

**Consultation on the Technical, Policy and Licensing
Framework for Advanced Wireless Services in the
Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)**

**Reply Comments of
the Public Interest Advocacy Centre
(PIAC)**

October 1, 2014

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1. Introduction

- 1) The Public Interest Advocacy Centre (“**PIAC**”) submits these reply comments in respect of Gazette Notice SLPB-004-14 (August 2, 2014) *Consultation on the Technical, Policy and Licensing Framework for Advanced Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)*.
- 2) In PIAC’s initial comments, PIAC explained how the AWS-1 experience is evidence of the positive impact competitive entry has toward achieving the wireless policy objectives, and how the AWS-3 spectrum auction represents an important opportunity to follow through on the objective of promoting sustainable wireless competition. PIAC explained the need for ongoing measures to promote competition in the Canadian wireless industry, and generally supported the Department’s proposed set-aside in the AWS-3 band for the combined GHI block, and open bidding for the J block. PIAC also suggested that the GHI block could be disaggregated so that more than one new entrant could participate in the set-aside, and suggested that eligibility for the set-aside could be expanded to include potential greenfield entry, as well as participation by larger regional players. Finally, PIAC advocated for higher deployment obligations to ensure more Canadians are provided with services using the spectrum.
- 3) PIAC has reviewed the comments filed by ABC Communications (“**ABC**”); Bell Mobility Inc. (“**Bell**”); Bragg Communications Inc., carrying on business as Eastlink (“**Eastlink**”); Cogeco Cable Inc. (“**Cogeco**”); the First Mile Connectivity Consortium (“**FMCC**”); Globalive Wireless Management Corp., doing business as WIND Mobile (“**WIND**”); the Independent Telecommunications Providers Association (the “**ITPA**”); Drs. McNally; Taylor and Middleton (the “**Professors**”); MTS Inc. (“**MTS**”); Niagara Networks Incorporated (“**Niagara Networks**”); Québecor Média inc. en son nom et en celui de Vidéotron s.e.n.c. (“**Vidéotron**”); Rogers Communications Partnership (“**Rogers**”); Saskatchewan Telecommunications (“**SaskTel**”); the SSI Group of Companies (“**SSI**”); TBayTel (“**Tbaytel**”); TELUS Communications Company (“**TELUS**”); and Xplornet Communications Inc. and Xplornet Broadband Inc. (collectively “**Xplornet**”).
- 4) By and large, most parties supported most of the proposals. For example, most parties that commented on auction format supported the use of a sealed-bid auction format and second-price rule.¹
- 5) These reply comments focus on the areas of disagreement or counter-proposals posed by certain parties that have the greatest relation to achieving the policy objectives.

¹ ABC at para. 22; Bell at para. 28; Eastlink at para. 10; MTS at para. 12; Niagara Networks at 11-12; SaskTel at para. 61; SSI at para. 32; Tbaytel at para. 18; TELUS at para. 75; Vidéotron at para. 47; and WIND at para. 2. In MTS’s view, for example, “compared to the combinatorial clock auction format, MTS believes the sealed-bid format will more accurately portray the highest-value users of scarce spectrum.”

- 6) Before addressing those specific areas, however, PIAC addresses a misconception about the purpose of spectrum auctions that Bell, TELUS and Rogers continue to advance. This is the misconceived premise that one of the goals (if not the key goal) of spectrum auctions is to maximize revenues to the Canadian public via the treasury.

The goal of spectrum auctions

- 7) Bell states, without any citations, that “A key objective of spectrum auctioning is to ensure that the Canadian taxpayer receives a fair return for the use of valuable spectrum.”²
- 8) TELUS states that “the AWS-3 proposals...deprive taxpayers of fair compensation for AWS-3 set aside spectrum. The proposals are equivalent to a 70% discount on being granted for free (but having to pay the standard annual CMRS licence fees for 20 years.)”³
- 9) Rogers states that “A set-aside is unnecessary and will confer a substantial subsidy on new entrants at the expense of Canadian taxpayers.”⁴
- 10) The assertion that spectrum auctions are a source of tax dollars to be maximized, and that foregone maximal auction revenue constitutes a “subsidy” paid for by taxpayers, is, as PIAC explained in its initial comments, highly questionable.⁵
- 11) The ‘taxpayer subsidy’ and ‘auction revenue maximization’ view is poorly supported at best, or misleading at worst. None of the current sources of policy related to spectrum use or management have ‘fair return for the use of valuable spectrum’ as an objective, therefore Bell’s assertion that this is a “key objective” of spectrum auctioning is plainly incorrect. The ‘taxpayer subsidy’ and ‘auction revenue maximization’ view put forward by TELUS and Rogers also have minimal support.
- 12) PIAC repeats here the conclusion of one spectrum consultancy: “it is worth keeping in mind that it is not the intent of an auction process to maximize revenues, but to reach as a [sic] reasonably efficient outcome while accomplishing key policy objectives.”⁶
- 13) On what, then, are Bell, TELUS and Rogers basing their ‘taxpayer subsidy’ and ‘auction revenue maximization’ views?
- 14) Canada’s spectrum auction policy is based on the *Radiocommunication Act*,⁷ regulations and policies promulgated thereunder, the *Telecommunications Act*,⁸ and Industry Canada’s

² Bell at para. 28.

