



Broadcasting and Telecommunications Legislative Review

Response to Call for Comments

Google Canada is pleased to submit the following comments in connection with the [Broadcasting and Telecommunications Legislative Review Panel's review of Canada's communication legislative framework](#). Our brief consists of the comments below, as well as a report on [Google's Economic Impact](#) recently published by Deloitte and our recently released [How Google Fights Piracy Report](#), which are both referred to throughout the brief and which we have appended for your reference.

Google

Google's [mission](#) is to organize the world's information and make it universally accessible and useful. Google has over 1,000 employees across four offices in Toronto, Kitchener-Waterloo, Montreal and Ottawa. Those employees include 600 software engineers who work on products that affect billions of users around the world, as well as Google Ads and Google Cloud teams who work directly with Canadian businesses and organizations to help them maximize the potential of the digital economy.

Canadian businesses of all sizes and technical sophistication use our search and advertising products to connect with consumers online, and our cloud-based services to improve their productivity. According to a recent [Economic Impact Study](#) published by Deloitte, Canadian businesses using Google Search and Google Ads generated up to \$18.5 billion in economic activity last year supporting up to 200,000 jobs, while those using Google Cloud enjoyed up to \$830 million in productivity improvements.

Canadian creators also leverage our platforms to reach global audiences and monetize their content. Google offers a wide variety of platforms and revenue streams for different types of creators, each based on a **partnership** model. Under this model, creators such as publishers, artists, producers or app developers supply the content, while we provide distribution and monetization, including technical infrastructure, sales teams, transaction & payment systems, business support and resources, etc. We then share in resulting revenue, with the majority of the revenue going to the creator **every time**. Under the partnership model, we only earn revenue when partners earn revenue. So it is in our interests to ensure our partners' success.



Google Search

[Google Search](#) is our world-renowned search engine, and is available in over 190 countries in more than 150 languages. When someone “googles”, our ranking systems sort through the hundreds of billions of webpages in our Search index to give you useful and relevant results in a fraction of a second. Algorithms analyze hundreds of different factors to try to surface the best and most relevant information the web can offer, including freshness, trustworthiness and authority of the content, frequency of search terms on the page, and whether the page has a good user experience, just to name a few. The underlying content on the web is constantly growing and changing, with hundreds of new web pages published every second, and over 15 percent of search queries received each day are brand new. We constantly strive to improve our ranking systems, and made over 200 changes and updates in the last year alone.

In our ongoing efforts to prevent the spread of offensive or clearly misleading content, we’ve adjusted our signals to help surface more authoritative pages and demote low-quality content, particularly during breaking news events where the likelihood of exposure to inaccurate content is higher. We also updated our comprehensive [Search Quality Rater Guidelines](#) that our raters use to evaluate the quality of our results and identify areas where we need to improve to provide more detailed examples of low-quality webpages for raters to appropriately flag, which can include misleading information, unexpected offensive results, hoaxes and unsupported conspiracy theories. These guidelines will begin to help our algorithms in demoting such low-quality content and help us to make additional improvements over time.

We also make [significant efforts](#) to prevent infringing webpages from appearing in Google Search. To help copyright owners submit copyright removal notices, we developed a [streamlined submission process](#), and have to date removed over **3 billion infringing URLs**. In addition, our Trusted Copyright Removal Program allows copyright owners to submit large volumes of notices. Google also factors in the volume of valid copyright removal notices we receive when ranking search results, which helps people find legitimate, quality sources of content more easily and steers them away from infringing content.

In an effort to increase transparency, we have published a comprehensive overview of [How Search Works](#) and our [Search Quality Rater Guidelines](#).

Google News

[Google News](#) is our computer-generated news service that aggregates headlines from tens of thousands of news sources worldwide, groups similar stories together, and displays them according to each reader's interests. Google News is available in both English and French versions, and includes almost 2,000 Canadian news publications, including hundreds of French-language publications. The goal of Google News is to offer diverse perspectives, so it offers links to several articles on every story, so users can decide what subject interests them and select which publishers’ accounts of each story they wish to read. Google News also offers



a local news section that surfaces content from regional papers to hyper-local blogs that otherwise wouldn't appear in national news, and a "for you" section that includes new developments on specific stories readers have been following. Our "full coverage" feature lets readers see how a story is being reported from a variety of places and in multiple formats, including social commentary, local news sources, and top publishers, and includes fact checks.

For many years, Google News has marked links with specific "source labels" such as "opinion content", "user-generated content" or "satire" that help readers understand what they are about to read, and encourages them to consider the source and nature of the information. In 2016, we launched a "fact check" tag that highlights news that's been fact-checked and verified by authoritative organizations, including news publishers and independent fact checking organizations. We also expanded the fact check tag to Search, so fact check articles in Search are also labelled.

Google News does not show ads. It provides only headlines in order to drive traffic to the news source. Google News drives over 10 billion clicks a month to publishers' websites for without any fees or payment to Google whatsoever. In fact, it provides news publishers an opportunity to monetize that audience. Participation in Google News is entirely optional, and news publishers can choose not to be included in Google News or block specific articles. Google News also includes an Editor's Picks feature that allows publishers to provide up to five links to original news content, which are then displayed on the Google News homepage and app.

Under the [Google News Initiative](#), we have launched a variety of products, programs and partnerships to further support our news publisher partners. Our open-source [Accelerated Mobile Pages](#) (AMP) project renders mobile web pages 4 times faster and uses 10 times less data, significantly improving the mobile web experience. Initial results have been promising: the Washington Post reported a 23% increase in mobile search users who return within 7 days, while the Globe & Mail advised that loyalty for AMP users is 16.5% higher than that of google.ca or Google News. YouTube's [Player for Publishers](#) offers news publishers a video hosting, streaming and ads management platform that allows publishers to control ad formats and ad loads on their news sites. We also announced a \$25 million News Innovation Fund to support news organizations in building sustainable video operations, and includes grants to Canadian news organizations Global News, TVO, and Post Media.

Our [Google News Lab](#) offers online training for journalists and newsrooms on data journalism, investigative reporting, verification, and leveraging digital tools. We recently re-launched our Google Trends tool to provide a transparent, real time storytelling tool to surface trending information. We have organized a variety of workshops and labs, training tens of thousands of journalists across dozens of countries.

