

## **Final Reply**

Regarding the Consultation on *Proceeding to establish a mandatory code for mobile wireless services*: Telecom Notice of Consultation CRTC 2012-557, 11 October 2012, CRTC 2012-557-1, 1 November 2012, CRTC 2012-557-2, 21 December 2012, CRTC 2012-557-3, 28 January 2013, CRTC 2012-557-4, 11 February 2013, and CRTC 2012-557-5, 13 March 2013.  
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## **Executive summary**

1. In this final reply, we respond to a number of recurring elements in the final comments filed 1 March 2013, mainly focusing on the Personalized Information Summary but also including issues of contract availability, terminology used, and measuring the success of a Wireless Code.
2. We also provide a discussion on the data cited throughout these proceedings about the state of Canada's wireless service industry. We note that data sets are often incomplete and inconsistent; and as such, there needs to be an effort on the part of the CRTC to collect comprehensive statistics on Canada's wireless services in relation to global markets and to ensure such data are available to all industry stakeholders.
3. To conclude, we contend that future research on this country's wireless services industry – quantitative, but also qualitative – will provide a clearer framing for the specific problems that the Wireless Code is attempting to address, how the Code will approach these problems, and how its effectiveness can be measured and further assessed.

## Part One - Responses to Reply Comments

### A. Personalized information summary

4. There continue to be differences of opinion among hearing participants as to how the "Personalized information summary" should be implemented. The Wireless Code Working Document proposes that "Consumers are to be provided with a personalized summary of how key terms and conditions in their contract will apply to them before they sign their contract."<sup>1</sup>
5. Bell Canada's final comment states that "Calls for a standardized, non-flexible Personal Information Summary to be used as a comparison shopping tool are inappropriate."<sup>2</sup> MTS Allstream notes that "service providers should have flexibility as to where and how they present the information outlined in the Commission's 'Personalized Information Summary,' as long as all the required information is provided."<sup>3</sup> The CWTA also calls for flexibility in the way the wireless service providers (WSPs) communicate this information to their customers.<sup>4</sup>
6. In describing the objectives for a National Code, Bell states that "it should strive to better inform those who feel overwhelmed by the complexity of the competitive marketplace, set out a basic set of consumer rights and improve the clarity of wireless contractual arrangements."<sup>5</sup> As such, we think standardized summaries are essential,<sup>6</sup> and consistent with the stated objectives in developing the code: "to ensure that consumers have the information they need to participate effectively in the competitive mobile wireless market."<sup>7</sup>
7. However, upon further reflection as to the objectives of providing an information summary that enables comparison of offers, we agree with the CWTA that such summaries need not be personalized.

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<sup>1</sup> CRTC (2013). Wireless Code Working Document. Telecom Notice of Consultation CRTC 2012-557-3: <http://www.crtc.gc.ca/eng/archive/2012/2012-557-3.htm>, section D1.4

<sup>2</sup> Bell Canada (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867674>, para. 3.3.

<sup>3</sup> MTS Allstream (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867286>, para. 9.

<sup>4</sup> CWTA (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1866396>, para. 41.

<sup>5</sup> Bell Canada, para. 12.

<sup>6</sup> This point is also made by PIAC/COS/CASCO (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867506>, para. ES7; and the Consumers Council of Canada (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1866583>, para 52.

<sup>7</sup> CRTC (2012). Telecom Decision CRTC 2012-556: <http://crtc.gc.ca/eng/archive/2012/2012-556.htm>.

8. As we noted in our initial intervention in the hearing,<sup>8</sup> and as discussed by the Consumers Council of Canada,<sup>9</sup> Australia is in the process of implementing a Telecommunications Consumer Protections Code. As of 1 March 2013, the Australian Code requires all suppliers to provide customers with a “summary of each of its current Offers to allow Consumers to compare Offers provided by each Supplier which best suit their needs.”<sup>10</sup> This summary is called a *Critical Information Summary*, and it follows a template that includes “Information about the service,” “Information about pricing,”<sup>11</sup> and “Other information.”<sup>12</sup>
9. Our recommendation is that all Wireless Service Providers (WSPs) be required to provide summaries of each of their individual offerings, in a standard format as mandated by the Wireless Code. These standard format “offering summaries” should be available on each WSP’s website, and in whatever physical locations their services are being sold. The standard format will allow consumers to better understand what each individual offering constitutes and will allow for comparison of offers with and without contracts, across WSPs.
10. To implement this recommendation, the Personalized Information Summary template in the working code could be renamed “Offering Summary.” The first component, “Info” would be excluded, but the other components would remain. As we have noted at the hearing and in our final comment,<sup>13</sup> we believe that an additional component is required, to state the minimum total cost of a contract, if the offer is only available by signing a contract.