³ TELUS at para. 4.

⁴ Rogers at para. E3; see also paras. 16, 19-20, 24, 45, 47, and 52.

⁵ PIAC Comments at paras. 49-51.

⁶ Lemay-Yates Associates Inc., “Report: Implications of reserving spectrum for entrants” (MTS Allstream Reply Comments, June 27, 2007, DGTP-002-07, Appendix B) at 7-8.

⁷ RSC 1985, c R-2, online: <<http://canlii.ca/t/j00h>>.

*Spectrum Policy Framework for Canada*⁹ and *Framework for Spectrum Auctions in Canada*.¹⁰ The Government's *Digital Canada 150*¹¹ document, and previous Industry Canada spectrum auction consultation documents may also provide insight into Canada's spectrum auction policy.

- 15) Section 5(a)(i.1) of the *Radiocommunication Act* gives the Minister of Industry the power to issue spectrum licenses. The *Radiocommunication Act* does not directly contain policy objectives, however section 5(1.1) references the policy objectives in section 7 of the *Telecommunications Act*. While section 5(1.1) says the Minister *may* have regard to these objectives, the grouping of this statement as a subsection of section 5 is clearly meant to colour the application of the powers in section 5(1), consistent with modern statutory interpretation principles.¹²
- 16) Sections 5(1.2)-(1.4) of the *Radiocommunication Act* reference the ability of the Minister to auction spectrum licenses, but do not explicitly state policy objectives to take into account in administering such auctions. It *could* be argued that the explicit mention of the ability to conduct competitive auctions implies the Minister should ensure a fair return from those auctions; however the preceding reference in section 5(1.1) to the policy objectives of the *Telecommunications Act* (which are largely public-interest focused) largely negates this implication.
- 17) Nothing in the *Radiocommunication Act* regulations¹³ would suggest the policy objectives asserted by the Bell, TELUS or Rogers.
- 18) Section 7 of the *Telecommunications Act* lists nine policy objectives that guide telecommunications policy (including the licensing and use of spectrum). Bell's asserted "key objective" is not included in this list, either explicitly or by analogy. The objectives speak largely to social goals rather than economic goals.
- 19) Potentially, objectives 7(b), 7(g), and 7(h), if interpreted broadly enough, could support the idea of requiring a fair return for auction revenues:

(b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada;

⁸ SC 1993, c 38, online: <<http://canlii.ca/t/529v1>>.

⁹ Industry Canada, "SPFC — Spectrum Policy Framework for Canada" (June 2007), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08776.html>>.

¹⁰ Industry Canada, "Framework for Spectrum Auctions in Canada" (March 2011), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01626.html>>.

¹¹ Minister of Industry, "Digital Canada 150" (2014), online:

<<http://www.ic.gc.ca/eic/site/028.nsf/eng/00576.html>>.

¹² See: *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 SCR 27 at para 21.

¹³ SOR/96-484, online: <<http://canlii.ca/t/527r8>>.

(g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services;

(h) to respond to the economic and social requirements of users of telecommunications services;

- 20) These objectives speak to the economic condition of Canadians, and it could be argued that by increasing revenues through the auction of public resources, the Government could allocate the money towards programs that achieve those objectives (for example, a subsidy for affordable rural wireless service based on auction revenues for licenses in rural areas).
- 21) However again, taken together in context of the purpose of the Act, the objectives of section 7 clearly show a focus towards the *social* benefits for individual Canadians through the use of telecommunication services, rather than the possibility of economic benefits resulting from public programs funded by revenues from telecommunications service providers.
- 22) Given that the policy objectives of the *Telecommunications Act* are largely social goals rather than specific economic results, Bell's assertion is not supported. While a "fair return" would likely be included as a possible result of a spectrum auction, it is by no means a "key objective." Rogers and TELUS's lesser assertions are poorly supported as well.
- 23) The single guiding policy objective of the *Spectrum Policy Framework for Canada* for managing radio frequency spectrum is: "To maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource." The inclusion of "economic ... benefits" if interpreted broadly enough, could support the 'taxpayer subsidy' and 'auction revenue maximization' premise, but in context, such a broad interpretation of "economic" would be strained.
- 24) The preamble to Industry Canada's guiding policy objective references the policy objectives in the *Telecommunications Act*.