News Lab has also launched a number of new initiatives with partners like the Center for Investigative Reporting and the European Journalism Centre. We convened a collection of the world's leading experts in the discovery and verification of user-generated news content to

address pressing problems around the verification of eyewitness media, leading to the formation of [First Draft](#), which provides relevant features, reviews, case studies and analysis and a library of free training resources. We recently launched the Disinfo Lab with First Draft to combat mis- and disinformation during elections and breaking news moments. Finally, to help consumers distinguish fact from fiction online, we partnered with the [Canadian Journalism Foundation](#) and [CIVIX](#) to launch [NewsWise](#), a project designed to improve digital information literacy for young consumers, providing \$500,000 in funding to support this multi-year initiative.

Google's sister company [Jigsaw](#) also offers a suite of free tools to news organizations. [Project Shield](#) uses Google's infrastructure to protect independent news sites from distributed denial of service attacks (DDoS), protecting them from digital attacks when they publish something controversial or that questions powerful institutions. [Outline](#) makes it easy for news organizations to set up a virtual private network (VPN) on their own server. This gives news organizations the power to provide anyone in their organization safer access to the internet and keep their communications private. [Perspective](#) is an API that uses machine learning to spot abuse and harassment online. Perspective scores comments based on the perceived impact a comment might have on a conversation, which publishers can use to give real-time feedback to commenters, help moderators sort comments more effectively, or allow readers to more easily find relevant information.

Ad Platforms

Google offers web publishers (including news publishers) [advertising platforms](#) that allow them to monetize their content by hosting ads on their sites and apps and sharing in the advertising revenue. This allows a wide ecosystem of content creators including bloggers, writers and news publishers to sustain content creation by renting the advertising space on their websites without having to maintain sales team or an ads infrastructure.

The Google Display Network (GDN) includes more than 2.5 million publisher sites reaching more than 90 percent of the global Internet users in over 100 countries and 30 languages. Globally, the revenue share is around 70%, and in 2017 we shared more than **\$12.6 billion** with our publisher partners. According to Deloitte's [Economic Impact Study](#), this revenue share generated economic impact of up to \$320 million in Canada, and \$43 million in Quebec.

We also offer Google Ad Manager (formerly DoubleClick for Publishers), which includes much more advanced solutions for sophisticated publishers and can offer more generous revenue share. Further, we are also developing new monetization options for new publisher partners, such as [Subscribe with Google](#), to support publishers developing new revenue streams.

We have [rigorous policies](#) to prevent bad actors from exploiting our ads and monetization systems. In 2017, we took down more than 3.2 billion ads that violated our advertising policies. We removed 320,000 publishers from our ad network for violating our publisher policies, and blacklisted nearly 90,000 websites and 700,000 mobile apps. We also introduced technology

that allows us to better protect our advertisers by removing Google ads from individual pages on a website that violate our policies, removing 2 million pages for policy violations each month. This has been critical in scaling enforcement for policies that prohibit monetization of inappropriate and controversial content.

Google Play

Another platform for creator remuneration is [Google Play](#), our online store that offers Android apps, games, music, movies, TV, books and magazines for desktop, mobile and TV devices. Over 1 billion people in 190 countries have access to Google Play, providing a massive global audience for developers and other content partners.

[Google Play Apps](#) provides a significant revenue stream for Android developers, who collectively earn over \$7B a year from sales alone. App developers have a host of revenue models available to them, including transactional (sales), in-app purchases, subscriptions and ads, and in all cases, Google shares **at least** 70% of the revenue with the developer. According to Deloitte's recent [Economic Impact Study](#), this app economy supports \$1.5 billion in revenues in Canada, representing 69,000 jobs, while in Quebec, it supports \$330 million and 15,000 jobs.

[Google Play Movies & TV](#) offers thousands of movies and television shows for rental or purchase across most surfaces, while [Google Play Books](#) is one of the world's largest eBook stores with over 5 million titles available. [Google Play Music](#) offers unlimited, ad-free access to 40 million songs for a monthly fee, or a more limited ad-supported tier. Each are licensed services that provide a significant source of revenue to our content partners.

Google Play [prohibits](#) apps that infringe copyright, encourage illegal streaming, or attempt to deceive users by impersonating other apps. In addition to proactively removing content that violates our policies, rightsholders notify us about content on Play that infringes on their rights. In 2017, more than 14,000 items were removed from the Play Store through this process.

YouTube

[YouTube](#) is Google's global online video platform. YouTube has over 1.9 billion monthly logged-in users, and over a billion hours of video watched every day. There are localized versions of YouTube in 91 countries around the world across 80 languages, covering 95% of all internet traffic. At YouTube, our [mission](#) is to *give everyone a voice and show them the world*. What that means is we are an open platform dedicated to freedom of expression, for people to get information, for creators to succeed and for creators and fans to find a sense of belonging. We think of these as 4 central freedoms that guide our decisions. The true power of YouTube is that, with just a camera and an Internet connection, anyone, of any age, from any walk of life, can participate, have a voice, and build a global audience.



Over 400 hours of video are uploaded to YouTube every minute, making it one of the largest living collections of human culture ever assembled. These uploads represent virtually every imaginable type of video content: from home videos and “user-generated content” to high-end film and television content. Through platforms like ours, more people around the world are able to think of themselves as authors, artists and content creators.

YouTube is a “lean-in”, interactive experience, where creators interact directly with a community of engaged, passionate fans who share, comment and contribute. Over the past year, the number of users following creators and engaging with their channels every day grew 70 percent. The personal, direct connection YouTube creators share with their fans makes them both authentic and relatable, and distinguishes YouTube from other platforms.

YouTube is primarily ad-supported and the YouTube Partner Program allows YouTube creators to participate in advertising revenues, the majority of which goes to the creator. There are more than one million channels earning revenue through the YouTube Partner Program globally, with thousands of channels making six figures or more annually. Today, we see more creators making a living on YouTube than ever before - the number of creators earning five figures a year is up by 35 percent from the past year, and the number of creators earning six figures is up by 40 percent. YouTube allows any creator, big or small, emerging or established, develop a global audience and build a sustainable business.

Canadian YouTube Creators

Canada has a large and vibrant YouTube creator community that produces high quality, engaging content that is being enjoyed in high numbers both domestically and globally. Every year, millions of hours of new Canadian content is uploaded to the platform. Put another way, each month Canadian creators upload more content to YouTube than all of the content broadcast by Canada's major national television networks in 10 years.

