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# **ISP/WSP New Media Broadcasting Content Contribution – Estimation of Market Tolerance and Valuation**

Submitted to:  
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## 1 Executive Summary and Conclusions

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The Canadian and global broadcasting and communications industries are in the process of fundamental change and consolidation. New distribution platforms, namely the Internet and wireless handsets, are increasingly and continually being used by consumers for viewing broadcasting and broadcasting-type content. These new platforms capture new audiences, thereby increasing overall content consumption.

As audiences to video and broadcasting-type content on new platforms rise, there is an opportunity for the Canadian broadcasting system to leverage new distribution platforms to provide new Canadian content to Canadian and global audiences.

There are currently no content exhibition or expenditure quotas related to Canadian content on either Internet Service Providers (ISPs) or Wireless Service Providers (WSPs), given these platforms are currently exempted from regulation under the *Broadcasting Act*.

There is a well-recognized principle in the *Broadcasting Act* that all platforms that carry video and broadcasting-type content should contribute in their fashion to Canadian content. Specifically, “each element of the Canadian broadcasting system shall contribute in an appropriate manner to the creation and presentation of Canadian programming.”<sup>1</sup> As broadcasting licensees [broadcasters and broadcasting distribution undertakings (BDUs)] are required to contribute while new media platforms are exempt, there is a *prima facie* case that the latter would have a commercial advantage in the exhibition of similar content. As well, this lack of equivalent capture of part of the revenues from these new broadcast players means there is no contribution to the financing of Canadian programming on new media platforms.

Embracing the future role of new digital platforms as an element of the Canadian broadcasting system by creating original, high-quality, broadcasting-related Canadian new media content will stimulate deployment of the most successful services. Allocating some of the revenues accruing to service providers to help finance the development and production of Canadian content on these platforms would give users more of a choice of Canadian content. Such a measure would make an important contribution to the objectives of the *Broadcasting Act* in a multi-platform universe.

Experience in traditional broadcast media and new media shows that properly-structured project financing leads to the creation of a significant amount of content production. Sources of funding exist for the creation of traditional Canadian television broadcasting

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<sup>1</sup> Source: *Broadcasting Act*, 1991, Section 3(e).

content [e.g. the Canadian Television Fund (CTF), Shaw Rocket Fund, etc.]. There is not an equivalent amount of support for Canadian new media broadcasting content and applications. The Bell Broadcast & New Media Fund is limited to the interactive component of TV broadcasting-related programming, the CTF's new Digital Media Pilot Program is limited in its funding, and the Canada New Media Fund's future is in doubt. There is some modest provincial funding support, but the level of funding is less than that for traditional cultural and media sectors.

In the context of the 2007/2008 CRTC review of the CTF, there was general agreement among industry stakeholders that existing television programming funding should not be redirected to a new media-specific fund. Thus, new sources of funding would certainly stimulate the development and creation of high-quality Canadian new media broadcasting content now and in the future.

## **1.1 Equity Considerations of a New Contribution by De facto BDUs**

The principle of a mandated, revenue-based contribution by both ISPs and WSPs can be invoked because of the revenues these distributors derive from broadcasting content. Just as the success of traditional BDUs was built on the carriage of broadcasting content, the ability of ISPs and WSPs to deliver the required bandwidth and service levels for the consumption of broadcasting content – although to different degrees – is becoming an increasingly important success criterion for these service providers.

### **1.1.1 Why Should ISPs Contribute?**

Internet service was originally developed, deployed and utilized as a text-based communications medium. However, the proliferation of broadband networks stimulated the consumption of video and broadcasting-type<sup>2</sup> content, so that now it represents more than 50% of all Internet traffic according to some estimates. It is predicted that broadcasting-type video will be an increasingly important segment of ISP use, and therefore ISP revenues, in coming years.<sup>3</sup>

As ISPs benefit from the distribution of television content among other video material, they become an integral part of the broadcasting industry – whether or not they are exempted from regulation. Therefore, it could be argued that ISPs should be required to

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<sup>2</sup> For clarification, this study looks to determine the % of Internet and wireless handset use attributable to broadcasting-type video, which includes linear, streamed and downloaded professional video content, and excludes games, video communications and user-generated video.

<sup>3</sup> A recent Cisco study estimated that 68% of North American Internet traffic in 2008 would be attributable to video, a figure that will rise above 74% by 2011.

contribute back to the system via financial contributions towards the development and creation of Canadian new media content. Yet it is highly unlikely and unfeasible to subject ISPs to content exhibition or channel preponderance regulation as is the case for broadcasters and BDUs. However, using supply-side tools such as the requirement on the part of ISPs to make an equitable financial contribution to the creation of high-quality Canadian new media broadcasting content would provide a practicable solution.

### **1.1.2 Why Should WSPs Contribute?**

Similar to ISPs, the core business of WSPs was originally based on delivering communications services, in this case voice, and later text messaging and email. However, transmission of video and broadcasting-type traffic is developing into a significant business opportunity for the WSPs. Data bit rate speeds, screen size and handset features are providing more opportunities for the distribution and consumption of video content. Consumer habits have changed from mere sampling to actual viewing and usage over mobile devices.

## **1.2 Substantiality and Sustainability of an ISP/WSP Contribution Regime**

The Alliance of Canadian Cinema, Television and Radio Artists (ACTRA), the Canadian Film and Television Production Association (CFTPA), the Directors Guild of Canada (DGC), and the Writers Guild of Canada (WGC) [hereinafter the “Coalition”] believes in an equitable and sustainable contribution regime for all players in the broadcasting sector. An equitable contribution in the case of the ISPs and WSPs would be a balance between the benefits derived from the broadcasting-type content and the additional cost for consumers and/or ISPs and WSPs.

### **1.2.1 Substantiality and Leverage**

Based on the high uptake of ISP and WSP services<sup>4</sup>, even a modest contribution from these providers has the potential to inject significant new funds for Canadian digital media content creation for the system.

According to a recent study, video was forecast to represent approximately 68.58% of total North American ISP traffic in 2008 and this figure is expected to grow to 74.2% by 2011.<sup>5</sup>

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<sup>4</sup> Source: CRTC Communications Monitoring Report, July 2008. High-speed Internet and wireless service compound annual growth rate for subscribers from 2003-2007 were 16.7% and 11.1%, respectively.

<sup>5</sup> Source: Cisco, Global IP Traffic Forecast and Methodology, 2006–2011.

Video consumption over mobile devices is extremely nascent compared with that over the Internet. Provider MobiTV has 4 million subscribers across its 15 North American distributors<sup>6</sup>, including Bell, Rogers and Telus in Canada. Comscore Inc. reports that 6.5 million Americans view mobile on-demand and broadcast video monthly.<sup>7</sup> However, mobile video has much greater growth potential than Internet video, with global revenues expected to grow by a cumulative 1485% over the next five years.<sup>8</sup> Estimating conservatively, about 1% of Canadian mobile usage is attributable to video consumption through mobile TV services and via mobile Internet.<sup>9</sup>

In light of these traffic and revenue estimates, 2-3% of applicable gross revenues from ISPs and 0.06% of applicable gross revenues from WSPs could be considered as an equitable contribution. Such a contribution level would yield \$65-\$97 million from ISPs in 2009, rising to \$112-\$168 million in 2013. Correspondingly, a 0.06% contribution by WSPs would generate \$7.75 million in 2009, increasing to \$12.61 million in 2013. Overall, total contribution to the development and creation of high-quality Canadian new media broadcasting content from ISPs and WSPs would be \$73-\$105 million in 2009 and \$124-\$180 million in 2013.