In managing the radio frequency spectrum resource by the powers conferred by the *Radiocommunication Act*, **and with due regard to the objectives of the *Telecommunications Act*** and other related legislation, the Department will be guided by the following Policy Objective and Enabling Guidelines.

- 25) As discussed above, the *Telecommunications Act* focuses on the social and economic benefits felt by individual Canadians, rather than potential benefits the Government may create through increased revenues. Therefore, a broad interpretation of "economic ... benefits" is not well supported.
- 26) Further, none of the 'enabling guidelines' meant to build on the policy objective in the *Spectrum Policy Framework for Canada* speak explicitly to Bell's asserted "key objective"

either. Guideline (a), “Market forces should be relied upon to the maximum extent feasible” could be broadly interpreted to mean that a public auction process (i.e. market forces at work) should ensure spectrum is licensed at appropriate market rates.

- 27) However this would still not make auction revenue a “key objective” as Bell has claimed. Especially since the guideline says “to the maximum extent feasible,” and arguably the Government, Industry Canada, the Competition Bureau and perhaps now the CRTC are each coming to the view that more competition is needed in the wireless market from non-incumbents.
- 28) While many sources of spectrum policy include ‘economic benefits’ and reliance on ‘market forces’ in their objectives which, if interpreted broadly enough, could support a *notion* of a fair return for the use of public spectrum, these policy sources read in their entirety clearly have placed the focus of any benefits resulting from the use of spectrum on *individual* Canadians, rather than indirectly benefitting taxpayers through increased revenues to the Government.
- 29) The *Framework for Spectrum Auctions in Canada*, Industry Canada’s more narrowly focused policy for spectrum auctions, simply references the *Spectrum Policy Framework for Canada*¹⁴ above as its guiding policy, and therefore the same analysis would generally apply. The lack of additional rules or direction speaking to revenue generation in this document essentially rules out the assertions made by the Big Three.
- 30) The *Framework for Spectrum Auctions in Canada* does provide two extra conditions that guide whether spectrum licenses should be granted through an auction:
- whether the demand for spectrum is expected to exceed the available supply and
government policy objectives can be fully met through the use of an auction.
- 31) These conditions essentially restate the objective and enabling guidelines of the *Spectrum Policy Framework for Canada*, and do not provide any added support for the ‘maximizing spectrum revenues’ premise.
- 32) Each policy framework for the most recent spectrum auctions (AWS-1,¹⁵ 700MHz/BRS,¹⁶ and AWS-3¹⁷) reference the *Spectrum Policy Framework for Canada*, and provide no

¹⁴ Industry Canada, “Framework for Spectrum Auctions in Canada” (March 2011), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01626.html>>.

¹⁵ Industry Canada, “Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range” (November 2007), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08833.html>>.

¹⁶ Industry Canada, “Policy and Technical Framework: Mobile Broadband Services (MBS) — 700 MHz Band, Broadband Radio Service (BRS) — 2500 MHz Band” (March 2012), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10121.html>>.

evidence of a ‘taxpayer subsidy’ or ‘auction revenue maximization’ view of spectrum auctions.

- 33) The added policy directions noted in the 700MHz/BRS and AWS-3 documents are:

sustained competition in the wireless telecommunications services market so that consumers and businesses benefit from competitive pricing and choice in service offerings;

robust investment and innovation by wireless telecommunications carriers so that Canadians benefit from world-class networks and the latest technologies; and

availability of these benefits to Canadians across the country, including those in rural areas, in a timely fashion.

- 34) None of these objectives support the ‘taxpayer subsidy’ or ‘auction revenue maximization’ view. Arguably, increasing revenues from spectrum license auctions would put companies at a disadvantage for investment in innovation and sustained competition through reducing available capital.

- 35) Finally, nothing in Canada’s digital economy strategy, “Digital Canada 150” supports the ‘taxpayer subsidy’ or ‘auction revenue maximization’ view. The Government’s digital economy strategy includes two broad policy goals that could be applicable to spectrum management:

Canada’s wireless policies will connect Canadians with competitive prices, more choice in services and world-leading technologies in all regions of the country.

The Government will optimize the use of publicly owned wireless airwaves to provide Canadians with the access they need on the devices they choose.

- 36) Neither of these goals directly support the ‘taxpayer subsidy’ or ‘auction revenue maximization’ view, especially in the context of the whole document which focuses on the affordability and availability of services to individual Canadians rather than government revenues. The document also references several Industry Canada documents regarding previous spectrum auctions (e.g., the 700MHz auction) which in turn reference the *Spectrum Policy Framework for Canada* above.

- 37) The sole source of direct support for these assertions is Industry Canada’s first issue of the *Framework for Spectrum Auctions in Canada*,¹⁸ published in 1998, shortly after the

¹⁷ Industry Canada, “Consultation on the Technical, Policy and Licensing Framework for Advanced Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)” (28 July 2014), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10851.html>>.