Canada is one of the top exporters of content on YouTube. Globally, on average, 50% of a creator’s watchtime comes from outside their home country, but for Canadian creators, **over 90% of watchtime comes from outside Canada** - higher than any other country on the platform. Canadian content also accounts for a disproportionately high amount of global watchtime on YouTube, reflecting the compelling content Canadians create and their success abroad.

The range of Canadian content available on YouTube is extraordinarily diverse, and includes scripted web series, animated films, comedy, documentaries, children’s, educational, entertainment, music, gaming (“let’s play” videos and walkthroughs), food, style & beauty, travel, science & technology, do-it-yourself tutorials, news & politics, and vlogs (video blogs), all available in a multiplicity of languages. Canadian content tends to perform very well with global markets, due to both the talent of our creators and our cultural diversity, which resonates with international audiences.

Canada's YouTube community is large, and increasingly successful. Over 40,000 Canadian YouTube channels have over 1,000 subscribers & eligible for monetization, and over 230 Canadian YouTube channels with over 1 million subscribers. In the past year, Canadian channels have seen their watchtime grow 45 percent, and channels making six figures or more in revenue are up 24 percent over last year. Canadian success stories are numerous, and many of these creators have grown sufficiently large and sophisticated that they employ teams of business managers, researchers, camera operators, editors and others, effectively becoming small production studios. A few prominent examples include:

[Lilly Singh aka ||Superwoman||](#) (**14.5M subs, 2.9B views**) is a multi- talented entertainer with a message of positivity who found worldwide fame through witty and inspirational videos on YouTube. Her knack for observational comedy, often centered around her Indo-Canadian roots, has led to viral hits such as "[How Girls Get Ready](#)" and "[Types of Kids at School](#)" which collectively have over 20 million views. One of the biggest Creators on the platform, Lilly has collaborated with digital stars including Jenna Marbles, Grace Helbig, Hannah Hart and mainstream celebrities James Franco, Seth Rogan, and The Rock. Lilly recently collaborated with the YouTube Originals program on her documentary, [A Trip to Unicorn Island](#).

[Watchmojo](#) (**19.6M subs, 11.8B views**) creates "top 10 list" videos for nearly anything in popular culture, including celebrities, movies, music, TV, film, video games, politics, news, comics and superheroes. One of the most successful channels on all of YouTube globally (frequently ranking in the top 10), Watchmojo produces dozens of videos a week which regularly have hundreds of thousands if not millions of views, and offers videos in English, French, Spanish and German (among others). Watchmojo employs 70+ full-time employees and over 100 freelance writers and video editors. It recently launched [MsMojo](#), which focuses on a female demographic.

[SuperSimpleSongs](#) (**13M Subs, 11.8B views**) began in a small classroom when Devon Thagard and Troy McDonald started began creating children's songs for their students in Japan, and achieved tremendous success when they started uploading the songs to YouTube. A few years later, they co-founded Toronto's [Skyship Entertainment](#), which now produces a wide variety of children's animation, stop motion, puppet and live action content from their Toronto studio. They recently passed 10 million subscribers, making them the most successful children's content creators in Canada, and one of the most successful on the platform.

[AsapSCIENCE](#) (**8.4M subs, 1.2B views**) was created by Mitchell Moffit and Greg Brown to provide scientific explanations on various topics through animated videos. Their unique and compelling 'explainer' format makes science interesting and more accessible to their wide audience who return each week to learn more about the world around them, and [AsapSCIENCE](#) is now one of YouTube's biggest learning channels. Mitch and Greg

also routinely address issues affecting the gay community and created a new channel [AsapTHOUGHT](#) to promote science with a social conscience.

[How to Cake It](#) (3.9M subs, 445M views) Yolanda Gampp, Connie Contardi and Jocelyn Mercer collectively run one of the most successful food channels on YouTube. With Yolanda's extraordinary talent as a baker matched to Connie and Jocelyn's decades of experience as video producers, How to Cake It has become a global media empire that includes their wildly popular videos released every Tuesday, a new cookbook and a line of baking tools. A true partnership of equals, the How to Cake It team put the emphasis on "we" instead of "she". The How to Cake it team started on cable television and moved to YouTube after their show was cancelled. They quickly found an audience on YouTube and have grown their channel quickly and sustainably.

[FaZe Pamaj](#) (3.2M subs, 575M views)'s Austin Pamajewon, who is originally from the Shawanaga First Nation, close to Parry Sound, ON, has achieved significant success as a YouTube gaming creator. In high school, he began to post videos of his video game play, and his skills at gaming, on-screen personality and entertaining commentary soon attracted a fan base. After a stint with Optic Gaming, a major U.S.-based company, he Anishinaabe gamer recently relocated back to Canada.

[GigiGorgeous](#) (2.8M subs, 460M views)'s Gigi Loren Lazzarato is YouTube's top trans-gendered Creator who inspires and entertains with her story and larger-than-life personality. In addition to chronicling her journey during her transition, she also produces beauty, fashion, advice and comedy videos. Gigi partnered with YouTube Originals on [This is Everything](#), a full-length documentary, directed by two-time Oscar-winner Barbara Kopple, chronicling Gigi's transition from male to female, exposing her personal journey and struggles.

[The Domestic Geek](#) (1.5M subs, 131M views) Sara Lynn Cauchon started The Domestic Geek as a personal creative outlet while working a day job as a television producer. She discovered a place where she didn't need to compromise and could cook the dishes she wanted to and have full creative control of the production process. As her channel grew in popularity, she realized that her side hustle was offering her more enjoyment and satisfaction than her day job. Now she employs four full-time staff members and calls herself the "accidental entrepreneur".

Canada also has a large community of up and coming creators, YouTube's creative middle-class, including a range of Quebec creators who predominantly produce French-language content that performs well in Quebec and other French-language markets.

Canadian creators are wildly diverse, and come from a wide variety of backgrounds and experiences. The primary thread that connects them is that each successfully leveraged the

open platform of YouTube to build a global audience, something they would have been very unlikely to achieve in the closed system of conventional broadcasting.

Partnerships (MCNs, Broadcasters, Producers, etc.)

In addition to YouTube Creators, we have also seen the emergence of new businesses built on the platform. Most notable is the multi-channel network (MCN), which offers business, marketing and cross-promotion support to YouTube creators in exchange for a percentage of the ad revenue from the channel. Vancouver's [BroadbandTV](#) is one of the largest MCNs in the world, accounting for hundreds of millions of unique viewers and billions of views across multiple platforms. Canadian media companies have also been investing in or establishing MCNs for the Canadian Creator community. For example, Corus partnered with MCN KIN Community to launch [Kin Canada](#), bringing KIN's lifestyle Creators and advertising opportunities to the Canadian marketplace. Bell Media launched [Much Digital Studios](#), intended to more closely align Much with its core audience and provide new brand opportunities for its Creators. And Quebecor established [Goji Studios](#) to give Creators access to its reach and media expertise.