These contributions both in percentage and absolute dollar terms would be significantly less than the current BDU contribution of 5% of revenues derived from broadcasting services to Canadian programming (including \$149.9 million<sup>10</sup> to the CTF, as well as contributions to community programming and other certified production funds). However, the new contribution sources would have the potential to dramatically increase the quality and volume of Canadian content over new media platforms.

If an ISP/WSP-financed fund was organized as a public-private partnership (PPP) fund similar to the CTF, it would have the potential to lever matching contribution by the Canadian Government. It could also stimulate participation from broadcasters (e.g. through licence fees and possibly allocations from benefit packages). Thus, as with CTF funding for TV programming, the contributions from such a fund would leverage overall contributions to the development and production of Canadian content over new media

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<sup>6</sup> Source: [San Francisco Business Times](#), "MobiTV adds 1 million mobile TV subscribers in 6 months", August 8, 2008.

<sup>7</sup> Source: [http://www.cellphonedigest.net/news/2008/11/65\\_million\\_americans\\_viewed\\_mo\\_1.php](http://www.cellphonedigest.net/news/2008/11/65_million_americans_viewed_mo_1.php).

<sup>8</sup> Source: PricewaterhouseCoopers (PwC) "Global Entertainment and Media Outlook: 2008-2012" (2008), pg 21.

<sup>9</sup> At the time of this analysis, data on Canadian WSP video traffic and revenues were not available, thus US market data from a collection of sources is used as a proxy. Rollout of video services over wireless in the US has generally been earlier than in Canada and uptake higher, thus projections for Canada were adjusted accordingly.

<sup>10</sup> Source: Canadian Television Fund, 2006-2007 Annual Report.

platforms. The total would be three to four times the direct contributions of ISPs and WSPs.

It would be reasonable to fix the contribution of ISPs and WSPs for a period of three to five years to provide some certainty in business planning for these service providers. However, in light of the projected increases in video traffic over both platforms, it would also be reasonable to re-examine new media video traffic levels at the end of the period and adjust the contributions accordingly.

### **1.2.2 Sustainability for Stakeholders' Business Plans and Consumers**

An equitable contribution would have only a modest impact on ISP and WSP monthly fees. The suggested revenue contribution percentages of 2-3% for ISPs and 0.06% for WSPs are both below any threshold that would trigger a decline in subscribership.<sup>11</sup> Consumers increasingly consider wireless and Internet services to be essential, and thus subscribership has not been impacted by higher per month price increases imposed by service providers in the past. In January 2008, Rogers Communications, for example, raised the price of its *Ultra-Lite* Internet service from \$21.95 to \$23.95 (9.1%), and the price of its *Extreme* Internet service from \$52.95 to \$54.95 (3.8%).<sup>12 13</sup> In spite of the rise in fees, Rogers added 83,000 cable Internet subscribers through the first three quarters of 2008<sup>14</sup>.

### **1.2.3 Consumer Support and Willingness to Pay**

Polling shows that Canadian consumers support the notion of ISPs & WSPs contributing to the creation of Canadian new media broadcasting.<sup>15</sup>

As indicated above, in the scenario that distributors 'pass through' the contribution in its entirety to consumers, a modest contribution (average of \$1.05 per month on Internet bills and less than 4 cents per month on wireless bills) would likely not result in subscriber drop off or change in consumer support.

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<sup>11</sup> Source: High-speed residential Internet and WSP revenue growth has outpaced subscriber growth by 1.8% and 4.1%, respectively, on average over the past five years. This, and data for price and subscriber increases to other communications services, suggests that subscriber behaviour would be relatively inelastic for modest price increases.

<sup>12</sup> Source: <http://www.thestar.com/Business/article/296938>.

<sup>13</sup> The price increase was accompanied by an increase in the *Extreme* download speeds, but no additional service was attached to the *Ultra-Lite* price hike.

<sup>14</sup> Source: Rogers Communications quarterly financial reports, 2008.

<sup>15</sup> Source: Harris-Decima, National poll of 2,038 people conducted in January, 2008. 69% and 73% of Canadians believe ISPs and WSPs, respectively, should help fund Canadian new media content creation.

## 2 Background

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On October 15, 2008, the CRTC announced *Broadcasting Notice of Public Hearing CRTC 2008-11* (the “Canadian Broadcasting in New Media Consultation”). Among other questions, the Commission is seeking responses to the question: ‘*Are incentives or regulatory measures necessary or desirable for the creation and promotion of Canadian broadcasting content in new media?*’

Embracing the role of new digital platforms within the Canadian broadcasting system by creating original, high-quality, broadcasting-related Canadian content provides the best pathway to ensuring the objectives of the *Broadcasting Act* are met in a multi-platform universe.

Adopting regulatory measures to aid the creation and promotion of Canadian content on new digital platforms would not only ensure the representation of Canadian content and culture in the new media space, but would also likely result in maintaining and even increasing television audience through branding and cross promotion between platforms.

### 2.1 Canadian Content Funding Contributions by Distributors

The CTF, which is financed through a CRTC-mandated contribution based on a percentage of BDU broadcasting-related revenues, is the national and international standard for distributor funding of indigenous broadcasting content. Overall, terrestrial and Direct-to-Home (DTH) satellite BDUs are currently required to contribute 5% of gross revenues derived from broadcasting activities to Canadian programming. The majority of this contribution is directed to the CTF, with the remainder allocated to certified independent production funds, cable community channels, or local programming initiatives. In an October 2008 policy ruling<sup>16</sup>, the Commission determined that it was appropriate to increase the BDU contribution level to 6%, with the additional 1% being directed to a Local Programming Improvement Fund. The new funding will be made available beginning in the 2009/2010 broadcast year.

At the 2008 CFTPA *Prime Time in Ottawa* conference, communications and media lawyer Peter S. Grant submitted in the report, ‘*Reinventing the Cultural Tool Kit*’

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<sup>16</sup> Broadcasting Public Notice CRTC 2008-100, Regulatory frameworks for broadcasting distribution undertakings and discretionary programming services:

<http://www.crtc.gc.ca/archive/ENG/Notices/2008/pb2008-100.pdf>

*Canadian Content on New Media*<sup>17</sup>, that “ISPs and cell phone companies are now acting as BDUs.” Grant proposed a contribution by ISPs towards digital media content creation at 2.5% of ISP revenues (half of the then maximum BDU contribution). His proposal was based on an estimate that only 50% of ISP traffic is broadcasting-related. Grant further estimated that a 2.5% contribution would potentially generate between \$70 and \$80 million per year in funding for Canadian producers for the development and production of Canadian new media broadcasting content.

The notion of Grant’s proposal was supported by a Harris-Decima poll<sup>18</sup> that was jointly commissioned by the Coalition. Amongst key findings, the poll indicated that:

- 69% of Canadians believe that ISPs should be required to help fund the production of Canadian digital media content;
- 73% agree that WSPs should be required to help fund the production of Canadian digital media content; and
- 84% of Canadians feel that the federal government should work to ensure that Canadians have Canadian content choices available to them on all media platforms.

## **2.2 BDU Contribution Regime as a Baseline for New Media Contribution Calculations**

Grant used the mandated BDU contribution as the baseline for calculating a mandated new media broadcasting contribution from ISPs. Building on Grant’s model, other factors specific to new media platforms – in addition to newly reported financial subscriber and user data – can be considered in estimating an equitable contribution from distributors for content creation.

1. While BDUs are completely dedicated to delivering broadcasting content, the percentage level of broadcasting and video content viewed over new media platforms will continue to increase into the next decade.
2. The multi-purpose nature of the Internet and mobile handsets (e.g. communications, information and entertainment) means revenues are attributable to multiple services and, therefore, it may not be appropriate to apply a contribution percentage to all ISP/WSP revenue.