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<sup>8</sup> Middleton, C. et al. (2012). Intervention on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1804996>, para. 40.

<sup>9</sup> Consumers Council of Canada, para. 16.

<sup>10</sup> Communications Alliance Ltd. (2012). *Telecommunications Consumer Protections Code*, Industry Code C628:2012: <http://www.commsalliance.com.au/Documents/all/codes/c628>, para. 4.1.2.

<sup>11</sup> In a Canadian version of an “Offering Summary,” pricing information must be very clear as to the actual amount that is charged for each service. While we believe the Australian Critical Information Summary is a potentially useful reference model, we do caution against following the pricing conventions in place in Australia. The Australian market has adopted an unusual way of pricing mobile services, in which the fee paid for a particular offer is assigned a ‘value’ much greater than this actual fee paid. For instance, Telstra’s Every day connect BYO plan costs \$50 per month, but provides a customer with \$600 of ‘value.’ See <http://www.telstra.com.au/help/download/document/personal-critical-information-summary-every-day-connect-byo-plan-50-tso.pdf> for a description of this plan. Confusingly, the prices for individual services are consistent with the ‘value’ calculations, rather than actual monies paid, e.g., the price for a 2-minute standard national mobile call on this plan is listed as \$2.38, but the critical information summary notes that a customer could make 252 such calls per month, for a cost of \$599.76. With the \$600 of ‘value,’ a \$50 payment allows this level of service. We do not recommend that this confusing practice be allowed in Canada.

<sup>12</sup> Details are provided in Communications Alliance Ltd, para. 4.1.2(iii).

<sup>13</sup> Middleton, C. et al. (2012). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867196>, para. D1.2(e).

11. Requiring WSPs to describe their services in standard format, without personalization, also addresses concerns articulated by those offering pre-paid or pay-in-advance services that the personalized format would be very difficult to implement in instances where customer data is not collected at the point of sale. It would eliminate the cost of providing a personalized summary prior to actually acquiring a customer, but would require that the WSP state the cost of its service in a manner that can be easily compared across providers.
12. In instances where a consumer chooses to sign a contract with a WSP, the terms of that contract must be consistent with the "Offering Summary." The contract would be required to include the 'Info' initially suggested for inclusion in the Personalized information summary, i.e. "Consumer name, Phone number, Contract or client ID number, Company name and explanation of how to contact customer service, Contract start date, Contract end date."<sup>14</sup>
13. The Consumers Council of Canada argues that the "Personalized Information Summary should be presented both as a separate document to facilitate consumers' consideration of various offers and as part of the WSP's final service contract."<sup>15</sup> Our proposal would require the generic "Offering summary" to allow for consumers' consideration of various offers, and a personalized contract to document the specific offer chosen by a consumer (in the instance where the service requires a contract).
14. We are in agreement with the Consumers Council of Canada's recommendation that "As many Canadians do not want, cannot get, cannot afford, or do not fully understand the Internet and/or a device that enables them to access the Internet, however, the Summary [i.e. the proposed "Offering Summary"] should always be available printed on paper (or in alternative formats for accessibility reasons), as a standalone documents for consumers who want to comparison shop."<sup>16</sup> This recommendation is particularly important for the many senior citizens who, as we have found in our research, are not necessarily comfortable accessing such information online.

## **B. Contract availability**

15. We reiterate the Consumers Council of Canada's support for a requirement that "WSPs retain a permanent record of their contracts with consumers,"<sup>17</sup> noting that youth – especially those with transitory living arrangements that may create challenges for storing documents

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<sup>14</sup> CRTC, Wireless Code Working Document, section D1.4.

