

# Submission to the Competition Bureau on updating IPEG<sup>1</sup>.

by Russell McOrmond<sup>2</sup>

## Introduction

This submission is an update to a submission I made in 2003<sup>3</sup>. The concerns I expressed in that submission still apply to the current draft, and related legislation has been updated<sup>4</sup>. Following up from that submission and other work I did for Industry Canada on Software Patent Issues<sup>5</sup> I met with people at the Competition Bureau in 2005<sup>6</sup>.

In the introduction to the draft update of the Intellectual Property Enforcement Guidelines it is suggested that competition law and laws granting statutory monopolies<sup>7</sup> are complimentary. While this is often true, these laws also come into direct conflict. I am concerned that with the current IPEG draft the bureau may treat as a mere exercise of an exclusive right activities which may not even involve a valid exclusive right.

## Software and Technology Property Rights

Much of my policy work is focused on policies which come into conflict with the rights of technology owners<sup>8</sup>. The right of owners to make their own software choices must be considered an essential component of technology ownership.

This right is also critical to protect my rights as a software author as, if owners cannot make their own independent software choices, they can not choose my software. In my case I focus on Free/Libre and

---

1 The latest version of this document is available as <http://www.flora.ca/competition2014> . It is made available in OpenDocument format (<http://en.wikipedia.org/wiki/OpenDocument>) and Portable Document Format (PDF) <http://www.flora.ca/pdf.shtml>

2 Full contact information for the author can be found at his work website of <http://www.flora.ca>. While currently employed by the NGO [Canadiana.org](http://www.canadiana.org), the views expressed in this document are his own based on several decades as a self-employed businessperson who focuses on Free/Libre and Open Source Software (FLOSS) from a technical, business and public policy perspective. I have not been paid to write this submission.

3 Submission is available at <http://www.flora.ca/competition2003/>

4 Since 2003 a new Copyright Bill C-11 has been passed, which may induce more competition issues.

5 Some of the outputs of that review at <http://www.flora.ca/patent2003/>

6 Slides/handouts made for that meeting on May 6, 2005 are available in PDF and other formats at <http://www.flora.ca/competition2005/>

7 I tend to avoid the acronym "IP" or the term "Intellectual Property" as they cause confusion <https://www.gnu.org/philosophy/words-to-avoid.html> . The term lumps together areas of law which are different, and promotes a controversial way to look at laws where the government grants specifically defined monopolies for often very different public policy purposes. As an example, while copyright and patents offer incentives to creators and inventors, trademark law is intended to be a form of consumer protection to reduce confusion in the marketplace.

8 "Protecting Property Rights in a digital world" <http://c11.ca/own> was written in the context of changes to copyright law, where specific aspects come into conflict with the rights of technology owners. I offered more specific details in my submission on Bill C-11 discussing the contributory and direct infringements of technology property rights potentially legalized and/or legally protected by C-11 <http://c11.ca/brief>

Open Source Software (FLOSS)<sup>9</sup>.

### **Relevant software history**

The origins of the FLOSS movement can be found in the formation of the software sector generally. Prior to the 1960's software was always bundled with hardware as part of an integrated device. You had a device that could do word processing, but it could not be easily reprogrammed to do other work. Hardware was obviously manufactured, distributed and sold on a per-unit basis and thus the bundle of hardware and software was marketed that way.

In the 1960's the software sector formed with the separation of software from hardware. At this point two very different parts of the software industry were formed. There were those who felt that software should be treated the same as hardware, with those in the "software manufacturing"<sup>10</sup> branch relying almost entirely on business models from the manufacturing sector. This subset of the software industry has been very successful from the 1960's up to today.

Another group of people noticed that software, being intangible and naturally non-rivalrous, has very different attributes than hardware. They felt that there was no need to arbitrarily limit software and software business models to those from the manufacturing sector, and think of per-unit royalty payments as simply one business model among many.

The growth of the Internet was simultaneous with the growth of FLOSS. These two innovations are co-dependent in that much of the core technologies of the Internet are FLOSS<sup>11</sup> (or derivatives of FLOSS<sup>12</sup>), and FLOSS development methodologies thrive best in the open and international collaborative environment created by the Internet.