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<sup>17</sup> Grant’s report was also filed with the Commission as an appendix to ACTRA’s submission to Broadcasting Public Notice CRTC 2008-44 (scope of the Canadian Broadcasting in New Media consultation).

<sup>18</sup> National telephone poll of 2,038 people conducted in January 2008.

3. Administering a mandated contribution from all of the hundreds of small ISPs that exist in the Canadian marketplace would be inefficient and exemption criteria should likely be established similar to what exists for BDUs.

### **2.3 Estimation of an Equitable New Media Distributor Contribution to Content Creation**

This study estimates potential ISP/WSP contributions to the creation of Canadian new media broadcasting content considering all factors mentioned above that are unique to new media platforms.

While the Peter Grant methodology of using the mandated BDU contribution regime as a guideline is used to generate a baseline estimate of an ISP/WSP contribution, it is not assumed to automatically be the most appropriate corollary and therefore the results from other potential contribution percentages are also presented. As such, Nordicity was asked to build upon Peter Grant's proposal and further develop and model the concept.

## 3 Description of Methodology

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Nordicity's market assessment model was designed to assess impact on the major stakeholders and consumers based on a 5:5 model – 5-year historical and 5-year forecast (including current year) projection. The model examined impact on the stakeholders based on standard parameters: revenues (gross revenues, income and consumer subscribership). Projections were based on trend line adjusted for GDP growth (i.e. impact of recession would be taken into account).

### 3.1 Market Size Assessment

In our market size assessment, Nordicity undertook the following steps:

1. Validation of current and projected subscribership and revenues for ISPs and WSPs. (Based on publicly available sources of historical and forecasted revenues: financial reports, sector studies, CRTC filings).
2. Validation and/or update of key parameters in Peter Grant's proposed ISP contribution, i.e. whether 50% of ISP traffic is broadcasting-related. Establish similar traffic estimates for WSPs.
3. Determination of practical parameters for application of the contribution, i.e. which ISPs/WSPs and which subscribers should be subject to a contribution based on various parameters (i.e. subscribership, bandwidth speed, facilities-based vs. resellers).<sup>19</sup> Consider revenue impact and practicality of changes in parameters. Draw comparisons to BDUs exempt from making CTF contributions based on size.
4. Re-calculation of Peter Grant's revenue estimate of potential ISP contribution, based on agreed-upon parameters (above).

### 3.2 Demand Elasticity Assessment

In our demand elasticity assessment, Nordicity undertook the following steps:

1. Review of past literature and public documents to examine the impact of price increases on subscribership, revenues and profitability for communications services in general, and Internet/Wireless services specifically.

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<sup>19</sup> In the case of bandwidth speed specifically, it's generally considered that dial-up subscribers do not have sufficient bandwidth to realistically allow for the consumption of broadcasting content.

2. Estimation of the impact on Internet and wireless service subscriptions of a range of potential contribution scenarios translating into subscriber price increases. Calculation of the contribution/price increases according to the calculation of relevant ISP and WSP revenue and subscribership bases (note: 3% upper threshold corresponds to half the revised future 6% mandated contribution level for BDUs).
3. Consideration of various market elasticity scenarios and price increase thresholds in the calculation of subscriber impacts of the contribution.<sup>20</sup> In considering any thresholds, take into account macroeconomic factors such as the influence of a recession on consumer attitudes towards increases in pricing for communications services.
4. Assessment of differential impact of different levels of 'pass through' by ISPs/WSPs to consumers on subscribership and/or nature of subscriber package uptake.
5. Assessment of potential impact, if any, of different applicability criteria [bandwidth speed, large versus small firms, Mobile Virtual Network Operator (MVNO) versus facility owner] on subscribers' price elasticity.

### **3.3 Calculate Range of ISP/WSP Contribution and Assess Potential Impacts on Subscriptions and Revenues**

In our calculation of the contribution and assessment of potential impact, Nordicity undertook the following steps:

1. Calculation of the revenue potential of the contribution in consideration of the above parameters: application thresholds, contribution level/price increase, elasticity, pass through and change in subscriber packages detailed above.
2. Estimation of the revenues associated with each of the potential ISP/WSP contributions (5-year projection).

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<sup>20</sup> For example, in conditions of perfect elasticity, a 3% price increase results in a 3% drop in revenues.

## 4 Market Size

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### ***Total ISP Market<sup>21</sup>***

Canadian Internet revenues totalled \$5.669 billion in 2007, representing an increase of 12.6% over the previous year. The number of residential Internet access subscribers reached 9.3 million, with 8.4 million (64% of Canadian households) of those subscribing to high-speed service. Some 58% of Canadian households subscribed to high-speed service the previous year. Dial-up subscriptions declined from 14.2% of all Internet connections to 10% between 2006 and 2007.

The top five ISPs – Bell Canada, Telus, Rogers Communications, Videotron, and Shaw Communications – captured 77% of Internet revenues in 2007.

### ***Total WSP Market<sup>22</sup>***

Canadian mobile wireless revenues, excluding paging, totalled \$14.4 billion in 2007, representing an increase of 14.4% over the previous year. Total wireless subscribers reached 20.3 million in 2007, up 8.2% over 2006. Average Revenue per User (ARPU) increased from \$56 per month in 2006 to \$59 per month in 2007.

Canada's three largest WSPs – Rogers, Bell and Telus – captured more than 92% of Canada's wireless subscribers in 2007.

### **4.1 Broadcasting Content and Video as a Percentage of ISP/WSP Use/Revenue**

Video content viewing represents a growing subset of Internet and mobile usage. Estimates of total current video content viewing on both Internet and mobile platforms are presented below, along with predictions of the growth of video viewing on these platforms over the coming years.

#### **4.1.1 Internet Video Consumption – Present & Predicted**

##### ***Present***

A recent Cisco study estimated that 68.58%<sup>23</sup> of total North American Internet traffic in 2008 would be dedicated to viewing video content. As the table on the following page

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<sup>21</sup> Source: CRTC Communications Monitoring Report, July 2008 (All figures in Total ISP Market section from this source).

<sup>22</sup> Source: *Ibid* (All figures in Total WSP Market section from this source).

<sup>23</sup> Source: Cisco, Global IP Traffic Forecast and Methodology, 2006–2011.

shows (excerpted from the Cisco study), Internet video to PC, Internet video to TV and Peer-to-peer video file sharing accounts for 1,163,862 terabytes (TB) per month, of a total 1,697,079 TB of Internet usage per month.

**Table 1: 2008 North American Internet Traffic**

<b>Internet Traffic Segment</b>	<b>Terabytes Per Month</b>	<b>% of Total Internet Traffic</b>
Web, e-mail, file transfer	271,981	16.03%
Gaming	21,711	1.28%
Video Communications	4,951	0.29%
VoIP	10,247	0.60%
Non-Video P2P	224,327	13.22%
<b>Non-Video Sub-Total<sup>24</sup></b>	<b>522,217</b>	<b>31.42%</b>
Internet Video to PC	682,502	40.22%
Internet Video to TV	144,870	8.54%
Video P2P	336,490	19.83%
<b>Video Sub-Total</b>	<b>1,163,862</b>	<b>68.58%</b>
<b>Total</b>	<b>1,697,079</b>	<b>100%</b>

*Source: Cisco, Global IP Traffic Forecast and Methodology, 2006–2011*

The 68.58% of Internet usage attributed to video is substantially higher than the 50% figure used in Grant's study.<sup>25</sup>

While the Cisco study includes all video content in its estimates, other reports quantify the percentage of high-quality broadcasting-type content distributed via the Internet. For instance, a recent study of the US market by The Diffusion Group estimated professional online video<sup>26</sup> accounts for 58% of Internet video streams in 2008.<sup>27</sup> Thus, it would be reasonable to conclude on a traffic basis, that broadcasting-type content accounts for approximately 39% of total ISP traffic (58% x 68.58% = 39%).<sup>28</sup>

An Ipsos Reid consumer survey commissioned by Shaw Communications and submitted as part of its submission to the CRTC's BDU and Discretionary Services hearing in April 2008 revealed that 56% of Canadians have used the Internet or other new technologies to view information or entertainment video content, with 42% noting this usage had increased in the past 12 months.<sup>29</sup>

<sup>24</sup> The Cisco report estimates that 60-70% of all P2P traffic is derived from the transfer of videos.