<sup>15</sup> Consumers Council of Canada, para. 52.

<sup>16</sup> Consumers Council of Canada, para. 58.

<sup>17</sup> Consumers Council of Canada, para. 62.

– would benefit from this requirement. Ideally contracts should be accessible to consumers by logging into their personal account on their WSP’s websites.

### **C. Terminology**

16. On the issue of terminology, consistent with our previous comments,<sup>18</sup> we agree with the Consumers Council of Canada that “the Code should prohibit the use of terms such as ‘unlimited,’ ‘subsidy’ and their synonyms should be prohibited, and WSPs should be required to clearly explain contract limits that impose costs on consumers. Words such as ‘discount,’ ‘rebate,’ ‘credit,’ and their synonyms should be prohibited if consumers are in any way ever required to reimburse WSPs for these discounts or rebates.”<sup>19</sup>
17. Further to the issue of accurate terminology, we reject MTS Allstream’s recommendation that “providers should be allowed to advertise plans as ‘unlimited’ where the customer cannot be subject to any additional financial obligations.”<sup>20</sup> If there are limits on a service, regardless of whether the limit invokes a financial obligation or not, it should not be advertised as unlimited, and the consumer must be aware of the limits prior to choosing that service.
18. With respect to plain language, the language used in the CWTA’s recommendation that the statement “Service providers cannot unilaterally change services that consumer cannot change, cancel or choose not to use,” which it claims should be embedded in the Wireless Code as a consumer right, is difficult to understand.<sup>21</sup>

### **D. Measures of Success**

19. In order to effectively measure the success of a Wireless Code, a clear articulation of its objectives is necessary. The onus for this falls on the CRTC, to provide a focused statement on what precisely the Code is intended to accomplish. Previously, the CRTC has indicated that these objectives include:
  - “to ensure that consumers are able to participate in the competitive market in an informed and effective manner, and to fulfill the policy objectives of the Telecommunications Act”<sup>22</sup>

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<sup>18</sup> Middleton et al., Final comment, para. D4.3.

<sup>19</sup> Consumers Council of Canada, para. ES22.

<sup>20</sup> MTS Allstream, para. 18.

<sup>21</sup> CWTA, para. 32.

<sup>22</sup> CRTC, Telecom Decision CRTC 2012-556. With regard to addressing “the policy objectives of the Telecommunications Act,” we would like to highlight the importance of the Telecom Act’s provisions for access in rural areas and general affordability of telecommunications services as part of any assessment of the success of a Wireless Code.

- “to ensure the clarity of mobile wireless service contracts and related issues for consumers. The Commission concluded that consumers need additional tools to better understand their basic rights, as well as their service providers’ responsibilities with respect to mobile wireless services, in order to participate in the competitive market in an informed and effective manner”<sup>23</sup>
- “to provide a clear and concise list of consumers’ rights and service providers’ responsibilities regarding mobile wireless services.”<sup>24</sup>
- “to clarify wireless companies’ responsibilities and provide consumers with new tools to better understand their rights. This will ultimately assist them in making informed choices about their wireless services. As a result, we are hoping to create a more dynamic marketplace empowered by informed consumers.”<sup>25</sup>

20. Through the course of the consultation, and particularly in the online comments and some of the comments presented at the oral hearing, the issue of encouraging increased market competition was raised as important for addressing these objectives. We agree with CIPPIC that the Wireless Code of Conduct must be developed within a clear set of objectives that include “the development of an environment that is responsive to the economic and social requirements of users of wireless services”:

“The appropriate empirical metrics for measuring the success of this Code will depend in large part on its objectives. We have suggested that the objectives of this Code should be, primarily, to ensure the development of an environment that is responsive to the economic and social requirements of users of wireless services. This requires, primarily, empowerment of customers to ensure they are able to make informed and effective decisions within a competitive wireless marketplace. We have argued that the Code should strive to empower customers in ways that will not only alleviate growing frustration with WSPs in Canada, but also will ensure that the choices empowered Canadians make will more effectively resonate, through competitive pressures, in the broader telecommunications landscape.”<sup>26</sup>

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<sup>23</sup> CRTC (2013). Telecom Notice of Consultation CRTC 2012-557-1: <http://www.crtc.gc.ca/eng/archive/2012/2012-557-1.htm>.