In my FLOSS public policy work I try to ensure policy makers understand the nature of software. In ICT tools and in cyberspace software code is the law<sup>13</sup> that governs what citizens can do. I strongly advocate for ensuring that software that controls ICT, automates government policy, or electronically counts votes has the same requirements of citizen input and accountability<sup>14</sup> that government created laws should.

---

9 At <http://flora.ca/floss> I offer links to organizations that help define and advocate for FLOSS.

10 "Software Manufacturing" is a term used to discuss those methodologies and businesses in the software industry which treat software as a product which is manufactured, distributed, and sold using a per-unit price.

11 The examples of BIND <http://www.isc.org/products/BIND/>, Sendmail <http://www.sendmail.org/>, and Apache <http://www.apache.org/> entirely dominate their category. The category dominance of Apache is probably the lowest of the three and it represents over 52% according to Netcraft [http://news.netcraft.com/archives/web\\_server\\_survey.html](http://news.netcraft.com/archives/web_server_survey.html). That said, the next largest is nginx which is also FLOSS. The most well-known example of a FLOSS project is Linux, although as of yet it does not command the same dominance in the operating system category. On the desktop there are popular projects include Mozilla (previously Netscape) <http://www.mozilla.org/> and OpenOffice.org <http://www.openoffice.org/>

12 Internet Explorer is a derivative of NCSA Mosaic which was the first FLOSS browser. Details of this licensing is available from a submission from co-founder of Spyglass in a submission to Microsoft anti-trust case. Mosaic was an early example of a dual licensed project with both FLOSS and a non-FLOSS licenses available.

13 See Lawrence Lessig <http://www.lessig.org/>, author of [The Future of Ideas](#) and [Code and Other Laws of Cyberspace](#)

14 The access to source code and ability to share this knowledge with others that FLOSS enables can be considered similar to access to information laws for governments. The Open Government movement in many ways comes out of the FLOSS movement, trying to further apply transparency and accountability to governments similar to what is offered for software with FLOSS.

## *Is FLOSS understood as a "Relevant Market"?*

An important question that the Competition Bureau needs to ask itself is: Is Free/Libre and Open Source Software adequately understood as a relevant market, and a market separate from "software manufacturing"?

To help raise this question I tried to bring a complaint to the Competition Bureau<sup>15</sup> in relation to some vague legal issues with the DVD-CSS<sup>16</sup> technology. This technology is claimed to be owned by the DVD Copy Control Association (DVD CCA)<sup>17</sup>. I offered some details of the issue first in a submission to Industry Canada as part of the copyright consultation that was a reply to the Canadian Motion Pictures Distributors Association (CMPDA) submission<sup>18</sup>.

In this case, the statutory monopoly claimed by the DVD-CCA is excluded from use by any FLOSS DVD playing software by virtue of the fact that DVD-CSS is claimed as a trade secret. Due to the open and publicly accountable nature of FLOSS, implementing technologies based on trade secrets in FLOSS is not possible. This trade secret is embedded in any DVD-CCA licensed player.

This "secret" can be determined through simple reverse engineering the data on a DVD-CSS encoded DVD, so in many ways it is already an "open secret". A public domain piece of software named DeCSS, which makes public this "secret", has been converted to many forms of protected free speech such as mathematical descriptions, dramatic readings, and even songs as part of a square-dance. Many of these can be viewed from the DeCSS Gallery<sup>19</sup>.

Without purchasing a DVD-CCA licensed CD player, it is suggested under so-called "anti-circumvention" clauses of copyright law that one cannot legally purchase and view a DVD-CCS encoded DVD movie. This ties the purchase of a DVD movie (one market) to the purchase of a specific subset of DVD players (a second market). This type of market manipulation is referenced under 'tied selling' which is part of section 77 of the Competition Act.

There is also an issue with the region encoding of DVD movies, which many believe to also be an issue with the Competition Act under barriers to trade.

When I received a reply from the Competition Bureau to my complaint, I was essentially told that the simple answer was that statutory monopoly policy superseded competition policy. I did not know about IPEG at the time, but my reading of parts of this document mirrors what this investigator told me.

The person who called me also indicated that they did a "relevant market" analysis and found that there was no price issues with DVD players. He suggested that licensed DVD players would need to be

---

15 This consisted of a series of email messages and some conversation on a phone call originating from the bureau. I posted the start of this discussion at <http://www.digital-copyright.ca/discuss/42> (August 2001).