¹⁸ Industry Canada, “Framework for Spectrum Auctions in Canada” (August 1998), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09970.html>>.

Radiocommunication Act was amended to allow competitive bidding as a method to award spectrum licenses.¹⁹ The document states in its introduction:

Auctions offer a number of advantages, such as the ability to promote economically efficient use of spectrum, openness and objectivity as an assignment mechanism, procedural efficiency, and the ability to return appropriate compensation to Canadian taxpayers for the use of a public resource.

- 38) Note the language used: a non-exhaustive list of objectives, focused on the benefits Canadians will derive through the use of a *public* resource. Taxpayer revenues were by no means a “key” objective, merely one consideration among several that Industry Canada was balancing in the framing of their initial auction policy, in the nascent years of the wireless industry. Note also the amendments to the *Radiocommunication Act* allowing competitive bidding also created section 5(1.1), the reference to the socially-focused *Telecommunications Act* policy objectives.
- 39) Along with the analysis above, the importance of the ‘taxpayer compensation’ objective in the current economic context can be inferred from its explicit omission from the most recent *Framework for Spectrum Auctions in Canada*, issued in 2011. The 2011 auction policy is based on the new *Spectrum Policy Framework for Canada*, which represents the “modernization” of spectrum policy in the now \$44.8 billion telecommunications industry. As former Industry Canada Telecommunications Policy Branch Director General Leonard St-Aubin states in the opening to the policy:

The new Framework has been streamlined, shortened, **updated, and reoriented to reflect current practices and current government policy**. The update takes into account comments received during an extensive public process over the past year. Its effect will be to consolidate and **clearly communicate to all spectrum stakeholders evolutionary changes in the Department's approach to spectrum stewardship**, which have taken place over the past several years. [emphasis added]

- 40) Clearly, focusing on short-term income was not significant enough to survive the “evolutionary changes” in spectrum policy. Perhaps at one point in the past, when it was unclear how the telecommunications industry would evolve, the Government was concerned about receiving a fair return for the public resource they were licensing. Today, modern communications technologies are an integral part of Canadians’ everyday lives, and there are far more pressing issues related to the social and economic benefits Canadians receive or should be receiving through the use of their public resources, than auction revenues.

¹⁹ Canada, Bill C-31, *Budget Implementation Act, 1996*, 2nd Sess, 35th Parl, 1996, online: <<http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=2329470&File=139#33>>.

- 41) In light of the foregoing, and the repeated claims in support of the ‘taxpayer subsidy’ or ‘auction revenue maximization’ view, PIAC recommends that Industry Canada dismiss the view that auctions are principally about revenue maximization. Were that actually to be the case that auctions should maximize revenue, PIAC repeats its view that wireless customers’ savings on wireless bills from more competition could easily outweigh any one-time reduction in auction revenues.

2. Specific Comments on Material Issues

(I) Set-Aside and Eligibility

- 42) Bell, TELUS and Rogers have argued that a set-aside would inappropriately deprive taxpayers of a fair return on the spectrum being auctioned.²⁰ PIAC has addressed the misconceived basis of these arguments above.
- 43) Bell at least appears to have accepted the path that the Department is on, and proposed only moderate adjustments to the proposed technical, policy and licensing framework. Rogers and TELUS, on the other hand, have proposed major deviations from the Department’s proposals.
- 44) Rogers proposed that the Department “licence all 50 MHz of the AWS-3 spectrum using an open bidding format.”²¹ Rogers has also attempted to put the Transfer Framework into issue in the current consultation, which PIAC believes is out of scope (and already the subject of judicial review by TELUS).
- 45) TELUS proposed licensing the AWS-3 spectrum in 5 generic blocks using the combinatorial clock auction (“**CCA**”) format. PIAC believes that the generic blocks proposal should be rejected, and there to be no need for an overly complex and controversial CCA auction format that generated widely held concerns over its complexities and uncertainties in the context of the 700 MHz auction.
- 46) TELUS invokes the colourful imagery of “continuing to press the choke on the lawnmower when the engine won’t start,” and the “entrant engine” being “flooded” with spectrum.²² On its face, TELUS’ analogy may seem applicable, however, it ignores the evidence of the smaller competitors who have been stonewalled or been subject to unreasonable delays in their attempts to develop their service; for example, the difficulties in obtaining reasonable tower sharing agreements from the incumbents that are necessary to make use of spectrum.

²⁰ Bell at paras. E7, 20-21 and 28; TELUS at para. 4; Rogers at para. 16.

²¹ Rogers at para. 22.

²² TELUS at para. 5.

