwise "unused" part of some existing broadcast standard (e.g. a "these bytes must be zero" part of the existing standard), then ABSOLUTELY NO ASSERTION CAN BE MADE as to whether changing the old "must be zero" part of the data stream to some non-zero value will interfere with "old equipment" since each piece of old equipment may or may not individually require that the zero bits remain zero.

In short, the proponents "simple no" answer is unsupportably vague.

Would a broadcast flag requirement limit the development of future equipment providing consumers with new options?
Remembering that saying "that isn't our *_intent_*" is the proponents way of saying "yes, but that is only a side effect."

By definition, once everyone agrees what is allowed, the set of all possible future developments that might touch the disallowed set of operations are, well, disallowed.

If the flag existed, but was never used, then the idea-space prohibited to the consumer and developer would be non-existent. Of course, yet again, if it was never used it would have no reason to exist.

What will be the cost impact, if any, that a broadcast flag requirement would have on consumer electronics equipment?
The initial cost will be very small, the total cost is potentially unbounded.

The first semi-obvious cost will be the creation of a blue-market, where customers can buy the "legitimate, high end, professional grade" equipment who's main trait is the absence of support for the flag, or some means of disabling it.

Next will be the grey-market for end-user modification chips that will spring up, with the concomitant costs.

Both of these avenues amount to charging the consumer more to regain the features and functionality they enjoyed before the flag facility was added to the mix.

If honoring the flag is mandated, there will also be the taxpayer burden for the cost-of-enforcement as policing and customs agencies try to enforce the provisions and court costs as civil and criminal avenues are pursued.

Other Comments:

First off, "Digital Rights Management" and "broadcast flag" are nice pleasant-sounding euphemisms that don't properly characterize the seriousness or danger of the issues being discussed. These issues and their brethren are "Absolute Restriction Imposition and Enforcement Techniques", nothing more, nothing less.

As a first step, I would challenge the reader of these provisions to mentally replace the term "broadcast flag" with the phrase "prior-restraint flag" while reading these comments and proceedings. Clearly, since the discussion centers around information being broadcast, the use of broadcast in the term is intended to anesthetize the reader into presuming the idea is innocuous. It's not.

Furthermore, even as the phrase "broadcast flag" is a tad dismissive, "Digital Rights Management" is tantamount to a criminal abuse of the English language. There is no "Management" involved in the various proposals floating around. Management implies some degree of consideration for all involved parties. None of the so-called "technical solutions" to the problem of how easily and perfectly digital information can be propagated between devices.

Several points must be understood before the issue can be tackled, and most of those issues are being ignored or dismissed wholesale by the proponents of these restriction enforcement initiatives.

1) No technology exists that can lock away sound, pictures or movies completely and still let a person see and hear them. Period. It has been proved by better technologists than I that the fact that you know you are unlocking a movie or a sound file provides you with enough information to defeat the technology.

2) Putting the force of law behind a technology, instead of behind the concept that theft is bad and will be punished, is doomed to failure. Technologies go stale too fast. Legally mandating today's technology will, by definition, cause our technological base to fall behind or be trampled by those cultures not similarly hobbled.

3) The idea that tools are responsible for the mis-deeds of their users is ridiculous. The honest person will remain honest when opportunity for dishonesty comes around. The dishonest person, to the capacity of their will, will find a way to be dishonest no matter what the impediment.

Put another way, there are, with respect to any product, movie, song or whatever, there are six types of people:

- 1) The person who will use/own it no matter what the cost.
- 2) The person who will use/own it if it is available for a reasonable cost.
- 3) The person who will use/own it only if it is free or comes to them through no effort of their own, and who will expend no effort to possess it otherwise.
- 4) The person who will steal it (even if it was accessible for a reasonable cost etc)
- 5) The person who has no interest in it and will not user/own it under andy curcumstances, possibly even in the presence of a penalty for its removal.
- 6) The people who beleive they have no interest in the product but who, with exposuere to it, may be promoted to one of the other types.

(Advertisements exist almost solely in the attempt to turn a number-six into a number two or one.)

ALL of the arguments put forward by the proponents of prior-restraint technologies base their arguments on two absurd propositions.

The first absurd proposition is that the third, fourth, and in some extreme cases the fifth, type of person will automatically be promoted to the second type of person if just the righ forms of prior-restraint can be enacted. They make statements like "A hundred copies of my song are downloaded every day, that's a hundred sales I have lost. This is destroying my business." Anybody making this kind of argument should be dismissed wholesale. The actions of persons in categories three, four, and five, especially in the presence of an easy/free exchange media, unilaterally factor out of the real economies of exchange.

The second, less obviously absurd proposition, is that a person is that the "presenter's message" is getting through better if the presentation is limited to realtime. This is most often presented as "people skiping the commercials are taking money out of my pocket, but if I chould just make them watch..." but it has a close cousin "people making mix tapes and play-lists on their computer are diminishing my sales because they aren't listening to the other songs."

The absurdity of the second is harder to define but in many ways more real.

For decades advertisers have know that good commercials are themselves products, and good product gets watched while bad product gets ignored. Nobody has done any credible research in the area, but I know that I am more likely to watch a comercial while doing "time shifting" using my VCR than while watching broadcast. Why? well, when watching real-time I am under time pressure, if I have to leave the room I do it during the comercial. Otherwise I tend to channel-surf. Conversly, when I am doing playback I pause if I have to leave the room and I never switch channels. Do I zap the commercials? Yep, but as I speed through them, if one is applicable to me or looks interesting in fast-forward, I will actually watch it. Moreover, having been releived of the real-time issue, I find that I often DON'T zap them at all because there is no external pressure or constraint on my when I sit down to view, so I am less stringent about my

time...

So how does that anticdote make the second assertion absurd? In and of itself, it doesnt. The absurdity is that the advertisment has already been sold, as has the album. The money has already changed hands and the transaction is complete. The kernel of the problem being mis-stated in the second proposition is that when the audience has options they demand better product.

Each time technology changes the business place, the smart businesses survive and the dumb ones fail.

- The TV didn't kill the movie theater.
- The TV remote didn't destroy broadcast advertising.
- The photo-copier didn't kill publishing.
- The VCR didn't destroy the movie theater *OR* broadcast advertising.
- Cable didn't destroy broadcast TV.
- The internet and Napster didn't destroy record sales (they actually peaked together and closing napster directly reduced record sales.)
- Being able to make a "perfect" copy of what is on TV isn't going to do anything harmful to any business that is smart, and we really don't need the dumb ones.

BUT stopping innovation and clogging up our technological and business base with a bunch of backward-lloing measures to help lazy business not-have-to-think about their business models is like putting a speedbump on a freeway. It serves no purpose, it will help nobody, it will cause harm, and there is no way to know before hand how far that harm will reach.

==== Personal Statement ===

I write software for a living and I write fiction. I do not copy comercial software, but I do use Open Source software. I rent, and occasionally buy, movies on DVD and VHS. I buy almost no music because I listen to music almost exclusively on the radio.

When I hear about a software professional copying software or a musician or DJ ripping CDs am amazed by the hypocrisy. People who make their living in a given field should respect the others in their field if they expect to be respected in return.

And all that being said, "Digital Rights Management", the DMCA, the SSSCA, and all similar attempts to solve completely social problems by trying to use the force of law to attach laughably naive prior-restraint technologies to important cultural media are ill-advised and, in the long term, will be immesruably expensive and ultimately doomed to failure.