YouTube's open model, diverse content, global reach and lean-in, interactive nature means that the platform is more complementary to than competitive with conventional broadcasting, and Canadian broadcasters and producers are increasingly partnering with YouTube and leveraging the platform to reach new international audiences. There are countless examples of broadcasters and producers putting clips online, and using the detailed analytics YouTube provides to identify markets and demographics where content performs well. Then, armed with audience data, they can secure new opportunities to license their content in unexpected markets.

We partnered with Canada Media Fund on [Encore +](#), a YouTube channel featuring classic Canadian content that is no longer aired such as *The Littlest Hobo* & *Wayne & Shuster*. Since launching in November 2017, the CMF has uploaded over 1000 videos to the channel, which have over 7.6 million views. The CMF reports that over half of [Encore+](#)'s watchtime comes from outside of Canada, so this classic Canadian programming is reaching entirely new audiences. Further, not only does [Encore +](#) make classic Canadian programming available, it also fulfills a critical digitization and archival function, preserving shows as original master tapes degrade.

We've provided live-streaming services for major events including the last Tragically Hip concert, the Juno Awards, the Canadian Screen Awards, and APTN's Indigenous Day Live, extending the reach of these Canadian moments. And we work closely with these partners to help them maximize the opportunities on the platform.

We have partnered with companies like DHX Media, who not only make their world-class content available on YouTube, but leverage the powerful analytics and audience measurement tools available on the platform to pursue new licensing and sales opportunities in foreign

markets. We have similarly partnered with broadcasters like Corus/Nelvana, Quebecor, TVO and TFO, Pelmorex, and producers like Temple Street/Boat Rocker, 9 Story and Apartment 11, as well as digital publishers such as Just for Laughs and Dibly to bring their content to an international audience. We have also partnered with organizations like Cirque du Soleil, providing VR Funding and Content Lab that included training, mentorship, VR equipment and production funding.

YouTube Originals

YouTube Originals is relatively new division that produces original projects, primarily for our YouTube Premium subscription service. Originals includes a significant mix of projects developed specifically for the YouTube audience, such as ambitious, new content from top creators (whether a YouTube star or a traditional celebrity), more conventional episodic and feature length content, and has released over 50 series and movies.

For top creator content, the emphasis is on partnering an established creator with production company for a project they might not do on their own. Originals has developed projects with several Canadian YouTube creators, partnering with Lilly Singh for her documentary [A Trip to Unicorn Island](#), and GigiGorgeous for her documentary [This is Everything](#). We have also partnered non-Canadian YouTube creators with Canadian production companies, partnering [9Story Media Group](#) with British YouTube creator and inventor [Colin Furze](#) on extreme invention series [Furze World Wonders](#), filmed in Toronto.

Several major YouTube Originals series have also been filmed in Canada. Original's tentpole science fiction series [Impulse](#) features Canadian talent such as Euka Okuma, Callum Keith Renni and Shawn Doyle and was filmed in Toronto. Another tentpole, dark comedy [Wayne](#), was also filmed in Toronto and will be released on YouTube Premium on January 16, 2019.

YouTube Originals are performing very well, garnering over half-a-billion views. However, Originals are the **exception**, not the rule, and Originals content only represents a tiny fraction of overall YouTube corpus.

Contributions to the Canadian Creative Ecosystem

YouTube is committed to the success of YouTube Creators. We make substantial investments in a variety of resources for YouTube Creators, including specific investments to benefit Canadian Creators. Accordingly, while YouTube does not participate in the closed, regulated broadcasting model, YouTube does make **significant contributions** to the Canadian creative ecosystem.

Open Platform

Operating a global, open, online video platform is extraordinary resource intensive, and we invest **billions** of dollars in the platform and [underlying infrastructure](#), giving **anyone** the instant ability to upload and stream their content to 91 countries **at no cost to them**. We own and operate 15 data centers on 3 continents around the world to keep our products running 24 hours a day, 7 days a week. Our engineers work to constantly improve the platform, developing new technologies to improve video quality and compression, reduce buffering and introduce new features. We also invest in local content caches which are integrated with local ISPs (at our expense) in order to ensure video streams delivered to our users efficiently with minimal delay.

This is YouTube's core value proposition to creators, and the value of this contribution cannot be overstated. For instance, one Canadian YouTube creator estimated that it would cost them **\$300,000** to build and operate a video platform that would provide equivalent functionality just for their own videos (and that is excluding ongoing bandwidth costs, which are considerable). YouTube provides all creators equivalent functionality, for **free**.

We also invest in integrating YouTube across multiple platforms, including desktops, smartphones, tablets, smart TVs, game consoles and even set-top boxes, in order to provide our users with many different options to interact with the platform, and to enable our creators to reach audiences on a variety of devices. In order to further broaden accessibility audiences, we developed [YouTube Go](#), a "light" version of the YouTube mobile app designed for places with poor connectivity or expensive cellular data prices.

We are also constantly deploying entirely new capabilities, such as 360-degree video and mobile livestreaming, which open up entirely new possibilities for Creators.

Monetization

We continually work to improve the ability of creators to [make money on YouTube](#). YouTube is primarily an ad-supported platform, which is what allows YouTube to be an open platform available free of charge to users around the world. In 2007, YouTube introduced the YouTube Partner Program, a first of its kind program which enabled creators to participate in revenues from ads shown against their content, with the majority going to the creator. A YouTube creator must be in YouTube Partner Program and enable monetization for ads to play against their videos (except in certain, limited circumstances), so YouTube only makes money when the Creator makes money. This partnership arrangement has allowed the YouTube creator ecosystem to flourish, and today we see more creators making a living on the platform than ever before.