In public discussion it was suggested what became Copyright bill C-11 may cause lawful behaviour to become unlawful under the Competition Act <http://www.digital-copyright.ca/discuss/5451> (July 2005). The lack of anti-circumvention legislation in Canada was one reason I was given on the phone why the bureau would not consider anti-competitive the activities of the DVD-CCA and others.

16 Content Scramble System, <http://www.dvdcca.org/css.aspx> (June 1, 2014)

17 DVD Copy Control Association, <http://www.dvdcca.org/> (September 30, 2003)

18 McOrmond, Russell (2001) 2001 copyright reform: CMPDA reply. <<http://www.flora.ca/copyright-2001-cmpda-reply.shtml>> (September 30, 2003)

19 Touretzky, D. S. (2000) Gallery of CSS Descramblers. Available: <<http://www.cs.cmu.edu/~dst/DeCSS/Gallery>>, (September 30, 2003).

expensive for there to be a competition issue. He also suggested that since most movies are released in DVD Region 1 (North America), that there was also no barrier to trade.

This answer ignored the problem of the insurmountable barriers to market entry to the DVD player market that exists for FLOSS DVD players. The price of the existing proprietary players is not the only issue that should be investigated, with the exclusion of the FLOSS services market needing to be included in policy analysis. Doing a simple price analysis may be appropriate when there is a single industry or production methodology that is serving a given market, but this is not the case for ICT tools. There are many important reasons why a consumer may favor a FLOSS-developed solution over a "software manufacturing" solution even if the price of the FLOSS solution were higher.

Section 2.2 of the draft IPEG reminds us that price is only one of the facets of competition, along with output, quality, variety, service, advertising and innovation. This analysis ignored the fact that DVD's can be read by more than dedicated DVD players, with my original question relating to software running on desktop computers.

This relates to the relevant software history. While software and hardware were once bundled and treated as a single unit, the marketplace has changed such that they are generally considered independent markets. There are companies which wish to put that genie back in the bottle, where the manufacturer of the hardware rather than the owner of the hardware makes all software choices.

People like to make transportation analogies when discussing communications technology. While some people would like to suggest that software is like the engine of a car which is integrated and often expected to be tied to other aspects of the car, I believe a more correct analogy would be to consider software to be the driver. It is the software that determines what hardware can do (within the limits of the hardware) just as it is the driver that determines where a car will go.

If someone asked the bureau a question about potential competition problems within the market for purchasing subcompact cars, would a "market analysis" of taxi fairs be done? This is not to suggest that taxis are not also a relevant market that might be worthy of investigation, but it is a separate market from car purchasing. This is the same for devices which have DVD/Blue-ray drives, and the broad diversity of software that may run on these devices to display DVD/Blue-ray videos.

Modern DVD and Blu-ray players<sup>20</sup> increasingly have applications for YouTube, Netflix, and other online media, games, or productivity available for them. This makes this hardware more similar to desktop computers than older integrated DVD players, more like car ownership than a taxi. This should be taken into account if the bureau is asked to investigate potential issues with multi-purpose communications hardware that, among other things, happens to be able to access media such as DVD and/or Blu-ray disks.

There are many reasons why people might choose to own rather than rent a car, why they might sometimes choose taxis, why they might sometimes choose public transit, trains, or even airplanes.

This is true of software where some may choose to write their own software, some may choose FLOSS, while others choose software manufacturing. As more and more digital technology

---

20 This needs to be understood to include not just devices called a DVD and/or Blu-ray player on the box, but also game consoles such as Wii, PS3/4, OUYA, XBOX, and many more devices. This may also include hardware setups where the device that is connected to the screen is not the same as the device connected to the DVD/Blue-ray drive, such as mobile or set-top devices connecting to a media server. It is legal barriers that disallows software to be written for my Chromecast <http://google.com/Chromecast> to play DVD/Blue-ray disks over my home network, not something inherent in the hardware.

intermediates activities in our lives, software choice may become as (or possibly even more) critical to our society as the right to vote.

### ***Harmful IPEG hypothetical example***

Part 7 of IPEG offers a few hypothetical examples that are used to demonstrate the application of competition law. The example that demonstrates the most critical problem with IPEG is "Example 8: Refusal to License a Standard".