In AWS-1 new entrant Vidéotron's words, measures are indeed necessary to "*desserrer la mainmise*" – loosen the stranglehold (or "choke") of the incumbents on national spectrum resources.²³ As AWS-1 new entrant Eastlink noted in its comments, "new entrants have and continue to face significant challenges, many of which are artificially imposed by the incumbents."²⁴ The notion of larger players with market power imposing difficulties on smaller competitors also finds support in the Competition Bureau's submission to the Canadian Radio-television Telecommunications Commission's proceeding on wholesale wireless services.²⁵

- 47) In terms of eligibility to bid on the set-aside spectrum, PIAC questioned why the Department would not allow greenfield wireless entry in Canada from those who may not currently be providing service using AWS-1 spectrum; unless the answer is that the Department wishes to elicit a potential consolidation, either from amongst the AWS-1 new entrants, or from outside, through the incentive of the set-aside.
- 48) As Xplornet argued, suggesting a possible interest in the AWS-3 spectrum, "to maximize the potential for competition," the set-aside GHI block should be available to all entities that are "not a [fixed or mobile] Large Wireless Service Provider (LWSP) and should not be restricted to only existing mobile service providers."²⁶
- 49) A number of parties, such as Tbaytel²⁷ and Cogeco,²⁸ noted that the current eligibility proposal (operating new entrant) will result in only one new entrant being able to bid, or at worse, none. Cogeco, while "supportive of the Department's efforts to promote competitive entry in Canada's mobile wireless market," also questioned whether the auction design, and specifically the set-aside eligibility and tier sizes, was designed intentionally to result in a "pre-determined" outcome: only one new entrant that can bid on the set aside spectrum in a given licence area.²⁹
- 50) Niagara noted that "LWSP's [*sic*] have an enormous 'head start' in the market and the means to distort and open bidding process. This is by virtue of established networks and large subscriber bases producing significant positive cash flows. Thereby LWSP's [*sic*] have the necessary ability and impetus to prevent new entrants from acquiring spectrum in an open bidding process."³⁰
- 51) Eastlink, while generally in agreement with all of Industry Canada's proposals, raised a concern that the proposed eligibility criteria relating to "the subscribership in the service

²³ Vidéotron at para. 23.

²⁴ Eastlink at para. 7.

²⁵ Submission of the Competition Bureau to the CRTC in Telecom Notice of Consultation CRTC 2014-76, Review of wholesale mobile wireless services. (15 May 2014) at para. 8 *et seq.*

²⁶ Xplornet at paras. 22-26.

²⁷ Tbaytel at paras. 11-12.

²⁸ Cogeco at para. 22.

²⁹ Cogeco at paras. 4, 22 and 28.

³⁰ Niagara at 6.

area” could result in otherwise operating new entrants being ineligible to bid due to “temporary” lack of subscriptions in a given market, despite network infrastructure and wholesale arrangements being put in place. These delays may not even be in the entrant’s control, for example an insufficient subscriber market could be “due to incumbent-imposed network deployment delays and a limited device ecosystem” as a result of the new entrants’ often asymmetrical or less standard spectrum holdings.³¹

- 52) In light of this, PIAC suggests that refinements to the eligibility criteria for the competitor set-aside should be made to boost participation in the AWS-3 spectrum, including disaggregating the combined AWS-3 set aside block into its constituent G, H and I blocks of paired 5 + 5 MHz spectrum, and auctioning either one block of paired 10 MHz spectrum and 1 block of paired 5 MHz spectrum or three blocks of 5 MHz spectrum.³²
- 53) PIAC also agrees with WIND’s recommendation in respect of set-aside eligibility that “the Department clarify that the eligibility criteria cannot be satisfied through a network sharing arrangement(s) with a LWSP [...]”, thus “defeating the point of such a set-aside.”³³
- 54) PIAC also believes that SaskTel’s proposal that where there is no bid on the set-aside block, the block should be put to an open auction, is reasonable.³⁴ This is not dissimilar to TELUS’s proposal that the auction of open AWS-3 spectrum follow the auction of set-aside spectrum so that any unlicensed set-aside licences can then be auctioned.

(II) Band Plan

- 55) No parties opposed the Department’s proposal to generally follow the U.S. band plan. Rather, there was widespread support for that proposal.
- 56) PIAC generally supported the Department’s proposal to use the same band plan as currently used in the United States, but questioned whether the G, H and I blocks ought to be combined into one combined 15 + 15 MHz block, and whether the policy objectives could be achieved by allowing more than one operating new entrant per service area into the set-aside. As TELUS noted, “the small block (5+5 MHz) vs large block (10+10 MHz) dynamic is simply a licensing issue, not a technology issue. ... How the underlying five 5 + 5 MHz blocks are parsed up can simply be driven by the desired policy.”³⁵

³¹ Eastlink at paras. 16-17.