We make massive investments in the infrastructure that powers our [online ads marketplace](#) and [displays ads on videos](#), as well as in the sales teams who secure advertising so creators don't have to. YouTube offers creators controls over class of ads shown on their videos, and they can prevent ads from specific advertisers, or from certain "sensitive categories" of advertisers, from appearing. We also strive to balance the interests of our creators with those of our advertisers

and users, and to ensure brands have confidence advertising on YouTube, videos must adhere to our [advertiser-friendly content guidelines](#) for ads to run. We have made significant investments in the automated systems that determine if videos are appropriate for advertising, and have developed extensive brand appropriateness controls to allow advertisers to determine what types of content their ads will run against. Consequently, not all videos are eligible for monetization, and if a video is addressing racy or controversial subject matter, it may not attract interested advertisers even if the video is monetized. Also, as the majority of ad placing and pricing is administered through our automated auction systems, there can be a high degree of variability in ad revenue depending on specific circumstances, content and audience. For instance, audiences in developed countries tend to attract higher bid rates than audiences in less developed regions, while certain types of content (e.g. beauty) may be highly attractive to advertisers, while others (e.g. news) may not be, which will affect bid rates.

While the vast majority of the revenue is coming from our advertising partners, we are increasingly investing in developing tools to help creators diversify their revenue streams and increase their opportunities to monetize their audiences. We recently launched a new subscription service, [YouTube Premium](#), which offers users an ads-free experience, features such as downloads and background play, and access to our reimagined music streaming service [YouTube Music Premium](#). This benefits YouTube creators, as they receive a pro-rated share of the viewer's monthly subscription, which can be more lucrative than advertising revenue. Further, subscriptions allow creators more freedom to address subject matter that advertisers may not find brand appropriate. As we roll out YouTube Premium to more markets and attract more subscribers, we expect subscription revenue to make up a greater proportion of our creators' revenue mix.

Successful creators have been diversifying their revenue for years. Again, the true power of YouTube is the capacity to build large, global audiences and interact with them in an authentic way, and a passionate fanbase is often eager to support their favourite creators. Depending on the creator's circumstances, content and audience, supplementary revenue streams often include:

- **Sponsorship deals** with major brands, who invest directly in creators to reach their audience. Can be extraordinarily lucrative, and for some creators is their primary source of revenue;
- **Crowdfunding campaigns** and **subscriptions** (e.g. Patreon), allowing creators to raise funds for specific projects or earn a consistent, reliable source of revenue from fans in form of a monthly subscription fee;
- **Live events** such as performances or fan meet and greets, allowing creators to earn revenue from ticket sales;
- **Custom creator-branded merchandise**, now can be created very quickly and sold to fans through any number of e-commerce engines and digital storefronts; and
- **Spin-off content**, such as book deals on their areas of expertise (self-help, beauty, etc), podcasts and other forms of content

To make diversifying revenue easier and more accessible for YouTube creators, we have started building new revenue tools directly into the platform. [Channel Memberships](#) allow fans to pay a recurring monthly fee in return for unique perks, such as exclusive livestreams, extra videos, or shout-outs. [Super Chat](#) lets fans pay to highlight their messages within livestream chats, allowing creators to both earn revenue and recognize and interact with super fans more easily. We have implemented [merchandising](#) features, that let creators link to e-commerce, merchandise or crowdfunding sites from directly within videos. Lastly, [FameBit](#) is our “influencer marketplace” that connects brands with creators to develop branded content. These “[alternative monetization](#)” features allow creators to diversify revenue and reduce dependence on ads or subscription revenue, which helps them build sustainable creative businesses.

YouTube has thousands of licensing agreements with labels, publishers and collectives, including major Canadian collectives, ensuring creators and rightsholders are compensated when fans watch music videos. The music industry has earned over **\$6 billion** in total ad revenue from YouTube, including over **\$1.8 billion in the last year alone**. Combined with revenue from our growing subscription service, [YouTube Music Premium](#) (which pays the same rates as Spotify), and money earned from monetizing fan uploads, YouTube is contributing a meaningful and growing revenue stream for the industry while providing a powerful platform to engage with fans around the world.

Copyright Management (Content ID, Copyright Match, etc.)

We have developed [industry-leading tools](#) for creators to manage their copyright on YouTube. We have invested more than \$100 million dollars in [Content ID](#), a copyright management system that notifies creators of user-uploaded videos containing their creative work and allows them to choose in advance what happens when those videos are detected. Content ID works by comparing reference files provided by rightsholders against every upload to YouTube, and applying the rightholder’s preferred policy when it finds a match: block the video from being viewed; monetize the video by running ads against it; or leave the video up and track its viewership statistics. There are over 9,000 partners using Content ID, and we’ve paid out over \$3 billion to partners who have chosen to monetize their claims. Content ID is highly effective. Over 98% of copyright management on YouTube occurs through Content ID, and 99.5% in case of sound recordings. It also drives significant revenues, given that creators opt to monetize rather than block over 90% of time, and 95% in the case of music, allowing rightsholders to earn money even when their work hasn’t been properly licensed by the uploader.

Earlier this year we launched [Copyright Match](#), a new tool that uses our Content ID matching system to find reuploads (90% audiovisual and visual-only matches) of creator videos on YouTube and identify them to creator. Creators can then review the videos and take action. Our YouTube Copyright Center includes an easy-to-use webform for removal requests as well as educational information on copyright, and we offer a Content Verification Program for creators

and rightsholders who have a regular need to submit high volumes of copyright removal notices.

YouTube strives to be as [transparent](#) as possible when we remove content for copyright infringement. For that reason, we notify our users when we take action on their videos, and provide [appeals](#) and [counter notification](#) processes for users to dispute claims they believe are invalid. Fewer than 1% of Content ID claims are disputed, and over 60% of those resolve in favor of the uploader.

Analytics

Unlike many closed, curated online video platforms, YouTube provides extremely comprehensive [analytics](#) to its creators so they can monitor the performance of their videos with data on views, watchtime, traffic sources, demographics, and the like. These tools provide YouTube creators a wealth of audience information they may use to refine their content, such as changing format or content in response to audience reaction, or pursue new revenue opportunities, for instance using geographical audience data for licensing opportunities in foreign markets or demographic data for cross-promotional or e-commerce opportunities.

Captioning

We have made considerable investments in our speech to text and translation technologies, applying the latest advances in artificial intelligence and machine learning to substantially improve accuracy. YouTube deploys these technologies in [captioning features](#), allowing YouTube creators to automatically subtitle their videos in dozens of languages. This significantly expands the reach of their content, as videos can be watched by audiences in different languages and makes their content more accessible by hearing impaired audiences. Furthermore, it also helps discoverability, as captioning is a signal used in YouTube search. We have recently expanded captioning to livestreams, so YouTube creators can enable live captioning and simultaneous translation. While accuracy is significantly improved, we recognize that the system is not perfect (and some languages more challenging than others), so also enable creators to provide their own captions, and have developed features that allow audiences to improve the accuracy of captions.