<sup>25</sup> Even though Grant relied partially on a Cisco report for his usage data, an update to the report by Cisco and the addition of one year (Grant cited 2007 usage estimates) result in a higher figure.

<sup>26</sup> All video that is not user-generated.

<sup>27</sup> Source: The Diffusion Group, 2008.

<sup>28</sup> Calculation of broadcasting-type video as a portion of total ISP traffic based on 58% of 68.58%.

<sup>29</sup> Source: Ipsos Reid BDU Review Survey: Report on Results, October 15, 2007.

### ***Predicted***

The percentage of Internet traffic resulting from video consumption is predicted to continue to increase, from 71.4% in 2009 to 74.2% in 2011.<sup>30</sup>

**Table 2: North American Video Internet Traffic, 2009-2011**

<b>Internet Traffic</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Video</b>	71.4%	73.2%	74.2%
<b>Non-Video</b>	28.6%	26.8%	25.8%
<i>Source: Cisco, Global IP Traffic Forecast and Methodology, 2006–2011</i>			

### **4.1.2 Mobile Video Consumption, Present & Predicted**

#### ***Present***

Mobile video consumption as a percentage of total handset usage or mobile revenues is not yet at levels currently experienced by the Internet. The first step in narrowing to total mobile revenues to determine the percentage accrued from consumption of video applications includes removing basic voice, long distance and other non-data revenues. In 2007, data and other<sup>31</sup> revenue sources accounted for 17.5% of total wireless revenues.<sup>32</sup>

However, data revenue percentage estimates vary as revenue sources within the category can differ from one carrier to the next. Rogers, for instance, reports that data represented 13.2% of its wireless revenue in 2007, up from 10.6% in 2006 (49% growth).<sup>33</sup> Similarly, the Canadian Wireless Telecommunications Association (CWTA) estimated that email, web-browsing and multimedia account for about 10% of the Canadian cell phone bill in 2007.<sup>34</sup>

An estimation of video consumption over mobile devices in Canada must also account for two sources of content: Mobile TV services; and via the broad Internet. Currently, all three of Canada's incumbent wireless providers – Bell, Telus, and Rogers – offer the same 20+ channel mobile TV service provided by MobiTV, which they all launched in August 2005. The table on the following page shows the pricing plans for the mobile TV services at the time of launch.

<sup>30</sup> Source: Cisco, Global IP Traffic Forecast and Methodology, 2006–2011.

<sup>31</sup> Data and other consists of roaming charges, interconnection charges, and mobile data revenues.

<sup>32</sup> Source: CRTC Communications Monitoring Report, July 2008.

<sup>33</sup> Source: Rogers Communications Inc. 2007 Annual Report, pg. 2.

<sup>34</sup> Source: CBC.ca, "TV By Phone: Television in your hand: The next big thing?" November 23, 2007.

**Table 3: Canadian Mobile TV Plans, Per Month Rates**

Carrier	Access Price	Unlimited Viewing	Total
Bell	\$10	\$5	\$15
Telus	n/a	\$15	\$15
Rogers	\$9	\$7	\$16

*Source: Lemay-Yates Associates Inc., Mobile TV Technology Discussion, Sept. 12, 2005*

While Canadian-specific subscriber numbers are not available, MobiTV reports that it increased its total subscriber base on 15 North American carrier networks from 3 million to 4 million between February 2008 and August 2008.<sup>35</sup> Although Canadian networks represent 20% of MobiTV's distributors, a more common 10:1 ratio (10%) of Canada vs. US subscribers would put the Canadian mobile TV subscriber base at approximately 400,000, or around 2% of Canada's total wireless subscription base.

However, video viewed on mobile devices via a web browser must also be considered. Again, in the absence of Canadian-specific statistics, US data provides a proxy for mobile video consumption. The table below details US viewership to mobile on-demand and broadcast video by content type, and is the breakdown of viewership from a Comscore Inc. report revealing that 6.5 million Americans tuned into mobile video in August 2008.<sup>36</sup>

**Table 4: Mobile Video Consumption by Type, Three-month Average Ending August 2008**

Type of Video	Mobile On-Demand Viewers (000)	Mobile Broadcast Viewers (000)
Amateur Video Clips	1,346	n/a
Music Videos	1,224	639
Comedy Videos	1,179	596
Movie Trailers	1,074	617
Full TV/Film	727	622
Local/National/World News	645	563
Entertainment/Celebrity News	629	458
Sports Action or News	603	561
TV Highlights	598	425
Weather Information	581	581
Animations or Cartoons	n/a	473

*Source: Comscore Inc., 2008*

<sup>35</sup> Source: [San Francisco Business Times](#), "MobiTV adds 1 million mobile TV subscribers in 6 months", August 8, 2008.

<sup>36</sup> Source: [http://www.cellphonedigest.net/news/2008/11/65\\_million\\_americans\\_viewed\\_mo\\_1.php](http://www.cellphonedigest.net/news/2008/11/65_million_americans_viewed_mo_1.php).

As the table on the previous page clearly illustrates, accessing video through an on-demand option is currently more popular among US wireless customers than mobile broadcast video. This sentiment is echoed by a separate US consumer study, conducted by The Nielsen Company, which reports<sup>37</sup>:

- 13.9 million Americans (6% of US mobile subscribers) were paying for a mobile video plan as of Q1 2008; and
- 95 million Americans (37% of US mobile subscribers) subscribed to mobile Internet as part of their mobile data plan in Q1 2008, “**a significant platform for mobile video consumption.**”

Again, in the absence of Canadian mobile video data, using the US as a proxy and applying the 10:1 ratio to represent population differences would indicate that roughly 1.4 million Canadians pay for a mobile video plan and about 650,000 view mobile video monthly. These figures bring the total of Canadian mobile subscribers viewing video content above 3%.

In establishing the estimates for viewing of video content, it would be logical to take into account regional differences in mobile uptake, handset availability and data rates. However, in the absence of a comprehensive base of data for calculations, we have adopted a very conservative estimate of the percentage of current mobile usage attributable to mobile TV services and viewing video content via mobile Internet at 1%.

### ***Predicted***

Clearly, video consumption over mobile devices has more growth potential than on the Internet. There is a consensus among industry experts that the consumption of video over mobile networks, and correspondingly, the revenue derived from distributing mobile video, are on the cusp of experiencing exponential growth.

A number of growth forecasts for video over mobile as a significant application and revenue stream – beginning with the mobile TV revenue forecast from PricewaterhouseCoopers (PwC) – are presented below. As the PwC forecast shows, global mobile TV revenues are expected to reach almost \$19 billion by 2012, an increase of 1485%.

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<sup>37</sup> Source: Nielsen’s Three Screen Report, May 2008.