<sup>24</sup> CRTC, Telecom Notice of Consultation CRTC 2012-557-1.

<sup>25</sup> Blais, J-P. (2013). Opening remarks to the public hearing. Gatineau, QC. 11 February: <http://crtc.gc.ca/eng/com200/2013/s130211.htm>.

<sup>26</sup> Samuelson-Glushko Canadian Internet Policy & Public Interest Clinic, filed on behalf of client, OpenMedia.ca (CIPPIC) (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1872395>, para. 70.

21. It is only with an understanding of what the Code is intended to achieve that effective measures of success can be developed. We support and here add to CIPPIC's list of indicators of a successful Code<sup>27</sup>:
- Improved clarity of service agreements: the Code should improve the clarity of contract terms and conditions, through such tools as language simplicity indexes;
  - Less bill shock: a decreased percentage of customers indicating they have experienced dramatic surprises on a monthly bill, as measured by survey;
  - Improved customer outcomes: include general customer satisfaction with wireless services, as measured by opinion surveys; also, the indicators WIND Mobile has suggested to measure improvements to consumer protection and consumer welfare.<sup>28</sup>
  - Improved understanding of services: improved customer understanding of the nature of their services, measured through surveys matching customer perception of how their service operates against how it operates in reality; and
  - Improved general international standing: improvement in Canada's international standing in terms of price, advertised speed, device uptake, etc. Measures such as device uptake may not provide a comprehensive indication of the success of a Wireless Code, but they are nonetheless essential.<sup>29</sup>
22. Understanding the Code's objectives and measuring its success requires a clearer framing of the issues, but also a clearer picture of the wireless services environment in Canada as it compares to other countries internationally.

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<sup>27</sup> CIPPIC, para. 71.

<sup>28</sup> Globalive Wireless Management Company/WIND Mobile (2013). Final comment on CRTC 2012-557: <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867686>, paras. 20-21:

20. WIND Mobile submits that the success of a National Wireless Consumer Code be measured primarily by the improvements it creates in consumer protection and consumer welfare.

21. Specifically with respect to term contract limits (and limits on early termination fees), consumer benefits can be determined via surveys which measure how much better informed consumers are with respect of contract terms (or their level of confusion) and how much better a position they feel they are in should they wish to switch service providers. With contract term limits, the European Union has demonstrated that consumers have been able to mitigate confusion in contract terms by early retirement of contracts.

<sup>29</sup> We consider here the statement by Bell Canada, para. 14: "Indicators such as churn, price and wireless device penetration are poor performance measures because changes to these indicators can be attributed to a myriad of causes other than the introduction of the new Code. Customized and more focused evaluation measures are needed."



## Part Two - Available data

23. The need for additional research on Canada's wireless industry in a global context is apparent when examining the currently available data. Professor Michael Geist of the University of Ottawa Law School has noted inconsistencies across recent studies about Canada's wireless industry.<sup>30</sup> For example, he cites a number of key discrepancies between the Scotia Capital report Canadian Wireless Myths and Facts<sup>31</sup> and the CRTC's Communications Monitoring Report 2012.<sup>32</sup> We note additional international comparative data is compiled in the International Telecommunication Union (ITU) Yearbook of Statistics, 2002-2011<sup>33</sup> and the OECD Communications Outlook 2011.<sup>34</sup>

- Average revenue per user (ARPU) is the highest in Canada compared to any other country,<sup>35</sup> yet the Scotia Capital report claims that Canada's voice ARPU is declining significantly.<sup>36</sup> Geist makes the point that voice ARPU is declining globally, a trend that reflects the diminished importance of voice in recent usage trends.
- Prices for wireless services in Canada are shown to be among the world's highest in the CRTC's data,<sup>37</sup> as well as in the U.S. Federal Communication Commission's International Broadband Data Report, Third.<sup>38</sup> The Scotia Capital report attempts to downplay these high prices by only comparing Canadian prices with U.S. prices,<sup>39</sup> ignoring a number of other countries in which prices are significantly lower. By contrast, the Wall Communications report on Price Comparisons of Wireline, Wireless and Internet Services in Canada with Foreign Jurisdictions, prepared for the CRTC, makes clear that Canadian mobile data prices rank the second highest

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<sup>30</sup> See <http://www.michaelgeist.ca/content/view/6803/125/>.