Physical Infrastructure (YouTube Space Toronto, Pop-Up Spaces)

We've also made many investments specifically to support Canadian creators. In 2016, we opened [YouTube Space Toronto](#), a creative incubator, education hub and production facility that supports the Canadian creator community based in George Brown College. YouTube Space Toronto provides Canadian creators with a state-of-the-art production facilities designed specifically for YouTube Creators to experiment and innovate content for their channels, where they can:

- **learn** more about film production, through training programs and workshops, gaining hands-on experience from industry experts;
- **connect** with others in the industry, collaborate with fellow Creators, brainstorm ideas, and share tips and tricks to get the most out of YouTube; and
- **create** better quality & more ambitious video content by gaining access, for free, to a variety of resources, including physical spaces for creative collaboration; loaner production equipment such as cameras, lights, boom microphones, and more; rotating sets and an enclosed sound stage.

All services provided through the Space are free to creators who are eligible to participate in programming, and to date YouTube Space Toronto has welcomed over 5,000 creators for workshops, programs and to shoot at the Space at no charge.

The YouTube Space Toronto has hosted our [NextUp](#) program for emerging Canadian creators. NextUp is an in-depth bootcamp to help up-and-coming creators supercharge their channels. This included a week-long immersion at the YouTube Space for educational programming and hands-on skills development, as well as a grant for each creator to help purchase new video equipment. Several participants have gone on to become very successful YouTube creators, such as [Chris Ramsay](#), a professional magician who's channel now has 2.1 million subscribers and 230 million views.

We have also run Pop-Up Spaces in other communities, such as Montreal and Vancouver. We routinely host events and workshops for creators, musicians & artists to help them better understand how to unlock the revenue potential of YouTube. Last year, we hosted YouTube Music Week, an entire week of Songwriter workshops, YT Office Hours, Acoustic Sessions, Content ID workshop, Keynotes, networking and Master Class events.

We have also hosted launch events for partners at YouTube Space Toronto, including live performances & livestreams, at no cost. For instance, we hosted the launch event for Matthew Good's new album "Something Like A Storm". YouTube Space Toronto has also been used as a location for music videos by various musicians, including the Weeknd.

Promotion (YouTube Spotlight Canada, Creator on the Rise & Artist on the Rise)

Last year YouTube launched [YouTube Spotlight Canada Channel](#), which showcases Canada's top stars and emerging Canadian talent in both English and French. Canada was the first market globally to launch a channel that is solely dedicated to promoting local creators. The

Canada was also the first market outside the US to launch [Creator on the Rise](#), a new feature within our highly visible Trending tab to identify Canadian creators who are rapidly growing and help them to build a bigger audience. In May, we launched [Artist on the Rise](#), a comprehensive program designed to help break emerging artists through a mix of promotional tools, with Canadian artist Jessie Reyez as the inaugural recipient

Creator Resources (Creator Hub, Creator Academy, Partner Managers)

We have also made considerable investments in online resources to help YouTube creators maximize their potential on the platform. We've worked with many of YouTube's most successful creators to identify what it takes to grow their channel on YouTube and made this information available in the [YouTube Creator Hub](#). The YouTube Creator Hub includes the [YouTube Creator Academy](#), which has a wealth of online tutorials and information to support YouTube creators.

YouTube has invested in a team of strategic partner managers (SPMs) dedicated to Canadian YouTube creators. SPMs work with Canadian broadcasters, producers and digital creators to help them optimize their channels and leverage the full potential of the platform. They run in-person workshops and events to help creators and producers refine your production and programming techniques, as well as audience building skills.

Content Management

Responsible and Balanced Content Policies

Open platforms like YouTube, where anyone can upload a video and communicate to the world, have led to an incredible diversity of content -- much more than we had access to when there were just a few channels available on conventional television. It also means that more people around the world think of themselves as authors, artists and content creators. Empowering people to create, broadcast and share is at the core of YouTube's mission.

However, freedom of expression is not absolute, and to ensure Youtube's communities stay safe and vibrant, we have robust policies about what content is permitted on our platforms. We take hate speech, terrorism, and extremism very seriously, and YouTube's [Community Guidelines](#) include prohibitions on hate speech, gratuitous violence, incitement to violence, terrorist recruitment videos, and violent propaganda (with appropriate exceptions for videos with a clear educational, documentary, scientific or artistic purpose). To enforce the Guidelines, we use both automated systems to proactively detect content for removal, and rely on our community of Trusted Flaggers to identify any videos that are in contravention. Our [Transparency Report](#) includes Community Guidelines enforcement information, allowing users to see the number of YouTube channels and videos removed for violations. We also have robust [advertiser-friendly guidelines](#) and demonetize videos that don't comply with those policies, and can age-restrict or place a warning interstitial in front of content that may be shocking.

Misinformation, Disinformation & News

We are also committed to combating misinformation and disinformation on the platform by: 1) making authoritative sources readily available, especially during breaking news events, by surfacing and highlighting videos from credible news sources; 2) providing context to help

people make their own decisions by including information panels also alongside videos on well-established historical and scientific topics that have often been subject to misinformation to provide contextual information; and 3) supporting journalism with technology that allows news to thrive, such as YouTube's [Player for Publishers](#) (a video hosting, streaming and ads management platform for news publishers that allows them to control ad formats). We also announced a \$25 million program to support news organizations in building sustainable video operations, and will be awarding grants to three Canadian news publishers.

Analytical Framework

In the [Terms of Reference](#) for the [Broadcasting and Telecommunications Legislative Review](#) (BTLR), the Government of Canada rightly observed that “new technologies and business models are introducing disruptive change while simultaneously creating new opportunities.” This “disruptive change” has been occurring for decades. It was catalyzed by the advent of affordable personal computers in the 1980s, and household Internet access in the 1990s, in particular the open web. More recently, we have seen the emergence of entirely new devices (smartphones, tablets, smart TVs, game consoles, etc.), platforms (iTunes, Spotify, Netflix, YouTube, Google Play, Playstation Network, Amazon Kindle, Wattpad, etc) and business models (digital ads, subscriptions, freemium, in-app purchase, crowdfunding, etc.) that allow Canadians to watch, read experience and discover what they want, when they want, how they want, all at the touch of a button. Not only has this shift radically expanded options for consumers, it has also opened tremendous new opportunities for Canadian creators, who now have access to global platforms that enable them to build global audiences. Given this, the Government determined that “by embracing and adapting to the disruption, Canada can position itself to maximize the benefits the digital age brings to our citizens, artists and creators, communications industry, and economy as a whole.”