**Table 5: Projected Global Mobile TV Revenues (US\$ Millions)<sup>38</sup>**

	2008	2009	2010	2011	2012
Revenue	\$1,184	\$3,204	\$7,259	\$12,152	\$18,771
<i>Source: PwC "Global Entertainment and Media Outlook: 2008-2012", 2008</i>					

"SNL Kagan...predicts revenues tied to mobile entertainment such as video, music and games will grow exponentially over the next decade, even though as much as 40 percent of wireless-data revenues still come from basic messaging today. The firm expects mobile-data revenue to grow from \$34.7 billion in 2008 to more than \$113 billion over the next 10 years. Mobile video and TV are expected to grow at a compound annual rate of 18.8 percent."<sup>39</sup>

"Understanding & Solutions anticipates mobile television and video on demand revenues will increase 800 percent between 2006 and 2010, yielding global revenues of \$18 billion by the beginning of the next decade."<sup>40</sup>

"Mobile broadcast TV subscribers will total 155.6 million worldwide by the end of 2012, up from 4.4 million in June 2007, according to Datamonitor's 'Opportunities in the Mobile Broadcast TV Market, 2006-2012' report. Infonetics had estimated previously that paying mobile TV subscribers would total 46 million in 2010. Datamonitor's 2010 estimate is a more aggressive 65.6 million."<sup>41</sup>

"iSuppli predicts.....Total mobile video revenue will expand to \$17.6 billion by 2011, maintaining a CAGR of 76.7 percent from just \$1 billion in 2006. This growth will make the mobile-video market as large as the mobile-music area for the first time in 2011. The mobile video segment includes streaming and download revenue, as well as mobile television."<sup>42</sup>

<sup>38</sup> Source: PricewaterhouseCoopers (PwC) "Global Entertainment and Media Outlook: 2008-2012" (2008), pg 21.

<sup>39</sup> Source: <http://www.reuters.com/article/mocoTechAtoms/idUSCH11542008332976320081118>.

<sup>40</sup> Source: <http://www.fiercemobilecontent.com/story/forecast-mobile-tvvod-to-reach-18b-by-2010/2007-01-19>.

<sup>41</sup> [http://globaltechforum.eiu.com/index.asp?layout=rich\\_story&doc\\_id=10877&title=Mobile+TV+awareness%2C+then+adoption&categoryid=15&channelid=5](http://globaltechforum.eiu.com/index.asp?layout=rich_story&doc_id=10877&title=Mobile+TV+awareness%2C+then+adoption&categoryid=15&channelid=5).

<sup>42</sup> <http://www.cellular-news.com/story/22893.php>.

## 4.2 Contribution Parameters

Given the diversity of revenue sources and distributors in the ISP market, and to some extent in the WSP market, an all-encompassing mandated contribution towards Canadian new media broadcasting content creation does not make sense. As has historically been the case with the CRTC-mandated BDU contribution, the framework, number of subscribers and nature of business need to be considered when determining which players should contribute and correspondingly, which should be exempt.

### 4.2.1 ISPs/WSPs Subject to Mandated Contribution

In the case of ISPs it would be reasonable to exclude business Internet access (17.8% of retail Internet revenues in 2007<sup>43</sup>) and transport services from contribution. In the case of business Internet, the consumption of broadcasting-type services is generally low and not linked to entertainment, even though it is likely that some broadcasting-type content is consumed in workplace environments. Thus, the contribution regime would focus on the consumer, or residential, market where most of the consumption of professional online video for entertainment purposes occurs.

It would also be reasonable to exclude ISPs with subscriber bases below a pre-set threshold. Literally hundreds of small ISPs in Canada that split the 23%<sup>44</sup> of Internet revenue not captured by the top five ISPs and including all ISPs in a contribution regime would result in undue administrative costs. The precedent for exempting small distributors from participating in a contribution regime exists in the case of the mandated BDU contribution, wherein only 18 Canadian BDU corporate groups, based on distribution system size by number of subscribers, are required to contribute. Similarly, the CRTC determined in October 2008 that it would streamline the BDU licensing regime further, proposing to exempt from regulation all BDUs serving fewer than 20,000 subscribers under a single class of exemption.<sup>45</sup> For the purposes of calculations in this report, residential Internet access revenues for resellers, utility telcos and other ISPs, which represent only 6% of all residential Internet revenue, are excluded.<sup>46</sup>

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<sup>43</sup> Source: CRTC Communications Monitoring Report, July 2008.

<sup>44</sup> *Ibid.*

<sup>45</sup> Source: Broadcasting Public Notice CRTC 2008-100, Regulatory frameworks for broadcasting distribution undertakings and discretionary programming services, October 30, 2008.

<sup>46</sup> Source: CRTC Communications Monitoring Report, July 2008. Comprehensive subscriber figures for all ISPs were not available.

The WSP marketplace presents a simpler scenario as three facilities-based providers share 94% of the revenue.<sup>47</sup> As such, it would be reasonable to exempt the other WSPs until they met a certain revenue or subscriber threshold. New facilities-based WSPs entering the Canadian market as a result of the 2008 Industry Canada AWS Spectrum Auction would also be exempt from contributing until they passed the pre-set threshold.

#### **4.2.2 ISP/WSP Revenues Subject to Contribution Calculation**

In the case of ISPs, it would be reasonable to exclude dial up subscribers as lower bandwidth speeds would limit their ability to enjoy broadcasting-type content.<sup>48</sup> Also, Internet video forecasts, such as the Cisco study, rely on projections for broadband connections and may not include dial-up consumer statistics. Dial-up Internet accounts for 6.3% of Canadian Internet revenue.<sup>49</sup>

Wholesale and equipment-based revenue should also be excluded on the principle that a contribution should only include revenues generated from the delivery of Internet by the applicable distributors to their own customers. Thus, for WSPs, it is logical to remove wholesale revenue<sup>50</sup> (approximately 3% of wireless revenue in 2007<sup>51</sup>) from the applicable revenue base.<sup>52</sup>

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<sup>47</sup> *Ibid.*

<sup>48</sup> While resellers also have lower bandwidth speeds / higher percentage of dial up accounts than the larger facilities-based ISPs, as technology rolls out, this differentiation is likely to become less relevant in the future.

<sup>49</sup> Source: CRTC Communications Monitoring Report, July 2008.

<sup>50</sup> Wholesale revenues generally consisted of (a) roaming revenues a company received for processing calls from wireless subscribers of other companies roaming within its territory, and (b) revenues derived from the sale of wireless minutes to MVNOs.

<sup>51</sup> Source: CRTC Communications Monitoring Report, July 2008.

<sup>52</sup> In the absence of detailed Canadian mobile traffic and revenue data, it is recommended that a contribution percentage be applied to the majority of the WSP revenue base. The alternative scenario, if data was made available, would be to limit the revenue base to that generated by subscribers with video-enabled handsets. Although this would be much less than the total revenue base, the percentage of revenue for these subscribers generated by accessing mobile video would be much greater than the estimated 1%.

### 4.3 Recalculated ISP/WSP Revenue Base

#### *ISP Revenue Base*

Table 6: Applicable ISP Revenue Base Calculation (Millions)

Component	Revenue
<b>Total Internet Service</b>	<b>\$5,669</b>
Wholesale	\$201
Other	\$835
Business	\$1,011
Resellers & Other	\$214
Dial-up	\$145
<b>Residential Retail High-Speed Total</b>	<b>\$3,263</b>
<i>Source: CRTC Communications Monitoring Report, July 2008</i>	

Nordicity estimates that the residential retail high-speed Internet revenues applicable to a mandated contribution percentage are \$3.3 billion.