<sup>31</sup> Scotia Capital (2013). Canadian Wireless Myths and Facts. <http://blog.telus.com/wp-content/uploads/2013/03/SC-Canadian-Wireless-Myths-and-Facts.pdf>.

<sup>32</sup> CRTC (2012). Communications Monitoring Report 2012. <http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2012/cmr.htm>.

<sup>33</sup> International Telecommunication Union (2012). *Yearbook of Statistics: Telecommunication/ICT Indicators 2002-2011*. Geneva: ITU.

<sup>34</sup> OECD, *OECD Communications Outlook 2011*. While we acknowledge that the Scotia Capital Report provides more recent data, we note the need to rely upon sources like the ITU and the OECD for data that allows international comparisons.

<sup>35</sup> CRTC, Communications Monitoring Report 2012, p. 184.

<sup>36</sup> Scotia Capital, p. 3.

<sup>37</sup> CRTC, Communications Monitoring Report 2012, p. 178

<sup>38</sup> Federal Communications Commission (2012). International Broadband Data Report (Third). <http://www.fcc.gov/reports/international-broadband-data-report-third>, p. 18

<sup>39</sup> Rogers made a similar comparison, citing prices for the Apple iPhone in the U.S. as higher than those in Canada, without providing any other country data. Rogers Communications (2013). Final comment on CRTC 2012-557:

<https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=1867335>, para. E5.

next to Japan and have held steady since 2010 even while prices in Japan and other developed countries have been falling.<sup>40</sup>

24. Among these and other examples, Geist notes that three-year contracts have been a central concern in the public responses to the Wireless Code hearings. According to the Scotia Capital report, three-year contracts support lower consumer prices for handsets, especially smartphones.<sup>41</sup> As Geist points out, however, there is no supporting data on adoption and uptake rates to verify this claim.

## A. Uptake data

### A.1. Mobile phone uptake

25. In the Wireless Code oral hearing, the incumbent carriers avoided citing exact figures for the uptake of mobile devices, instead framing their customers' satisfaction in terms of low complaint levels,<sup>42</sup> high percentage of customers on contract as opposed to pre-paid,<sup>43</sup> and strong business performance.<sup>44</sup> Only representatives from Bell Canada mentioned anything about device uptake, noting that Canada's smartphone penetration is higher than in the U.S.: "if you actually look at the penetration of those devices in Canada, versus in the U.S., you will actually see that in Canada we have a higher Smartphone penetration overall".<sup>45</sup> Yet Bell did not offer a citation or any concrete figures on this penetration rate, and as we note below, we believe their claim can be misinterpreted. One reason for the lack of a substantiated discussion of mobile phone uptake data in the hearings, even though it is a key indicator of the health of the Canadian Wireless market, may be because Canada's uptake rates are globally low. For example, the CRTC's data shows that Canada has the lowest mobile subscription rate when measured against the U.S., UK, France, Germany, Italy, Japan, and Australia.<sup>46</sup>
26. International data confirms this assessment. The OECD's Communications Outlook 2011 shows that Canadian uptake of mobile is the lowest among OECD countries: "The lowest penetration was

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<sup>40</sup> Wall Communications Inc. (2102). Price Comparisons of Wireline, Wireless and Internet Services in Canada with Foreign Jurisdictions. Report prepared for the CRTC: <http://www.crtc.gc.ca/eng/publications/reports/rp120406.htm>, p. 33

<sup>41</sup> Scotia Capital, p. 2

<sup>42</sup> Fuller, D. (2013). Telus Communications Company, Presentation at the CRTC Wireless Code Hearing, 11 February: <http://www.crtc.gc.ca/eng/transcripts/2013/tt0211.html>, para. 1640