³² In making this suggestion, PIAC notes, but does not rely on, the developing potential for “carrier aggregation” – the pairing of contiguous and non-contiguous spectrum, intra-band and inter-band spectrum to vastly enhance the spectral efficiency of a given channel, *i.e.*, to deliver high data volume using less spectrum than previously required.³² At the same time, carrier aggregation will not likely be helpful for new entrants in the near future because they would need to replace or upgrade their network equipment and transition to LTE, and wait for a suitable (and cost-effective) device ecosystem to emerge before then having to wait for subscribers to migrate to the new devices.

³³ WIND at paras. 4 and 14.

³⁴ SaskTel at para. 6.

³⁵ TELUS at para. 39.

- 57) Bell and TELUS, proposed alterations to the band-plan that would move the set-aside block(s) away from the AWS-1 F block (currently either licensed to Bell or TELUS) such that at least the G block and perhaps others would be available in the open auction to LWSPs. Rogers has expressed its support for the Department's proposed band plan (with the G, H and I blocks set aside), in the event that the Department proceeds with a set-aside.³⁶
- 58) Bell proposed that rather than combine the G, H and I blocks for the 15 + 15 MHz set-aside, the Department combine the 5 MHz I and 10 MHz J blocks for a combined 15 + 15 MHz set-aside, while leaving the 5 + 5 MHz G and H blocks as "open spectrum". Bell's stated reason for its proposal is "it supports new entrants by enabling a 15X15 MHz block of contiguous spectrum" and "facilitates that efficient use of the AWS-3 non-set-aside spectrum in that it enables contiguity of the 'open auction' spectrum to the AWS-1 band and therefore also more closely mirrors the U.S. band plan."³⁷
- 59) TELUS, in addition to proposing that the Department fundamentally change most of the key proposals,³⁸ recommends that if the Department proceeds with a set-aside, that the J block (consisting of 10 + 10 MHz of paired spectrum, and thus 10 MHz less spectrum set-aside overall) be the set-aside block.
- 60) As between the Bell and TELUS proposals, which seem designed only with the those two associated entities' best interests in mind,³⁹ at the very least the Bell proposal does not cut the amount of set-aside spectrum by a third, and thus is more favourable. However, PIAC questions whether the new entrants stand to lose from such a proposal. Were a new entrant to gain access to the combined GHI block (or to the disaggregated G block as proposed by PIAC), it stands to reason that such a new entrant may be in a better bargaining position with the incumbents who may wish to negotiate a commercially reasonable sub-licensing agreement with them, as part of a broader negotiation of other wholesale issues. As such, PIAC recommends that the Department reject Bell's changes to the band plan.

(III) Deployment Obligations

- 61) The Department is proposing a 5-year deployment requirement based on the Tier 2 service area, and a 10-year deployment requirement based on the Tier 3 service area.

³⁶ Rogers at para. 23.

³⁷ Bell at para. 17.

³⁸ In addition to proposing to change the set-aside block and reduce the overall amount set aside by 10 MHz, TELUS has proposed that a set-aside is altogether unnecessary and instead proposes a LWSP auction cap of 10 MHz, and that the AWS-3 spectrum be divided into 5 generic blocks and auctioned using the combinatorial clock auction format. PIAC does not address these outlier proposals. Most of the parties support the proposed band plan and the concept of a set-aside, as well as the straightforward nature of a sealed-bid, second-price auction.

³⁹ See: Industry Canada, "Auction of Spectrum Licences for Advanced Wireless Services and Other Spectrum in the 2 GHz Range — Summary by Licence Block" (2008), online: <<https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09011.html>>; all but two of the AWS-1 F blocks (adjacent to the AWS-3 G block) are owned by either Bell or TELUS.

