



**TELUS COMMUNICATIONS COMPANY**

**Reply Comments for**

**CONSULTATION ON A LICENSING FRAMEWORK  
FOR MOBILE BROADBAND SERVICES (MBS) —  
700 MHz Band**

DGSO-002-12

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Spectrum Management and Telecommunications

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## Executive Summary

1. TELUS appreciates the opportunity to provide reply comments and in doing so makes the following general observations:
2. The 700 MHz spectrum to be made available in this auction affords one irretrievable opportunity to ensure that Canadians have available to them sufficient spectrum in order to satisfy their rapidly increasing demand for mobile broadband services (MBS). The consequences of error are profound for both consumers and the industry alike and TELUS encourages the Department to consider carefully its determinations flowing from this consultation.
3. The Department has stated that in developing a licensing framework for MBS in the 700 MHz band, Industry Canada will be guided by the objectives stated in section 7 of the *Telecommunications Act*, the policy objective stated in the Spectrum Policy Framework for Canada (SPFC) to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum, and the policy objectives outlined in SMSE-002-12, as follows:
  - sustained competition in the wireless telecommunications services market such that consumers and businesses benefit from competitive pricing and choice in service offerings;
  - robust investment and innovation by wireless telecommunications carriers such that Canadians benefit from world-class networks and the latest technologies; and
  - an availability of these benefits to Canadians across the country, including those in rural areas, in a timely fashion.
4. TELUS directionally supports the Department's proposed approaches with some suggested general and specific recommendations for modification to ensure that the benefits of competition, investment and innovation are delivered to the broadest number of Canadians possible, in particular rural Canadians, in a timely fashion.

5. In its reply comments TELUS builds upon its initial recommendations and supports or opposes comments of others with reference to the aforementioned objectives.
6. There were a wide range of unsolicited recommendations to alter in some form the March 14<sup>th</sup>, 2012 SMSE-002-12 decision. TELUS considers these recommendations outside the scope of the current consultation.
7. In its reply comments TELUS notes there appears to be considerable confusion about the definition and the rules regarding associated entities and TELUS recommends further clarification from the Department.
8. Furthermore, the replies of at least nine carriers contemplated the possibility of understandings or agreements with other carriers. Given these perspectives, the limited spectrum available, and the incompatibility of the various blocks, TELUS now believes and submits in its reply that open (non-anonymous) bidding is the best and most prudent approach in order that the Department's objectives are realized. While TELUS appreciates the rationale for anonymous bidding, block incompatibility has not been as critical an issue in previous combinatorial clock auctions (CCAs) where anonymous bidding has been used.
9. TELUS' recommendations are summarised below.

#### **Auction Format and Rules**

- TELUS has notable concerns with the CCA format but on balance does not recommend eliminating the CCA in favour of an alternative format.
- TELUS advocates open bidding as it provides better transparency and the opportunity for all operators to realise greater operational benefits stemming from greater spectral efficiencies.
- TELUS cautiously supports the generic blocks as proposed.
- TELUS supports bid increments of between 5% and 10% to a maximum of \$10M on a per licence basis.

- TELUS supports inclusion of financial deposits on a weekly basis which would be able to support respective peak bids of auction participants, to mitigate gaming.
- TELUS urges the Department to release the auction software at the earliest opportunity.
- TELUS supports the reserve prices and deposits, but suggests lower opening bids would improve price discovery.
- TELUS recommends that the proposed unpaired spectrum eligibility points be adjusted.

#### **Conditions of Licence**

- TELUS endorses the comments of the Canadian Wireless Telecommunications Association with respect to the proposed wording of the condition of licence related to lawful intercept requirements.
- TELUS requests that the Department issue a decision removing the condition of licence related to R&D.
- TELUS believes the Department and industry must be more ambitious with the general deployment requirements and reviews the 7 potential issues and consequences TELUS outlined in its initial submission. TELUS reiterates its proposal for modifications to the MBS general deployment requirements.
- TELUS recommends greater transparency and certainty with respect to remedial action in the event of a breach of the deployment requirements.

#### **Bidder Participation – Affiliated and Associated Entities**

- TELUS supports the amendments the Department has proposed to the treatment of associated entities for the purposes of the 700 MHz spectrum auction. With respect to auction integrity and transparency, TELUS proposes clarifying language to describe the features of the Department’s proposed narrative.