#### *WSP Revenue Base*<sup>53</sup>

Table 7: Applicable WSP Revenue Base Calculation (Millions)

Component	Revenue
<b>Total Wireless Service</b>	<b>\$14,413</b>
Other <sup>54</sup> Service Providers	\$1,153
Wholesale	\$342
<b>Retail Wireless Service Total</b>	<b>\$12,918</b>
<i>Source: CRTC Communications Monitoring Report, July 2008</i>	

The retail wireless service revenues applicable to a mandated contribution percentage are \$12.9 billion.

<sup>53</sup> Source: *Ibid.*

<sup>54</sup> Regional wireless service providers (MTS Allstream and SaskTel), small incumbent TSPs and mobile virtual operators (MVNOs).

## 5 Impacts

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Determining an equitable new media broadcasting content production contribution based on ISP and WSP revenues derived from the delivery of video content must take into account any potential negative impacts on both distributors and consumers. This section examines the likelihood and potential magnitude of any negative impacts of a contribution regime on ISPs, WSPs and consumers. In evaluating these possibilities, we have considered a range of scenarios including the extreme situation of maximum contribution scenarios and complete pass through of the contribution percentage by ISPs and WSPs to the consumer.

### 5.1 Consumer Impacts

Wireless and Internet service are increasingly being viewed by most consumers as essential, and therefore tend to be inelastic when it comes to modest price increases. An equitable content contribution percentage would have little absolute dollar impact on the average Internet or wireless bill if passed through to the subscriber.

For example, the maximum suggested contribution scenario for ISPs of 50%<sup>55</sup> of the future 6% mandated BDU contribution would result in a 3% increase in Internet fees, which equates to approximately \$1.05 per month at the consumer level (3% x \$35.50 average Canadian monthly Internet access revenue per subscriber).<sup>56</sup> An equitable WSP contribution would be up to 50 times less than that required of an ISP, or literally a few pennies a month on a per subscriber basis.

These modest rate increases would have little impact on Internet and wireless subscribership. A number of market factors support this:

- Internet and wireless services are considered to be 'essential' by consumers;
- Consumers have shown their willingness to absorb repeated increases in Internet and other communications fees; and
- Consumer trend towards bundled service packages.

#### ***Essential Service***

Internet is widely considered an essential service. Although the widespread adoption of high-speed Internet has occurred only within the past decade, the initial adoption rate for Internet service has surpassed that of any other previous major technology. In fact, it

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<sup>55</sup> Peter Grant's original ISP contribution calculation was based on 50% of current BDU contributions.

<sup>56</sup> Source: CRTC Communications Monitoring Report, July 2008.

took only 10 years before the Internet was in 50% of American homes, approximately two years faster than CD players, four years faster than cell phones, 18 years faster than radios and more than 60 years faster than the telephone<sup>57</sup>.

Time spent online by Canadian Internet users increased from 13.2 hours per week to 17.1 hours per week between 2004 and 2007.<sup>58</sup> And a 2007 New Paradigm survey of more than 7,600 people aged 16-29 in 12 countries reported that 77% of online youth would rather live without television than the Internet.<sup>59</sup>

Subscriber and usage data confirms the increasing role of mobile phones as an essential communications device as well. Approximately two-thirds of Canadians are wireless subscribers and at the end of 2007 6.4% of Canadian households reported that they only had a cell phone (up from 5.1% the previous year).<sup>60</sup> As well, the average wireless subscriber uses their cell phone for 2.5 hours per week, only 1.2 hours less than they use a traditional landline.<sup>61</sup>

ISP and WSP revenue growth has also outpaced subscriber growth by 1.8% and 4.1% respectively on average over the past five years.<sup>62</sup> This indicates the willingness among consumers to pay more for higher service level packages (more bandwidth) in the case of the Internet, and more applications in the case of wireless.

### **Fee Increases**

Past experience has shown that consumer demand for Internet services is relatively inelastic. For example, in January 2008, Rogers, raised the price of its *Ultra-Lite* Internet service from \$21.95 to \$23.95 (9.1%), and the price of its *Extreme* Internet service from \$52.95 to \$54.95 (3.8%).<sup>63</sup> The price increase was accompanied by an increase in the *Extreme* download speeds, but no additional service was attached to the *Ultra-Lite* price hike. In spite of the rise in fees, Rogers added 83,000 cable Internet subscribers through the first three quarters of 2008.<sup>64</sup>

For *Extreme* Internet service customers, the January 2008 rate increase was the third in a little more than 18 months; Rogers raised rates from \$46.95 to \$51.95 in August 2006,

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<sup>57</sup> Source: Industry Canada: The Consumer Trends Report.

<sup>58</sup> Source: Canadian Internet Project (CIP), Canada Online! Year Two Report, 2007.

<sup>59</sup> Source: <http://www.newswire.ca/en/releases/archive/July2007/11/c5356.html>.

<sup>60</sup> Source: Statistics Canada, Residential Telephone Services Survey, April 2008.

<sup>61</sup> Source: CIP, 2007.

<sup>62</sup> Source: CRTC Communications Monitoring Report, July 2008.

<sup>63</sup> Source: <http://www.thestar.com/Business/article/296938>.

<sup>64</sup> Source: Rogers Communications quarterly reports, 2008.

and then to \$52.95 in March 2007.<sup>65</sup> Rogers added 164,494 high-speed Internet subscribers in 2007, despite the first two fee increases.<sup>66</sup>

There is historical evidence for other communications services of subscriber growth in the face of fee increases. For instance, Canadian cable and satellite BDUs increased the price of their basic service packages by an annual average of 4% between 1998 and 2005<sup>67</sup> while growing subscribers. The table below illustrates the dollar value increase to basic cable and satellite packages.

**Table 8: Television BDU Historical Basic Package Per-Month Rate Increases**

BDU	1999	2007
Rogers	\$19.10	\$27.99
Bell ExpressVu	\$24.20	\$33.75
	2003	2006
Star Choice	\$24	\$31
<i>Source: Lemay-Yates, July 2007</i>		

Communications service providers continue to increase rates, suggesting little fear of losing customers. Bell announced it will increase satellite TV fees by about \$4 per customer in 2009, even though it introduced a \$3 a month digital service fee at the beginning of 2008.<sup>68</sup> The 2008 Rogers Internet rate increase mentioned above was part of a broad increase in fees that included a \$1 per month rise in basic cable rates and a \$1.45 increase in the home phone system access fee.<sup>69</sup>

### ***Influence of Bundling on Potential Switching by Consumers from Large ISPs to Reseller ISPs***

Consumer preference for acquiring multiple, or all, communications services from a single provider further drives the inelasticity of Internet pricing. A mandated content contribution passed on by all large ISPs to consumers could be seen to give an advantage to ISPs exempt from contributing. However, resellers usually lack the ability to bundle Internet with one or more additional services. They therefore can't match the percentage discounts or one-bill convenience of the large triple- and quadruple-play

<sup>65</sup> Source: <http://www.digitalhome.ca/content/view/2256/282/>.

<sup>66</sup> Source: Rogers Communications Inc. 2007 Annual Report.

<sup>67</sup> Source: Lemay-Yates, Note on Evolution of service pricing of Canadian BDU's, July 2007.

<sup>68</sup> Source: <http://www.cbc.ca/technology/story/2008/11/24/tech-bell.html?ref=rss>.

<sup>69</sup> Source: <http://www.thestar.com/Business/article/296938>.

providers. For example, more than 70% of Shaw Communications customers receive services in a bundle.<sup>70</sup>

## 5.2 Corporate Impacts

A 100% pass-through of any contribution level by ISPs and WSPs to their subscribers would likely have no real impact on the economic value of ISPs and WSPs. Under such a scenario their revenues and costs would rise by an equal amount, leaving the dollar amount of their profits unchanged. Although their percentage operating margins would decline, their cash flow or EBITDA per share would remain unchanged. And thus, there should be no change in the value of the companies.