In the Government's original [Canadian Content in A Digital World Consultation Paper](#) (the Consultation Paper) upon which the [Creative Canada Policy Framework](#) (the Framework) was based, the Government indicated that policies and programs that support Canadian creators and creative entrepreneurs must evolve:

- from **protecting** Canadian culture to **promoting and supporting** Canadian culture;
- from focusing on growing the **domestic** market to capturing a greater share of **global** markets;
- from **subsidizing** Canadian content to **investing** in Canadian talent and incentivizing risk-taking;
- from platform-**specific** to platform-**agnostic**; and
- from seeing culture primarily as a **social** phenomenon to embracing culture's unrealized potential as a driver of **economic** growth, both in the creative sector and more broadly.

Google strongly agrees with this view. The digital ecosystem is constantly evolving, with new platforms, devices and business models frequently emerging and displacing established players. For instance, Facebook has recently become a significant platform for online video and livestreaming, while Snapchat and Instagram are establishing entirely new forms of narrative and storytelling. As well, we are only just beginning to realize the potential of virtual reality, augmented reality and 360 video, which promise to unleash new forms of creativity and create entirely new markets. Any new model must be able to sufficiently adapt to this rapidly evolving ecosystem, and allow Canadian creators and creative entrepreneurs to fully capitalize on emerging opportunities and build sustainable businesses. In our view, the forward-thinking, market-driven approach captured by the above-noted principles are well positioned to do this.

Moreover, the five principles articulated (the Principles) above provide a clear framework for evaluating existing policies and programs, including the BTLR. Most of the policy objectives articulated in the [Broadcasting Act](#) are primarily focussed on cultural policy, namely the protection and preservation of “Canadian culture” by excluding non-Canadian influences from the Canadian market. However, both the Principles and the Framework clearly shift the emphasis from protectionist cultural policy to economic policy, which focuses on supporting Canadian culture by ensuring creative industries are economically sustainable. For instance, the Framework expressly states that “creators, broadly defined, must be at the centre of our new approach for the creative industries,” and that “the intent is to recognize their role as employers and producers in the creative economy,” and proposes to achieve this by 1) investing in Canadian creators, cultural entrepreneurs and their stories, 2) promoting discovery and distribution at home and globally, and 3) strengthen public broadcasting and supporting local news. By placing creators and creative industries at the heart of their approach, the Government is clearly prioritizing the contributions of creative industries and creative jobs to the Canadian economy over the production of Canadian cultural products. The strong emphasis on supporting exports also makes this shift very clear, as exporting cultural goods and services is effectively irrelevant for the purposes of cultural policy (which is concerned about Canadians having access to Canadian content reflecting Canadian values, not on communicating to non-Canadians). In fact, protectionist cultural policy is antithetical to a strong export strategy as market access is reciprocal, and promoting sales of cultural products in non-Canadian markets while simultaneously discriminating against non-Canadian cultural products domestically is not a sustainable position.

Given the clear shift from cultural to economic policy signalled in both the Principles and Framework, updating, revising or expanding existing regulations, policies or programs to new content forms or platforms should not be a mere exercise in determining whether the new form or platform fits within existing definitions. Rather, it should consider:

- What are the actual policy objectives the regulations, policy or program is seeking to achieve?
- Are those objectives consistent with the Principles and the shift from cultural to economic policy objectives?
- If so, are the regulations, program or policy actually achieving those objectives?

- If so, could those objectives be achieved in a more flexible, market-driven way that minimizes unintended consequences and negative impacts?
- If not, why not?

Applying this analytical framework to Canada’s current broadcasting, telecommunications and radiocommunications regimes, it is clear that certain aspects are in need of re-evaluation. For instance, many of the programs that support film, television, and to a lesser extent interactive digital media, were developed for the 20th century world of terrestrial “broadcasting”. In Canada, our broadcasting regime is effectively a closed loop where major participants (*i.e.* broadcasters, BDUs, producers) receive exclusive benefits (*e.g.* spectrum license, simultaneous substitution, re-transmission, etc.) in return for taking on obligations (*e.g.* exhibition requirements, expenditure requirements, mandatory contributions, etc.). This policy approach may have been appropriate when markets were limited geographically, and, due to the capital investments required, a relatively small group had effective control over distribution. Under such circumstances, market intervention was likely necessary in order to ensure that Canadians had access to a diversity of voices and a variety of content, including Canadian content. However, such considerations do not apply to the open Internet, where Canadians have access to an unimaginable array of content, including Canadian content; and Canadian creators and creative entrepreneurs have access to global platforms through which they can build and interact directly with global audiences and develop new revenue opportunities.

Some stakeholders, notably participants in and beneficiaries of the closed broadcasting model, have argued we should simply expand the existing broadcasting regime and apply the old rules of terrestrial broadcasting to the new, borderless digital world. In our view, that is not the path forward, and moreover, would not be consistent with the Principles, the Framework, or the shift from cultural to economic policy objectives. The digital ecosystem is driven by highly competitive market forces that compel platforms and creators to put the audience - the user - first. Platforms and creators not only compete within the same category, but with all other forms of content as well. The audience will move on if not provided with a compelling experience. In this environment, consumer choice rules, and audiences will naturally gravitate towards quality content that resonates with them, regardless of source. Hence we strongly agree that any new model must support the creation of content that focuses on the **audience** rather than attempting to force consumers to experience a certain type of content (*e.g.* CanCon). Furthermore, imposing the closed broadcasting model onto open Internet platforms will:

- 1) force platforms to adopt broadcast business models (*i.e.* upfront commissioning vs. revenue sharing), limiting revenue options for creators and privileging incumbents over creative entrepreneurs;
- 2) discourage experimentation and innovation, as mandatory commissioning and contribution requirements insulate incumbents from competitive market forces, including the need to build global audiences, demonstrate positive returns on investment, and maintain sustainable businesses;

- 3) negatively impact Canadian digital creators that do build global audiences, as privileging local content means their content will be demoted in non-Canadian markets which, due to the small size of the Canadian market, make up the majority of their watchtime, sales and revenue; and
- 4) limit consumer choice, as some platforms will simply refuse to offer service to Canadians if it means they will be subject to Canadian broadcast regulatory requirements, while others will likely pass the cost on to consumers, increasing prices and reducing accessibility.