CALCULATOR approached ABACUS and requested a licence(sic) to copy the words and layout of its menu command hierarchy (for the purpose of this example assume that permission was required since ABACUS had valid IP rights in these works). With permission, CALCULATOR could have relaunched its product with an emulation mode and a key reader, which would have given CALCULATOR the ability to read ABACUS files and ensured compatibility between the two products.

This example asks that we assume that permission was required, something I do not consider to be a reasonable assumption. Rather than promoting competition as suggested in part 6 of IPEG, this example promotes what appears to be new and highly controversial forms of exclusive rights.

In this example there is both a file format and a user interface, neither of which should be offered any statutory monopoly at all. This example involves the look-and-feel of the user interface for software, or a file format that should be able to be legally reverse-engineered. These are cases that should never be brought to the competition bureau as the invalidity of these claimed statutory monopoly rights should be made clear within the copyright and patent acts.

This is a critical example for FLOSS creators and users as the very existence of office suites such as OpenOffice.org<sup>21</sup>, and the adoption of other Open Source desktop and mobile software rely on these interfaces not being eligible for copyright or patent monopolies.

If we substituted the word "CALCULATOR" for OpenOffice.org (specifically the spreadsheet component, called "calc") and "ABACUS" for Microsoft (specifically the component called "excel"), the example would almost become a real-life example. OpenOffice.org is an international community based FLOSS project (and thus is vendor-neutral) and not a company that can run into financial difficulties, but otherwise the issues are similar.

OpenOffice.org can read and write Microsoft Office files, and the look-and-feel (user interface, menu layout, etc) of OpenOffice.org is very similar to that of Microsoft Office. These two facts have been critical in the worldwide adoption of this Open Source alternative to Microsoft Office.

It should be obvious that if ever asked, Microsoft would never license these interfaces to either the OpenOffice.org community project, or at the time to Sun Microsystems which originated OpenOffice.org when it released the StarOffice product to Open Source. Microsoft has been very public with its hostility toward the Open Source and Free Software movements, which represent the greatest threat to its existing market dominance and to its legacy business model.

---

21 More information on the OpenOffice.org FLOSS project can be found at <http://www.openoffice.org> (accessed September 30, 2003). It should be noted that this document was created with the software from this project.

One of the simplest ways for domestic governments to deal with illegal monopolies such as Microsoft (which has been tried and convicted in the USA) is to modernize statutory monopoly and Competition policy to ensure that Competition policy takes precedence. One of the ways to accomplish this is for governments to simply not offer copyright or patents in areas such as computing interfaces that would create considerable competition problems.

A key motivator for my 2003 submission was to encourage the bureau to get involved in the then ongoing Copyright reform process as part of competition policy advocacy. Among other competition issues, the bureau should be strongly advocating against any changes in the scope, definition or breadth of copyright law which could grant exclusivity to interfaces.

The public policy position of not offering copyright on computing interfaces was specifically discussed in the 1991 European Union directive on the legal protection of computer programs<sup>22</sup>. The directive offers standardization and interoperability as important public policy justifications for this position. Interface patents are given as an area needing a "fair use" defence in Maureen A. O'Rourke's article<sup>23</sup> on patent law. It would be appropriate for the competition bureau to become fully aware of these policy alternatives and to offer advise to the relevant copyright and patent policy branches.

I am unaware at this time of bureau participation in what was passed as Bill C-11, which received royal assent on 2012-6-29. I would be interested to read any submissions made, but was generally disappointed in not seeing a visible and strong pro-competition message from the bureau.

While I am confident if these types of interface exclusive rights were tested in court that they would not be enforced, I believe it is inappropriate for the bureau to automatically defer any alleged exclusive right to the courts. As we know there are many unanswered questions on the boundaries of the scope, definition and breadth of exclusive rights like copyright and patents. It is well established that patent offices worldwide tend to err on the side of granting patents when there is a question, passing the question on to the courts to decide later. This is a considerable burden on competitors as it forces them through an expensive and potentially long court battle to confirm the invalidity of an alleged exclusive right before they can even approach the bureau about anti-competitive behaviour. The likely outcome will be that competitors are removed from the marketplace by questionable exclusive rights without any assistance from the bureau.

The bureau should be coming out clearly and strongly opposed to exclusive rights on interfaces. This should include making submissions to other branches of government to clarify the law as not granting these rights, and actively participating in any reform process. This should also include removing from IPEG examples or other literature any presumption of the existence and/or validity of statutory monopolies on interfaces.