- 62) PIAC believes that in furtherance of the policy objectives, licensees of AWS-3 spectrum should be required to deploy service for the benefit of all Canadians, not just those living in more populated areas. PIAC therefore recommended a strengthening of the deployment obligations.
- 63) PIAC was not alone in recommending more stringent deployment obligations.
- 64) Xplornet argued that “the proposed deployment requirements fail to reflect the urgent need Industry Canada claims to exist” for mobile wireless services. “A mobile wireless service provider could achieve the proposed minimum deployment requirements for the AWS-3 band by deploying in a few large cities.”⁴⁰
- 65) The Professors also argued that the deployment conditions should be strengthened, noting as did PIAC that while the Tier 2 and Tier 3 targets are the same from the AWS-1 spectrum auction, and for the upcoming 2500 MHz spectrum auction, the Tier 3 timeline is 10 years instead of 5. The Professors proposed either (i) to make the Tier 3 deployment obligations a 5-year obligation or (ii) to increase the 10-year Tier 3 deployment obligations to be greater than the “10, 15 or 20 percent” that several tiers currently have.⁴¹
- 66) Vidéotron, on the other hand, asked for a two-year extension to the deployment 5-year and 10-year timelines, citing the present lack of an ecosystem for equipment in the band.⁴²
- 67) As noted by TELUS, in support of Tier 2 licensing, “with this opportunity [for operating entrants to acquire set-aside spectrum] comes the responsibility to follow through,” and “Industry Canada presumably wants these WSPs to be provided the opportunity to expand beyond top urban markets as their networks mature.”⁴³ TELUS therefore recommended that Industry Canada “add teeth to its deployment requirements or revisit whether Tier 3 licenses be used for the restricted spectrum,” and recommends that failure to meet the ten-year deployment obligations which TELUS states are not “particularly onerous” then the licences should be recalled by Industry Canada.⁴⁴
- 68) PIAC therefore repeats the call for strengthened deployment obligations as proposed in PIAC’s initial comments: Tier 3 deployment requirements should be adjusted upward significantly, by 2.0 times in “urban” areas, and at least 1.5 times in non-urban areas. PIAC also recommends against Bell’s proposal that the set-aside spectrum be licensed on a Tier 3 basis and that only urban spectrum be made subject to the set-aside.⁴⁵ In PIAC’s view this proposal would limit, artificially, the benefits of more competition to urban areas, and should

⁴⁰ Xplornet at paras. 34-35.

⁴¹ Professors at para. 6.

⁴² Vidéotron at paras. 3. and 36-42.

⁴³ TELUS at para. 57.

⁴⁴ TELUS at paras. 57 and 60.

⁴⁵ Bell at para. 23.

be rejected. While PIAC supports increased deployment obligations, PIAC does not support TELUS' proposal for a *mandatory* recall of spectrum that has not met the obligations, given the difficulties and delays the new entrants have had with, for example, tower and site sharing agreements with the incumbents.⁴⁶

(IV) Tier Size

- 69) The Department has proposed using the Tier 2 licence area, which consists of 8 provincial/territorial areas and 6 sub-provincial areas (in Quebec and Ontario), for both blocks.
- 70) ABC disagreed with using Tier 2, arguing that the large tier size and limited number of blocks of AWS-3 spectrum available would have the effect of shutting out small regional and rural operators, and that AWS-1 new entrants in British Columbia have not deployed in ABC's serving areas (rural and northern British Columbia). ABC recommended using Tier 4 licence areas instead on the basis that this would increase the use of auctioned spectrum, and foster healthy and competitive regional markets.⁴⁷
- 71) The ITPA also expressed concern with the Tier 2 proposal, arguing that this proposal is "biased towards large companies to the detriment of smaller service providers that could also make use of this spectrum, especially in rural Canada, to compete in the market."⁴⁸ In ITPA's view, the use of Tier 2 service areas "instantly eliminates ITPA members, and likely other interested, smaller service providers, from participating in this auction..."⁴⁹
- 72) Xplornet argued that the AWS-3 spectrum should be auctioned at the Tier 3 level, stating that "[t]he use of the Tier 2 band limits the participants in the proposed auction to well-funded, large mobile carriers, which runs contrary to the attempt to set aside spectrum for smaller industry participants that have less than 10% market share."⁵⁰ Xplornet argued that Tier 3 licensing would make "strategic entry" possible by new entrants with less capital than the LWSPs who may be willing to serve areas outside of large cities.⁵¹
- 73) Bell proposed that "the set-aside spectrum be licensed on a Tier 3 basis and that only urban spectrum be made subject to the set-aside provision."⁵² Bell bases this argument on the view that new entrants will only want urban spectrum.⁵³

⁴⁶ See the evidence on the record for the CRTC Telecom Notice of Consultation 2013-685 and CRTC Telecom Notice of Consultation 2014-76 proceedings.

⁴⁷ ABC at paras. 12-14.

⁴⁸ ITPA at paras. 4-5.

⁴⁹ ITPA at para. 6.

⁵⁰ Xplornet at para. 13.

⁵¹ Xplornet at paras. 14-16.

⁵² Bell at para. 23.

⁵³ Bell at para. 19.