<sup>43</sup> Engelhart, K. (2013). Rogers Communications, Presentation at the CRTC Wireless Code Hearing, 12 February: <http://www.crtc.gc.ca/eng/transcripts/2013/tt0212.html>, para. 3741

<sup>44</sup> Gillies, C. (2013). Bell Canada, Presentation at the CRTC Wireless Code Hearing, 13 February: <http://www.crtc.gc.ca/eng/transcripts/2013/tt0213.html>, para. 6943

<sup>45</sup> Gillies, para. 7140

<sup>46</sup> CRTC, Communications Monitoring Report 2012, p. 181.

seen in Canada with 71 subscriptions per 100 inhabitants".<sup>47</sup> The most recent figures from the ITU show that number increasing in 2011 to approximately 80 subscriptions per 100 inhabitants, but that is still the lowest number among all 34 OECD countries.<sup>48</sup> Moreover, the OECD Broadband Statistics from June 2012 show that mobile data subscriptions are among the lowest (ranked 23rd out of 34 countries) at 41 per 100 inhabitants.<sup>49</sup> It is likely that Canada's high prices (e.g. Canada's mobile service price in the lowest usage basket ranks 2nd highest of 34 countries<sup>50</sup>) impact demand for services.

27. While these data sets indicate that Canada's mobile phone uptake rates are among the lowest in the world, the OECD and ITU data are not fine-grained enough to allow for a more detailed inquiry into the significance of these uptake figures. For example, the ITU Yearbook of Statistics only collects information on mobile subscription numbers, without measuring how many individuals are using mobile devices, and without collecting attendant data on pricing or usage patterns. Within Canada, data needs to be collected on these and other measures, as argued by the United Nations Economic and Social Council:

As a minimum requirement, all countries should collect indicators HH5 (individuals using a computer), HH7 (individuals using the Internet) and HH10 (individuals using a mobile telephone). ... HH10 is necessary to capture the real use of mobile telephones – especially in developing countries – and therefore the widely appraised development potential of mobile telephony. The commonly available – and used – indicator A2 (mobile cellular subscriptions per 100 inhabitants) includes double counting and has surpassed the 100 per cent mark in most countries; it therefore does not provide accurate information on how many people are using a mobile telephone.<sup>51</sup>

28. This 2011 paper, the Report of the Partnership on Measuring Information and Communication Technology for Development, indicates that Canada has not been collecting the HH10 variable.<sup>52</sup> Instead, Canadian data has been patchy and suffers from the problem noted above that measuring the number of subscriptions results in

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<sup>47</sup> OECD, *OECD Communications Outlook 2011*, p. 133.

<sup>48</sup> International Telecommunication Union, p. 67.

<sup>49</sup> OECD (2012). OECD Fixed (Wired) Broadband Subscriptions Per 100 Inhabitants, by Technology, June 2012. <http://www.oecd.org/sti/broadband/1d-OECD-WiredWirelessBB-2012-6.xls>. (accessed 25 February 2013), table 1d(2)).

<sup>50</sup> OECD, *OECD Communications Outlook 2011*, p. 260.

<sup>51</sup> United Nations Economic and Social Council (2011). *Report of the Partnership on Measuring Information and Communication Technology for Development*. Geneva: United Nations Statistical Commission. <http://unstats.un.org/unsd/statcom/doc12/2012-12-ICT-E.pdf>, p. 9.

<sup>52</sup> United Nations Economic and Social Council, p. 28

double counting.