## Encrypted Media

A large amount of media, whether in physical form such as DVDs or Blu-rays, or as downloads or streams like music or Netflix, is encrypted. While some lawyers and lobbyists consider this to be a form of "technological measure" alleged to protect copyright holders from copyright infringement,

---

22 31991L0250, Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31991L0250:EN:HTML>

23 Maureen A. O'rourke, "Toward a doctrine of fair use in patent law", Columbia law review, volume 100, No. 5 (June 2000)

most technologically sophisticated people dismiss this claim<sup>24</sup>.

Once you realize that this technology cannot achieve its advertised goal, you begin to ask what other intended or unintended consequences there may be. Most of these consequences fall into competition issues, often in forms that resemble competition act section 77 tied selling.

Sometimes the focus is on the abuse of encrypted media by groups of large copyright holding companies. These companies are trying to use their copyright holdings to manipulate technology companies in the hardware and/or software market<sup>25</sup>. The idea is that these possible cartels of copyright holders will refuse to allow content to be made available on hardware where the manufacturers don't bow to their demands about what features they don't wish to exist<sup>26</sup>.

Sometimes the discussion will be about the abuse of encrypted media by larger technology companies. These companies use encryption to tie the ability of the public to access media content to the purchase of their products, thus locking out competitors. With encrypted media content is encrypted such that it is only easily and/or legally accessible by specific brands of hardware and/or software. With this tie, any past media purchases become a barrier to entry of competing hardware/software as customers would have to re-purchase any content for the new hardware/software. Only unencrypted media<sup>27</sup> could be automatically accessed by a competitors hardware/software.

Those concerned with larger media or larger technology firms manipulating markets have valid concerns, with consumers of and competitors in the content, hardware and software industries all being

24 Science fiction author and digital right advocate Cory Doctorow gave a talk in June 2004 at Microsoft where he discussed the impossibility of encrypted media stopping people from infringing copyright. (Speaking notes <http://craphound.com/msftdrm.txt> , video <http://research.microsoft.com/apps/video/default.aspx?id=104869> ).

In public presentations <http://c11.ca/5464> and articles <http://c11.ca/5491> I have been discussing the "Harry Potter" version of technological measures where copyrighted works can, on their own, come alive make decisions such as whether they can be copied.

In my Frequently Asked Questions page for Bill C-11 I suggested that, "statistics used to indicate losses do not differentiate between losses due to infringement and losses due to unintended consequences from misunderstood and misapplied technological measures." <http://c11.ca/faq#needtpm>

Tor Books president and publisher Tom Doherty recently spoke about how "...the lack of DRM in Tor ebooks has not increased the amount of Tor books available online illegally, nor has it visibly hurt sales."

<http://www.tor.com/blogs/2014/05/tom-doherty-tor-books-book-expo-of-america-2014>

Similar views are often expressed by parts of the content industry who are or have taken advise from technologically sophisticated people.

25 After discussing how DRM can't work if "The purpose of DRM is to prevent people from copying content while allowing people to view that content", Ian Hickson states that, "The purpose of DRM is to give content providers leverage against creators of playback devices." <https://plus.google.com/u/0/+IanHickson/posts/iPmatxBYuj2>

26 Mozilla was recently forced to implement the so-called "Encrypted Media Extensions" to HTML5 <https://blog.mozilla.org/blog/2014/05/14/drm-and-the-challenge-of-serving-users/> . This requires integration with non-FLOSS software from Adobe, and will likely dictate what features will be "allowed" to be implemented in this otherwise open community developed software. While this goes against the overall philosophy of this organization, they feel forced to do so by copyright holders who have stated they will block access to content otherwise. This is a common occurrence, where smaller hardware manufacturers and software authors are dictated to by larger copyright holders.

This will do considerable damage to Mozilla given for some people the transparency, accountability and community driven process which EME disallows was the reason to choose Mozilla over competitors.

27 Or media where it is the customer that holds the decryption keys, rather than the incumbent technology provider holding the keys.

harmed.

In some cases promoters of these technologies aren't technologically literate enough to recognize they have become victims of abuses themselves<sup>28</sup>, so this isn't something that can simply be left to market forces. This type of abuse of technological measures should clearly be reviewable by the competition bureau, and should not be considered a "mere exercise" of a right simply because of the unfortunate and confusing mention of technological measures in the current Copyright Act.