Any contribution amount not passed on to consumers would, mathematically, have a negative impact on ISP and WSP profitability. ISPs' and WSPs' costs would increase by more than their revenues, and thus, not only push down their percentage margins, but also their cash flow or EBITDA per share. However, it is unclear if the subsequently lower rate of profits would have an undue impact on ISPs and WSPs ability to raise capital and provide consumers with new and innovative Internet access or mobile data services.

However, ISPs and WSPs in Canada both display relatively strong financial performance, which suggests that a modest percentage contribution for Canadian new media content would not seriously impact profitability. ISPs, for example, have experienced strong subscriber and revenue growth in recent years, with number of high-speed Internet subscribers growing by a (compound annual growth rate) CAGR of 16.7% between 2003 and 2007, and residential high-speed Internet service revenues growing at a CAGR of 18.5% during this period.<sup>71</sup>

**Table 9: Canadian High-Speed Residential Internet Market Growth, 2003-2007**

	2003	2004	2005	2006	2007	CAGR
Revenue (Millions)	\$1,719	\$2,090	\$2,447	\$2,912	\$3,397	18.5%
Subscribers (Thousands)	4,513	5,416	6,492	7,461	8,356	16.7%

*Source: CRTC Communications Monitoring Report, July 2008*

And while accurate industry-wide data for the profitability of ISP operations are not available (most ISPs report Internet service revenue within their wire line segment in the case of telcos, and within their cable and cable telephony segment in the case of cable

<sup>70</sup> Source: Oral Remarks by Shaw Communications Inc. to public hearing related to Broadcasting Notice of Public Hearing CRTC 2007-10.

<sup>71</sup> Source: CRTC Communications Monitoring Report, July 2008

BDUs), the CRTC reports that Canada's cable BDUs – which account for a large share of the residential ISP market – recorded an operating margin of 66.6%<sup>72</sup> from non-programming services in 2007.<sup>73 74</sup>

WSPs have also enjoyed strong revenue growth in recent years. Between 2003 and 2007, the number of WSP subscribers grew by 11.1%, while revenues grew by 16.2%.<sup>75</sup>

**Table 10: Canadian Wireless Market Growth, 2003-2007**

	2003	2004	2005	2006	2007	CAGR
Revenues (Millions)	\$7,905	\$9,349	\$10,896	\$12,600	\$14,414	16.2%
Subscribers (Thousands)	13,291	15,020	17,017	18,749	20,277	11.1%
<i>Source: CRTC Communications Monitoring Report, July 2008</i>						

In 2007, Rogers Wireless – Canada's largest mobile operator – recorded an *adjusted operating profit* margin of 47% on its wireless services.<sup>76</sup>

**Table 11: Canadian Wireless Service Provider Operating and EBITDA Margins, 2007**

Carrier	2007 Revenue (Millions)	2007 Profit (Millions)	Margin
Rogers	\$5,500	\$2,620 <sup>77</sup>	47.64%
Bell	\$4,131	\$1,212 <sup>78</sup>	29.34%
Telus	\$4,290.7	\$1,905.8 <sup>79</sup>	44.42%
<i>Source: Rogers, Bell Canada, Telus 2007 Annual Reports</i>			

ISP and WSP operating margins are in line with BDU operating margins. In its October 2008 ruling setting out new regulatory frameworks for BDUs and discretionary programming services, the CRTC determined that BDU margins would not be unduly impacted by an increase in the percentage of mandated contribution towards the creation of Canadian programming. The Commission noted the following in announcing a 1% increase in BDU contributions to support a Local Programming Improvement Fund: "In light of the performance levels of the BDU sector [approximate operating margins of 35%] and the benefits accruing to BDUs as a result of other changes being made to the

<sup>72</sup> Operating Income/Operating Revenue

<sup>73</sup> Source: CRTC, Broadcast Distribution Class 1, 2 and 3: Statistical and Financial Summaries, 2003-2007.

<sup>74</sup> Revenue derived from channel lease, internet access services and telephony.

<sup>75</sup> CRTC, Communications Monitoring Report 2008, p. 231.

<sup>76</sup> Rogers Communications Inc., *Annual Report 2007*, p. 4.

<sup>77</sup> Adjusted Operating Profit.

<sup>78</sup> Operating Income.

<sup>79</sup> EBITDA.

regulatory framework, the Commission is of the view that there is no justification for BDUs to pass along any increased costs relating to the LPIF.”<sup>80</sup>

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<sup>80</sup> Source: Broadcasting Public Notice CRTC 2008-100, Regulatory frameworks for broadcasting distribution undertakings and discretionary programming services, October 30, 2008.

## 6 ISP/WSP Contribution Potential

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This section calculates the revenue potential of ISP and WSP contributions to the development and creation of Canadian new media broadcasting content considering the parameters developed throughout this report.

### 6.1 Contribution Percentage

The calculation of equitable and sustainable contribution percentages for ISPs and WSPs were based on:

- the estimated percentage of ISP and WSP usage and revenues attributable to viewing broadcasting-type video percentage;
- the impending new contribution level for BDUs of 6% of gross broadcasting-related revenues towards the creation of Canadian programming.

#### *ISPs*

In section 4.1.1 Nordicity noted that Cisco estimated that roughly 68% of North American Internet usage in 2008 would be attributable to video. An additional study published by The Diffusion Group noted that 58% of Internet video streams are professionally-produced content. Therefore, it is reasonable to assume that 39% of Internet traffic is related to professional video content.

If in the case of BDUs 100% of content is broadcasting-type content and the impending new contribution level of 6% is considered equitable and sustainable, it follows that in the case of ISPs, applying the 39% figure to the same 6% contribution level would yield an equitable and sustainable contribution level of 2.34% of applicable ISP revenues.

#### *WSPs*

American mobile video usage data was used in section 4.1.2<sup>81</sup> as a proxy. In the absence of corresponding Canadian data, Nordicity adopted a very conservative estimate that 1% of current WSP usage is attributable to video.

Applying the 1% to the impending new 6% BDU contribution level yields an equitable contribution percentage of 0.06% of applicable WSP revenue.

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<sup>81</sup> See rationale above in section 4.1.2. For example, 6% of US mobile subscribers pay for a mobile video plan.

## 6.2 Potential Contribution Amount

### ISPs

To provide a range of potential contribution levels for examination, this study calculates potential contributions of mandated percentages of applicable ISP revenues at 3% and 2%.

**Table 12: ISP Contribution Potential Calculation**

Revenue Base (Millions)	% Contribution	Contribution Amount (Millions)
\$3,263	3%	\$97.89
\$3,263	2%	\$65.26

### WSPs

Data shows an equitable and sustainable WSP programming contribution percentage would be 0.06%. Given the nascence of mobile video and the conservative nature of this calculation, this study only examines the one potential WSP contribution.

**Table 13: WSP Contribution Potential Calculation**

Revenue Base (Millions)	% Contribution	Contribution Amount (Millions)
\$12,918	0.06%	\$7.75

### Total

**Table 14: Total ISP/WSP Potential Contribution**

ISP Contribution	WSP Contribution	Contribution Amount (Millions)
\$97.89	\$7.75	\$105.64
\$65.26	\$7.75	\$73.01

## 6.3 Five-Year Potential<sup>82</sup>

The five-year potential for the above ISP and WSP contributions are calculated in the tables on the following page accounting for past revenue growth rate patterns in each sector, and assuming a constant contribution percentage is maintained. The first year (2009) contribution amounts calculated above are based on 2007 ISP and WSP revenue figures and should therefore be considered very conservative. The current difficult

<sup>82</sup> Calculated in current dollars.

economic climate is accounted for by basing the 2009 contribution potential on a percentage of 2007 revenues.