29. Despite the lack of complete data on Canada's mobile phone uptake rates, the available data makes clear that Canada scores among the lowest in the world. Even in the Connectivity Scorecard 2011, a report that heralds Canada as "a relatively strong performer," it is apparent that the wireless market in Canada lags: "Canadian wireless penetration including 3G penetration remains lower than in many other innovation-driven economies."<sup>53</sup>

## A.2. Smartphone uptake

30. When smartphone uptake is isolated from mobile subscriptions in general, the statistics must be carefully interpreted. Quorus's 2012 data prepared for the Canadian Wireless Telecommunication Association (CWTA) indicates that 48% of Canadian mobile subscriptions are smartphones.<sup>54</sup> The CWTA's own data show a 75% mobile phone uptake rate, thus indicating approximately 36% of the Canadian population (48% of 75%) have adopted smartphones,<sup>55</sup> a number supported by the CRTC's Communications Monitoring Report 2012 which reports about 37% smartphone adoption across the country.<sup>56</sup>
31. The comScore 2013 Mobile Future in Focus report shows that Canada has a 62% smartphone adoption rate (noting an increase from the 2012 data reported by Quorus), ranking it third behind Spain and the UK, and ahead of France, Italy, Germany, and Japan, but no other countries are included.<sup>57</sup> However, it appears that the comScore numbers represent the percentage of cell phone subscribers with smartphones, rather than the percentage of smartphone subscribers in the population. In contrast, Ofcom's 2012 International Communication Monitoring Report uses population wide data and indicates that Germany, the UK, Australia, Italy and Spain have higher rates of smartphone adoption than Canada.<sup>58</sup>

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<sup>53</sup> Waverman, L., Dasgupta, K., & Rajala, J. (2011). *Connectivity Scorecard 2011: Canada*. Berkeley Research Group, Communicea, Nokia Siemens Networks. [http://www.connectivityscorecard.org/images/uploads/media/CS2011\\_Canada.pdf](http://www.connectivityscorecard.org/images/uploads/media/CS2011_Canada.pdf). (accessed 11 March 2013), p. 2

<sup>54</sup> Quorus Consulting Group (2012). 2012 Cell Phone Consumer Attitudes Study (Prepared for CWTA). <http://cwta.ca/wordpress/wp-content/uploads/2011/08/CWTA-2012ConsumerAttitudes.pdf>, p. 17

<sup>55</sup> Canadian Wireless Telecommunications Association (n.d.). Facts & Figures: The Canadian Market. <http://cwta.ca/facts-figures/>.

<sup>56</sup> CRTC, Communications Monitoring Report 2012, p. 120

<sup>57</sup> comScore (2013). Mobile Future in Focus 2013.

[http://www.comscore.com/Insights/Presentations\\_and\\_Whitepapers/2013/2013\\_Mobile\\_Future\\_in\\_Focus](http://www.comscore.com/Insights/Presentations_and_Whitepapers/2013/2013_Mobile_Future_in_Focus), p. 40.

<sup>58</sup> Ofcom (2012). *International Communications Market Report 2012*. London: Ofcom. <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr12/international/>, p. 26, p. 274.

32. In its final reply comments, Bell Canada notes "Canada's smartphone penetration is higher (at 63% of post-paid subscribers) than both the U.S. (59%) and Europe (55%)".<sup>59</sup> It notes this information is "As of 30 September 2012, based on total subscribers in Europe's five largest markets (Germany, France, U.K., Italy and Spain)".<sup>60</sup> We are unable to verify this information, as no source for these total subscriber numbers is noted. However, we reiterate that all available evidence suggests that Canada has a lower percentage of mobile phone subscribers than the other countries cited. Thus, consistent with the data noted above, Bell's data indicates that smartphone uptake is high as a percentage of cell phone subscribers within Canada, but does not acknowledge that the low uptake of cell phones in Canada means that the total number of smartphone users as a percent of the total population is lower than in other countries.

### A.3. Mobile broadband uptake

33. The OECD's mobile broadband data is measured in terms of "Standard mobile broadband subscriptions" ("typical mobile voice subscriptions which also provide access to the larger Internet") and "Dedicated mobile data subscriptions" ("dedicated data subscriptions on mobile networks advertising speeds of at least 256 kbit/s which are purchased separately from voice services either as a stand-alone service [modem/dongle] or as an add-on data package to a voice service requiring an additional subscription").<sup>61</sup> Canadian subscription rates for June 2012 show 36.6 standard subscriptions per 100 inhabitants and 3.8 dedicated subscriptions,<sup>62</sup> categorizing most data subscriptions as being part of a voice plan rather than purchased separately (i.e. data plans for smartphones), and demonstrating that mobile broadband adoption is low when compared to that of other countries.