Beyond the use of encryption to tie media to specific brands of hardware/software, there are attempts to abuse these technologies for clearly anti-competitive reasons which have nothing to do with copyright. Examples have included computer printers, batteries for electric cars<sup>29</sup> and more recently coffee machines<sup>30</sup>.

## Vendor ties in non-owner locks on hardware

There are a variety of examples in the marketplace<sup>31</sup> which come back to the same issue. Some hardware manufacturers are using encryption within the boot loaders of computers to require that any operating system and/or other software be digitally signed (IE: allowed by) the manufacturer. This is an abuse of technological measures to deny the rights of technology owners the right to make their own software choices. This has considerable follow-on competitive issues given the hardware manufacturer is able to leverage this transfer of software choice from owners to manipulate software and other marketplaces.

## Potential abuses by Collective Societies

Collective societies are only mentioned in footnote 22, but there are activities which the bureau may consider as part of competition policy advocacy. As one example there is a long-running dispute between Access Copyright and educational institutions over whether Access Copyright's blanket license is mandatory. Access Copyright does not represent copyright holders, but a competing licensing model

---

28 "Meanwhile, Hachette -- publishing's most ardent DRM advocate -- and Amazon continue to duke it out in a ghastly and abusive public spat in which Amazon is attempting to extort deeper discounts from Hachette by de-listing, delaying and obfuscating its titles. If Hachette books were DRM free, the company could announce an "Amazon-refugee discount" of 10% of all its ebook titles at Google Play, Ibooks, and Barnes and Noble, and offer a tool to convert your Kindle library to work on one of those other players. But because Hachette allowed -- insisted! -- that Amazon put its own DRM on Hachette books, the only company that can authorize converting Amazon Kindle titles to work with other readers is Amazon.", Cory Doctorow <http://boingboing.net/2014/05/29/tor-founder-tom-doherty-on-pub.html>

29 "Renault will remotely lock down electric cars" <https://blogs.fsfe.org/gerloff/2013/10/31/renault-will-remotely-lock-down-electric-cars/>

30 "Keurig Will Use DRM In New Coffee Maker To Lock Out Refill Market" <http://www.techdirt.com/articles/20140227/06521826371/keurig-will-use-drm-new-coffee-maker-to-lock-out-refill-market.shtml>

31 This includes controversies around Unified Extensible Firmware Interface (UEFI) secure boot, and the fact some manufacturers aren't offering a way for owners to choose which encryption keys are used, with some hardware vendors not even offering an unencrypted or "owner override" option. This controversy often mentions Microsoft given there are agreements between Microsoft and hardware vendors to integrate Microsoft's keys, where some people accuse Microsoft of demanding competitors keys not be easily useable.

This also relates to so-called "Jail Breaking" of Apple and other mobile devices, enabling the owner of these devices to make their own software choices. Apple and some other companies allege it is in violation of anti-circumvention clauses of Copyright law for owners to use software not approved and/or supplied by the hardware vendor.

in a marketplace where customers prefer different licensing arrangements. Treating their license as mandatory effectively blocks other licensing suppliers. The Copyright Board has thus far done a poor job considering competition issues in its administrative role.

## Summary

As a summary I will offer questions for the bureau to contemplate as it updates IPEG and potentially moves forward with competition advocacy.

This discussion proposes some specific questions to the bureau

- Is software considered a relevant market separate from computer hardware?
- Is Free/Libre and Open Source Software considered a separate market from software manufacturing?
- Are competition factors beyond price considered when analyzing software?
- Will the bureau remove from IPEG examples which ask the reader to presume the validity of exclusive rights on interfaces?
- Will the bureau include opposition to exclusive rights on interfaces in its (IPEG section 6) Competition Policy Advocacy?
- Will the bureau avoid treating encrypted media used by and/or against copyright holders as a "mere exercise" of a right simply because the term "technological measure" is mentioned in the Copyright Act?
- Will the bureau keep an eye on potential abuses of encrypted media by copyright holders to manipulate hardware and/or software markets?
- Will the bureau keep an eye on potential abuses of encrypted media by technology companies to leverage media and the statutory monopoly of copyright to eradicate competition in the hardware, software or media markets?
- Will the bureau keep an eye on potential abuses by hardware manufacturers of encryption which disallows hardware owners to make their own software choices?