### ISP

**Table 15: ISP Contribution Potential 5-Year Projection (Millions)<sup>83</sup>**

Contribution %	2009	2010	2011	2012	2013
3%	\$97.89	\$114.43	\$131.94	\$150.02	\$168.17
2%	\$65.26	\$76.29	\$87.96	\$100.01	\$112.11

### WSP

**Table 16: WSP Contribution Potential 5-Year Projection (Millions)<sup>84</sup>**

Contribution %	2009	2010	2011	2012	2013
0.06%	\$7.75	\$8.9	\$10.12	\$11.36	\$12.61

### Total

**Table 17: ISP/WSP Contribution Potential 5-Year Projection (Millions)**

Contribution %	2009	2010	2011	2012	2013
ISP 3%	\$97.89	\$114.43	\$131.94	\$150.02	\$168.17
WSP 0.06%	\$7.75	\$8.9	\$10.12	\$11.36	\$12.61
<b>Total</b>	<b>\$105.64</b>	<b>\$123.33</b>	<b>\$142.06</b>	<b>\$161.38</b>	<b>\$180.78</b>
ISP 2%	\$65.26	\$76.29	\$87.96	\$100.01	\$112.11
WSP 0.06%	\$7.75	\$8.9	\$10.12	\$11.36	\$12.61
<b>Total</b>	<b>\$73.01</b>	<b>\$85.19</b>	<b>\$98.08</b>	<b>\$111.37</b>	<b>\$124.72</b>

In the case of ISPs, a 2-3% level of contribution would generate between \$65 and \$97 million in 2009, rising to \$112.11 to \$168 million in 2013, which would significantly benefit not only Canadian ISP users and the new media production community, but all communications players. In the case of WSPs, a modest 0.06% contribution level would still produce \$7.75 million in 2009, rising to more than \$12 million in 2013. There is a significant potential to substantially ramp up the contribution yield if video traffic increases in an exponential fashion as forecasted.

<sup>83</sup> Accounts for the 18.5% residential high-speed Internet revenue CAGR between 2003 and 2007, as well as the average annual 1.6% growth rate decline experienced between 2005 and 2007. Source: CRTC Communications Monitoring Report, July 2008.

<sup>84</sup> Accounts for 16.1% wireless revenue CAGR between 2003 and 2007, as well as the average annual 1.3% growth rate decline between 2005 and 2007. Source: CRTC Communications Monitoring Report, July 2008.

## 7 Summary and Conclusion

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Canada's BDU contribution regime is a vitally important element in the Canadian broadcasting system. It helps to finance the production of high-quality Canadian television programs in genres that are under-represented on Canadian TV.

A similar contribution regime could also become a key element in supporting the production of Canadian new media broadcasting content. What is more, such a regime would minimize any inequity that may arise between regulated BDU platforms and ISPs and WSPs.

Our research indicates that Canadians are increasingly turning to the Internet for broadcasting-type content, particularly television programs. In fact, data from Cisco and The Diffusion Group indicate that approximately 39% of Internet traffic today is comprised of professionally produced video content.

Our research also indicates that Canadian consumers' use of the Internet and mobile devices to access professional video content will likely increase in the future. Analysis demonstrates broadcasting-type content will be increasingly important in the service offering and business plans of both ISPs and WSPs. As convergence transforms the broadcasting and communications industries into a single entity, it is only fair that all players in the system contribute to the development and creation of high-quality Canadian new media broadcasting content.

Equitable and sustainable contribution regimes can be developed for ISPs and WSPs without major impacts on their subscribership or bottom line.

A 2-3% level of contribution for ISPs and a 0.06% contribution for WSPs would appear to be the most logical contribution levels given they can be easily justified based on the calculation of estimated broadcasting-type content on each platform and the potential to generate significant funds for the development of high-quality Canadian content for new media platforms.

## Appendix: BDU/WSP Attitudes Towards New Media Video

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Contrary to the more open American market, very little data for broadcasting-type video over the Internet and mobile networks have been published by the Canadian service providers. However, in past submissions to the CRTC, BDUs have underscored the significance of growth in this application and its impact on their subscriber base and overall business plans.<sup>85</sup> The following are excerpted from BDU submissions to the CRTC's April 2008 review of the regulatory frameworks for broadcasting distribution undertakings and discretionary programming services:

*"Unlimited choice from licensed and unlicensed platforms has contributed to the emergence of powerful and discriminating consumers who will not tolerate artificial constraints on choice.... BDUs continue to compete with unregulated internet platforms."*

- Shaw Communications Inc.

*"Last year, Rogers identified three overarching consumer trends that will have a particularly significant and lasting impact on the Canadian television industry: Everything on-demand, as evidenced by the popularity of video web sites, video on demand (VOD), personal video recorders (PVRs), and mobile video devices that allow consumers to watch what they want, when and where they want it; Unlimited shelf-space, enabled by investments by cable and other traditional media distributors in digital infrastructure and compression technologies; even with these improvements, these distribution platforms will be eclipsed by the Internet which has emerged as an alternative for watching video."*

*"Viewers are not just time-shifting, however. Increasingly, they also expect to be able to place-shift or format-shift their content so that it can be consumed somewhere other than on the television or in the home. Portable video players like the iPod, mobile cellular handsets and novel devices like Slingbox allow consumers to access content broadcast from traditional media sources, as well as streamed over the Internet or stored on the device."*

- Rogers Communications Inc.

*"The broadcasting industry is witnessing the appearance of innovative technologies which are enabling the availability of additional distribution channels for video content. Much of this innovation is taking place outside of the regulated broadcasting arena. At*

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<sup>85</sup> Given some of the largest BDUs are also ISPs and WSPs, it would be somewhat disingenuous for their ISP and WSP subsidiaries to argue that broadcasting-type video over the Web and wireless platforms is not significant and/or has limited growth potential.

*the moment, there are three distinct technologies in question: Internet-based video, which will bring the most changes to the broadcasting system, Internet Protocol TV and wireless mobile video/television.*

- Bell Canada

*“Moreover, more Canadians are choosing alternatives outside the regulated system as ‘over-the-top’ Internet services become viable alternatives for the distribution and consumption of content.”*

- Telus

Similarly, Canada’s WSPs have indicated the importance of mobile video as a data revenue generator in their investments and press releases. One of the most obvious examples is the May-June 2008 Canadian AWS Spectrum Auction, which generated more than \$4 billion in spectrum purchases. Canada’s incumbent WSPs – Bell, Rogers and Telus – invested \$2.6 billion in new spectrum, in part to be used to offer advanced data applications including video.

Ongoing network upgrades by the incumbents have also been in function of offering high-bandwidth data services to consumers. For example, Rogers notes that its upgrade to a next-generation HSAP network enables it to offer “new mobile multimedia services such as video calling, video-on-demand, 25 channels of mobile TV, satellite radio-on-demand and access to more than one million downloadable songs.”<sup>86</sup>

To keep pace with consumer demand for advanced wireless applications, Telus and Bell announced a partnership to invest in its 3<sup>rd</sup> Generation wireless network capabilities to ensure they can offer Canadians “the complete range of high-speed mobile data coverage, services and handset options.”<sup>87</sup>

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<sup>86</sup> Source: Rogers Communications Inc. Annual Report 2007, pg 6.

<sup>87</sup> Source: <http://www.newswire.ca/en/releases/archive/October2008/10/c5177.html>.