34. Some of the only available data on mobile broadband specifically can be found in the Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update,<sup>63</sup> which supports WSPs' claims that Canada has good 4G coverage with its findings that Canadian subscribers are

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<sup>59</sup> Bell Canada, para. 7.

<sup>60</sup> Bell Canada, f.n. 10.

<sup>61</sup> OECD (2010). Wireless Broadband Indicator Methodology. OECD Digital Economy Papers, No. 169. Paris: OECD Publishing. <http://dx.doi.org/10.1787/5kmh7b6sw2d4-en>, p. 4

<sup>62</sup> OECD (2012). OECD Fixed (Wired) Broadband Subscriptions Per 100 Inhabitants, by Technology, June 2012. <http://www.oecd.org/sti/broadband/1d-OECD-WiredWirelessBB-2012-6.xls>. (accessed 25 February 2013), table 1d(2)).

<sup>63</sup> Cisco (2013). Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2012-2017. [http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white\\_paper\\_c11-520862.html](http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.html).

using a significant amount of 4G mobile data, and that data transmission speeds are relatively high.

35. While these figures appear promising, when placed in the larger context of relatively low device uptake, Canada is no longer a global leader. For example, Cisco's 2012 Year in Review data notes that the average smartphone in Canada generated 608 megabytes of mobile data traffic per month, while in Germany the number is 274 megabytes per month, in the UK 489 megabytes, in Australia 193 megabytes, and in Spain 385 megabytes.<sup>64</sup> Canada's mobile broadband traffic would appear to be the highest in this group of countries, but as noted above, Ofcom's 2012 data reveals that Germany, the UK, Australia, and Spain all have higher rates of smartphone adoption than Canada.
36. Moreover, other data – such as Akamai's 2012 statistics on broadband speeds – suggest that Canada's overall speeds are in fact relatively low. While there is only one Canadian provider accounted for in this data set, we note that this may be because Akamai was not able to collect enough data points to meet their criteria given low mobile broadband penetration rates.<sup>65</sup>

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<sup>64</sup> Cisco, n.p.

<sup>65</sup> Akamai (2012). The State of the Internet, 3rd Quarter Report. <http://www.akamai.com/stateoftheinternet>, p. 28.

### Part Three - Future research

37. These examples indicate that international comparative data are essential to understanding the state of Canada's wireless industry, and by extension, the potential impact and assessment on a Wireless Code. In our view, the most reliable international comparative data come from the ITU and the OECD, but Canada has not necessarily collected measures on the key variables that need to be compared internationally.
38. Moreover, as indicated in Geist's summary, a number of sources for data need to be compiled in order to get a sense of the larger picture of how Canada fits into a global wireless services market. The challenge is that these sources vary in terms of their quality, completeness, timeliness and measures used, and are open to competing interpretations. Since these data sets are thus potentially contentious, Canada urgently requires reliable, unbiased data, collected or commissioned on an ongoing basis by impartial agencies like the CRTC, Industry Canada and Statistics Canada, to allow for a continual assessment of the Canadian wireless services market within a global context. Such data must be made available in raw, disaggregated form, to allow for independent analysis by any interested parties.
39. We support Bell's call for "an annual survey designed to measure consumer attitudes [...]. A national, representative and random sample of respondents, large enough to yield statistically significant results, would be asked to complete a survey before the implementation of the Code."<sup>66</sup> Rogers similarly recommends that "a mixture of public opinion polling and focus group research would be appropriate measurements,"<sup>67</sup> and both WIND Mobile<sup>68</sup> and CIPPIC<sup>69</sup> have also provided interesting models for further research. As with any data collected for the purpose of assessing the wireless code, we ask that in all future research, complete data sets (not just the summary report with aggregate analysis) be made available publicly for the purpose of unbiased analysis.

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<sup>66</sup> Bell Canada, para. 19.

<sup>67</sup> Rogers Communications, para. 146.

<sup>68</sup> Globalive/WIND Mobile, para. 21.

<sup>69</sup> CIPPIC, para. 71.