- TELUS fully supports the Department's proposed updates to the rules prohibiting collusion that would apply to bidders in the 700 MHz auction.
- TELUS proposes some minor updates to the wording for the proposed condition of licence on spectrum aggregation limits that would help improve clarity.
- TELUS proposes some minor modifications to the wording for the proposed condition of licence related to transferability and divisibility that would help improve clarity.

#### **Training and Access to Information**

- TELUS recommends providing schedules and establishing a process where potential bidders can get access to information as soon as possible.
- TELUS recommends providing at least two training sessions / mock auctions well in advance.
- TELUS supports making accessible bidding tools, user guides, bid templates, output file formats, etc. at least three months in advance.

#### **General**

- TELUS recommends that, as proposed by the Department, the existing allocation of the City of Lloydminster to the Alberta tier 2 serving area be maintained in order to minimize technical interference issues and customer confusion.
- TELUS rejects the submissions of Rogers and Mobilicity calling for amendments to the spectrum aggregation limits published in SMSE-002-12.

10. Greater detail behind TELUS' reply submission is provided in the main body of this document.

## TELUS' Reply to Specific Questions Posed by Industry Canada

### 3. General

#### 3.1. Service Area for Lloydminster (Alberta/Saskatchewan)

Industry Canada is seeking comments on whether or not the service area boundary for licences in the 700 MHz band should deviate from the provincial boundary around the City of Lloydminster, (Alberta/Saskatchewan)

11. In this consultation, the Department has proposed that the service area boundary for the City of Lloydminster for licences in the 700 MHz band should follow current practice and fall within the province of Alberta and has requested that interested parties comment.
12. The Department's proposal would mean that all current mobile spectrum bands<sup>1</sup> in Lloydminster were allocated on the basis of the same standard *Service Areas for Competitive Licensing*<sup>2</sup> - Cellular 850, PCS, AWS and MBS.
13. The situation in Lloydminster seems comparatively simple. Only three operators commented on the issue – TELUS, SaskTel and Rogers. Rogers and TELUS support the Department's proposal to continue to deviate from the provincial boundary around the City of Lloydminster while SaskTel is the only party which opposes the Department's proposal.
14. The weakness of SaskTel's position in this matter is underscored by the fact that it does not claim the entirety of Lloydminster but just the portion that is inside the province of Saskatchewan. SaskTel wants this third back simply because they provide wireline services there. However, SaskTel does not acknowledge that wireline and wireless boundaries are not administered in the same way and never have been. The Department

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<sup>1</sup> In 2000, the entirety of the City of Lloydminster was included as part of service area 2-12 (Alberta) for the purposes of the auction of additional PCS spectrum. The Department has recently clarified that a special authorization that was granted to SaskTel to provide services in the Cellular 850 band in the Province of Saskatchewan, including the Saskatchewan side of the City of Lloydminster, expired with the issuance of new licences on April 1, 2004. AWS spectrum kept the City of Lloydminster whole as part of tier 2 service area 2-12 (Alberta) and as part of the tier 3 service area 3-44 (Edmonton), logically placing it in the Alberta licence hierarchy as part of Industry Canada's standard *Service Areas for Competitive Licensing*.

<sup>2</sup> [http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h\\_sf01627.html](http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01627.html)

has a longstanding policy with respect to mobile spectrum licence areas of deviating from borders where they intersect population centres for important technology and market reasons.<sup>3</sup>

15. A significant amount of coordination would be required if the border were to be pushed into the city due to additional RF planning and design effort such as how to balance and optimize the traffic among competitor cell sites covering the middle of the city. This would require either new capabilities to be planned, designed and deployed, or a redesign of existing cell sites. The coordination efforts would be significant to allow several competing networks using multiple technologies and bands to coexist in the future in the city, all at a cost ultimately borne by the users.
16. RF optimization can mitigate a certain level of interference in this case but cannot eliminate it all. Users of wireless devices in the middle of the city would bounce back and forth between competitor networks, causing excessive RNC (Radio Network Controller) relocation requests, a high number of dropped calls, and customer dissatisfaction. These problems are avoided by the Department's proposal to continue to deviate around the population centre such that the network borders are out of the city at low traffic areas.
17. SaskTel also makes spurious arguments when they suggest that:

*"Companies wishing to acquire spectrum licences to service the entire province of Saskatchewan would be required to purchase an Alberta licence, or at least an Edmonton licence, to do so. This would obviously not be cost effective unless those companies wish to serve Alberta as well. Any smaller company wishing to service only the City of Lloydminster would face similar challenges. The Department's proposal will preclude any company from doing so."*

While the former is a legitimate albeit minor consequence of the Department's wisdom to deviate around Lloydminster (and ignores subordinate licensing and wholesaling opportunities), the latter is simply incorrect. In fact, with the Department's proposal a smaller company wishing to serve only the City of Lloydminster could purchase one

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<sup>3</sup> See the examples noted by the Department at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf05969.html>. TELUS notes that another border deviation example involves the regional area near Flin Flon, Manitoba, where a portion of a Manitoba area is included as part of a Saskatchewan tier for spectrum licensing purposes.

licence to do so, but would have to purchase two licences if SaskTel's proposal was accepted.

18. SaskTel notes that the current service area tiering puts Lloydminster in the tier 3<sup>4</sup> service area "with Edmonton, a city 234 kilometres away<sup>5</sup>". But SaskTel's proposal would put a fraction of Lloydminster in a tier 3 service area with Saskatoon, a city even further away - 257<sup>6</sup> kilometres.
19. SaskTel holds up its recently issued BRS spectrum licence as an indication that mobile spectrum allocation going forward should be altered to follow the provincial border through Lloydminster. But in fact, SaskTel's BRS licence is a converted fixed service MCS spectrum licence that SaskTel was granted in 2000 to promote learning in Saskatchewan. These fixed service licences were granted at the time on a provincial spectrum block basis. However, all other mobile spectrum deviates around Lloydminster. Converted MCS licences are from a legacy that was not mobile and are outdated.
20. TELUS considers that in the upcoming 2500 MHz Licensing Framework consultation the interested parties may have to reiterate their views on this issue as it relates to the auction of liberated and unassigned 2500 MHz spectrum.

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<sup>4</sup> SaskTel suggests Edmonton is a tier 2 licence in their response to DGSO-002-12 in paragraph 15 but Edmonton is a tier 3 licence.

<sup>5</sup> SaskTel response to DGSO-002-12, paragraph 15.

<sup>6</sup> See: <http://www.timeanddate.com/worldclock/distances.html?n=1101>.

### **3.2. Other General Items (New TELUS section)**

21. TELUS has added this “other general items” section to provide TELUS' reply comments related to several other topics raised by parties in the consultation on which the Department had not solicited input.

#### **Rate of Change of COLs**

22. Bell notes in their initial submission that the Department should not be updating COLs (Conditions of Licence) only a few years into the recently updated COLs defined for the term of the most recently auctioned spectrum (AWS). It is implied that any changes should happen in a more measured fashion. TELUS is of the view that well-justified, balanced, and progressive policy should be the goal of the Department and as long as these criteria are met, speed is a virtue. If COLs need updating, the Department should be encouraged to move quickly following adequate consultation. In this regard, TELUS reiterates its requests that the Department consult, at its earliest convenience, on the current spectrum fee regime which is out of date and out of step with other jurisdictions. TELUS provides further context on this specific issue below in the section discussing licence renewal.