- 74) The FMMC, while supportive of the principle of a Tier 2 model, also expressed concern “with the geographic and population metrics used to determine existing tiers and corresponding licences.”⁵⁴
- 75) Tbaytel takes issue with Tier 2 licensing, at least in Northern Ontario, stating that “due to the vast geographic area and sparse population ... Tbaytel has to withdraw from the previous AWS and 700 MHz Auctions as the successful bid amounts lacked a business case in Tbaytel’s eyes. Therefore, Tbaytel had to bow out before the auctions closed.”⁵⁵
- 76) PIAC supported the Tier 2 proposal as it is consistent with the licence areas for the similar AWS-1 spectrum, but recommended that the AWS licences come with higher deployment obligations. PIAC continues to believe that Tier 2 licensing, with appropriate deployment obligations, is suitable, as do a number of other diverse parties such as WIND,⁵⁶ MTS,⁵⁷ Vidéotron,⁵⁸ Rogers⁵⁹ and SSI⁶⁰ citing a variety of technological and licensing efficiencies.
- 77) At the same time, and in keeping with PIAC’s comments about the AWS-3 auction enabling more new entry, PIAC believes the Department should consider whether Tier 3 licensing may be better suited to achieving the policy objectives on the basis of demand by smaller players to acquire the spectrum., while taking into consideration how that may impact the prospect of a strong fourth national player emerging to provide maximum discipline in the marketplace.

(V) Proposals to delay the AWS-3 auction

- 78) Three parties, Bell, SaskTel and Tbaytel, have asked Industry Canada to delay the AWS-3 auction in one way or another.
- 79) Bell has proposed delaying the non-set-aside portion of the AWS-3 auction for a period of one to two years to “enable national and regional incumbents to focus capital resources in the near term on the planned deployment of network upgrades as well as more rapid deployment, including in rural and remote areas, of the 700 MHz spectrum acquired earlier this year.”⁶¹
- 80) SaskTel has proposed that the Department postpone the entire auction for “a couple of months” until the CRTC has finalized its proceedings in respect of roaming, speculating that those proceedings will result in “substantially reduced roaming rates for new entrants” which

⁵⁴ FMMC at para. 6.
⁵⁵ Tbaytel at para. 9.
⁵⁶ WIND at para. 6.
⁵⁷ MTS at para. 6.
⁵⁸ Vidéotron at paras. 11-4.
⁵⁹ Rogers at paras. 13-14.
⁶⁰ SSI at para. 18.
⁶¹ Bell at para. E4.

will place a greater burden on “existing facilities-based carriers to carry all traffic from all companies, especially in low-population density areas.”⁶² The premise of SaskTel’s request is the belief that “[m]andated low-cost roaming may continue for a significant length of time reducing the likelihood that new entrants would be willing to pay for access to this spectrum, or to construct the facilities necessary to put the spectrum to use in serving consumers.”⁶³ In SaskTel’s view, “this spectrum is too valuable to be rushed into the marketplace.”⁶⁴

- 81) Xplornet, while not proposing a delay to the AWS-3 auction, notes that financial deposits for both the AWS-3 auction and the 2500 MHz auction are both due on January 30, 2015.⁶⁵ As Xplornet notes, this runs counter to the Department’s stated objective of allowing 2500 MHz auction participants to have factored in the AWS-3 auction. Xplornet further notes that requiring both deposits on the same day “forces smaller participants to commit to only one auction process and, if they are unsuccessful, leaves them shut out from using the same funds to participate in the other auction.”⁶⁶
- 82) Tbaytel, noting that “the upcoming 2500 MHz (BRS) Auction and 3500 MHz Consultation leave a lot for a small regional wireless carrier to contemplate at one time,” proposes that the AWS-3 auction be delayed until 2016.⁶⁷
- 83) To accommodate the reasonable concerns with timing, PIAC recommends that Industry Canada hold the AWS-3 auction in the latter half of 2015 after the 2500 MHz auction, and after the CRTC has made its determinations in respect of the wholesale mobile wireless frameworks.
- 84) PIAC does not, however, think that the auction should be bifurcated between the set-aside and open blocks, as Bell proposes, unless Industry Canada can determine that the impacts of such a bifurcation (and delayed auction of the open auction relative to the set-aside auction) will not unduly impact the new entrants. PIAC also notes that in the *Commercial Mobile Spectrum Outlook*, which took into account the then already-announced 700 MHz auction and 2500 MHz auction, Industry Canada stated that “It is anticipated that the AWS-3 bands will be available for licensing as early as 2015.”⁶⁸

⁶² SaskTel Comments at paras. 2 and 9.

⁶³ SaskTel at para. 3.

⁶⁴ SaskTel at para. 4.

⁶⁵ Xplornet at paras. 57-63.

⁶⁶ Xplornet at para. 60.

⁶⁷ Tbaytel at para. 28.

⁶⁸ Industry Canada, *Commercial Mobile Spectrum Outlook* (March 2013), online: <<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09444.html>> at 26.

3. Conclusion

- 85) The AWS-3 spectrum auction is an important opportunity to continue to follow through on the objective of making the social and economic benefits from wireless competition, investment and innovation, to be available to all Canadians, including those in rural areas, in a timely fashion. That is the goal, not auction revenue maximization.
- 86) Subject to PIAC's comments about making it possible for more competitors to enter the AWS-3 band, and strengthening the deployment obligations, PIAC continues to believe that the Department's proposals support that objective.

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