Moreover, the tremendous success of Canada's digital creators, such as Canada's globally renowned video game industry and robust YouTube creator community, is clear evidence that Canadian creators do not require highly regulated, protectionist systems in order to succeed. These industries have **always** focussed on global markets and building sustainable creative businesses. The emergence of new digital platforms opened new opportunities for smaller, independent entrepreneurs to reach global audiences. Rather than rely on regulation requiring distributors to commission and/or fund their content, the industries benefited from strategic investment by provincial governments in the form of tax credits and direct funding, which allowed them to develop new innovative products and services and evolve as markets have evolved. The model of strategic investment has allowed the digital industries to flourish and is wholly consistent with the Principles, the Framework, and the shift from cultural to economic policy, and reflects an approach the panel should also emulate as it undertakes its review.

Recommendations

The BTLR's [Terms of Reference](#) and [Call for Comments](#) includes a number of themes and questions for consideration. Rather than respond to each individually, we will outline key principles we believe should inform the panel during the review.

1) Creator Agnostic

In our view, the distinction between creators and consumers is rapidly vanishing - citizens become creators when creating YouTube videos, crafting photographic stories on Instagram, or posting fiction on Wattpad. These open platforms have enabled creators who might never have been given opportunities by conventional models, including historically disadvantaged communities, to reach Canadian and non-Canadian audiences and achieve success. Similarly, these open platforms have supported the creation of more diverse and varied content than ever before. Consequently, in our view it is essential that any new regulatory model support content creation without impeding consumer access or privileging any one form of content or one class of creator over another. To maximize access to the widest possible range, variety and diversity of content, we must avoid regulatory barriers that would limit access to online platforms, such as imposing a closed, broadcasting model onto Internet Service Providers (ISPs). By permitting a range of online platforms to flourish, we will promote competition in an already fiercely

competitive digital ecosystem. This benefits both consumers (in the form of better offerings and lower prices) and creators (in the form of more distribution options and more opportunities to build global audiences and revenue).

2) Market-driven

The Principles and Framework reflect a clear shift from cultural policy to economic policy, and any new regulatory model should also reflect this shift. This means the regulatory model should shift away from the current “closed loop” broadcasting model and towards a market-driven approach focused on supporting Canadian creators building economically viable businesses by reaching global audiences and developing new revenue opportunities. This is critical as the “closed loop” approach focused on requiring “contributions” in return for “privileges” and developing content exclusively for the domestic market is not sustainable on the open Internet. First, while discussion of the application of broadcasting regulations to online video platforms tends to revolve around a few large services, there is actually an extremely diverse range of online video sources accessible by Canadians, including video platforms (e.g. Vimeo, DailyMotion, Ooyala, etc) and a variety of cloud services that host online video. Many of these operate entirely outside the jurisdiction, and requiring all of these services to “participate” in the broadcasting system and “contribute” to Canadian content production is neither practical nor enforceable. Second, requirements for online platforms to privilege Canadian content will adversely impact Canadian creators, as the implementation of equivalent rules in non-Canadian markets would mean their content would be demoted in favour of local creators, negatively affecting watchtime, sales and revenue. Third, due to the wide range of content available online, consumers have become accustomed to watching what they want, when they want, on whatever platform they want, and any attempt to compel Canadian consumers to watch Canadian content will be negatively received. Fourth, most platforms either license content or offer a revenue share, so creators are already compensated for their content, and requiring platforms to also “contribute” is effectively double compensation.

3) Recognizes Different “Contributions”

In its [Harnessing Change](#) report, the Canadian Radio-Television and Telecommunications Commission (CRTC) recognized that online video platforms “make important contributions, but neither their roles and responsibilities nor their contributions are currently recognized.” The CRTC also acknowledged that “these services are not identical and so should not make identical contributions.”

While any new regulatory model adopt a light-touch, market-driven approach focused on global markets, the approach must also recognize that different platforms contribute to Canada’s creative ecosystem in different ways. Open platforms do not participate in a conventional broadcasting model, and do not typically commission content. Rather, open platforms contribute by offering Canadian creators the opportunity to reach global audiences, and monetize those audiences by offering revenue sharing arrangements. This contribution is

profound, allowing Canadian creators who may not have been allowed access to broadcasting platforms that opportunity to reach audiences and build creative businesses, and it is critical that any new model acknowledge and account for different types of contributions.

YouTube in particular makes substantial contributions to Canada's creative economy, as highlighted earlier in this brief. We invest billions in infrastructure to allow Canadian creators to reach audiences around the globe, at no cost to them. We have developed revenue sharing models, and invested in ad system and other monetization features to enable them to build self-sustaining businesses. We have invested in industry-leading content management systems to allow them to manage their content and monetize fan videos. We have provided creators access to world-leading analytics to optimize their content and explore new opportunities. We have invested in a variety of resources to support our creators, including the YouTube Spaces, SPMs, programs, workshops, etc. And we have invested in promotional programs such as the YouTube Spotlight Canada channel, Creator on the Rise and Artist on the Rise. While these contributions may be different than a broadcaster or BDU, they represent massive investments that are available to all Canadian creators, supporting the diverse range of Canadian content available on the platform.

The difference between open platforms and the closed broadcasting model also highlights the general inapplicability of many conventional broadcasting regulations to these platforms. For instance, the concept of content "quotas" clearly have no application to a platform than allows any Canadian creator to upload content. Accordingly, open platforms should not be treated in the same category as broadcasters or similar services.

4) Supports Internet Access

Ensuring robust Internet access for Canadians, especially in rural, remote or disadvantaged communities, is a necessary precondition of supporting Canadian creators. While Canada has very high Internet usage numbers, the "digital divide" remains an issue and lower income and rural Canadians have much more limited access. In order to fully support creators leveraging the open Internet and online platforms to reach global audiences, we must address broadband access issues.

To facilitate this, and to further competition in wireless and wireline markets, we support the adoption of the flexible telecommunications regime that would readily permit the introduction of new services, such as Mobile Virtual Network Operators, and allow for more flexibility in spectrum management. We also strongly support the balanced approach to "Net Neutrality" expressed in the CRTC's Internet Traffic Management Practices, which are critical for online services.

Conclusion

We thank the panel for the opportunity to participate in this consultation, and look forward to engaging further on these issues.