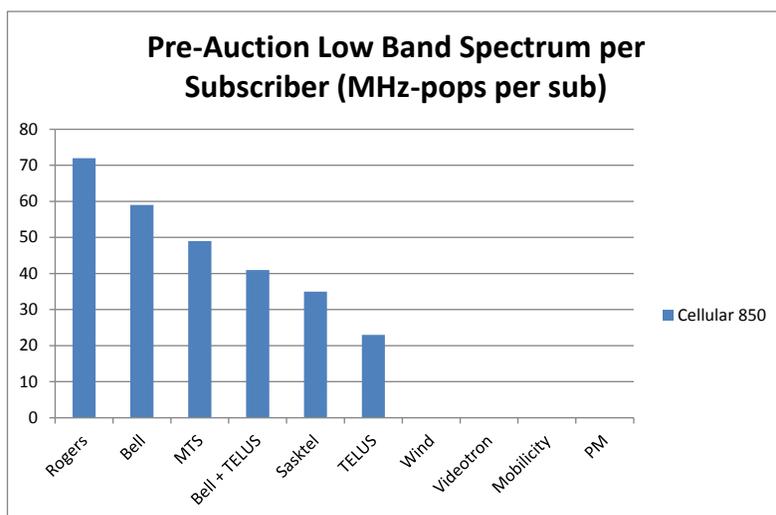
#### **2500 MHz Head Start**

23. Rogers, who already has a national BRS footprint and is in-market with LTE service over its BRS spectrum, has implored the Department to delay the imminent consultation on the BRS Licensing Framework consultation on the basis that there are several issues with the proposed details of the activity rules for the 700 MHz auction. Whether these purported concerns with the auction design are material or not, they do not warrant further delay in the process of getting liberated and unassigned 2500 MHz spectrum into the hands of operators who have been consulting on this topic since 2004. Any CCA design changes contemplated as a result of the 700 MHz consultation can simply flow through as appropriate to the future 2500 MHz Licensing Framework decision. Any further delay in the 2500 MHz process serves only to allow Rogers to further exploit the head start in this band that it is already enjoying.

## Rogers Unique Spectrum Advantage

24. Rogers claims to be “uniquely disadvantaged” in the upcoming 700 MHz auction, but this claim is decidedly incorrect. Rogers raises what it deems serious issues with the spectrum aggregation limits and associated entities rules and their interplay with the auction rules. As a result, Rogers makes recommendations that are self-serving and designed to systemically disadvantage Rogers’ prime competitors.
25. Rogers’ assertion that it is “uniquely disadvantaged” ignores the context in which the Policy decisions and proposed Licensing Framework have been developed. Rogers leads Canada in low band spectrum per subscriber<sup>7</sup> by a wide margin and even if Rogers acquired no spectrum in the 700 MHz auction TELUS could not catch up to Rogers on this metric.

**Figure 1 – Pre 700 MHz Auction Low Band Spectrum per Subscriber (MHz-pops per sub)**



26. Rogers’ assertion that it is “uniquely disadvantaged” is based on the more than questionable assumption that Rogers actually *requires* two paired blocks at 700 MHz. TELUS has no issue with Rogers desiring or succeeding in purchasing two paired blocks

<sup>7</sup> Based on spectrum licence information publicly available through Industry Canada’s website and publicly available subscriber numbers for Canadian carriers for year end 2011. The inclusion of a bar for Bell + TELUS is in no way intended to imply that the companies have any intention of combining spectrum holdings, rather it acknowledges the historical sharing arrangements.

but when considering the Canadian industry context, TELUS cannot possibly support Rogers' assertion that they *need* two paired blocks of lower 700 MHz spectrum.

- a. Rogers holds the most spectrum in every other mobile spectrum band in Canada – Cellular 850, PCS, AWS, BRS – where it can already exploit its wider channel configuration potential for increased efficiencies and speeds.
  - b. Rogers' deep spectrum pool provides flexibility and many forms of network capital and operating efficiencies such as a reduced pressure to cell split to increase capacity.
  - c. Rogers has 25 MHz of Cellular 850 spectrum nationally and LTE 850 is expected to be approaching commercial availability at about the same time that Canadian 700 MHz spectrum licences are issued in late 2013 or early 2014.
  - d. As emphasised in the chart above, Rogers' 25 MHz of national Cellular 850 spectrum serves about 33% of Canada's mobile wireless subscribers. TELUS and Bell, who have reciprocal network access arrangements (largely as a function of the government's allocation of spectrum in the early years on a regional ILEC basis versus nationally to Rogers) have access to less Cellular 850 spectrum than Rogers and serve over 60% of subscribers nationally. This is a very pertinent asymmetry that significantly favours Rogers.
  - e. Rogers asserts that it is appropriate that the deployment obligations for prime 700 MHz spectrum be coverage of between 20 and 50% of the population in a service area within ten years, underscoring its lack of urgent need for this spectrum or its actual intention to rise to the Department's objectives for rural deployment.
27. It is clear to TELUS that two paired blocks is simply a "nice to have" for Rogers. Rogers' claim that there is a serious asymmetry to the spectrum aggregation limits and associated entities rules and their interplay with the auction rules leaving Rogers "uniquely disadvantaged" is inaccurate and ignores Rogers' vast inventory of existing spectrum holdings exceeding every other competitor in every band.

28. This rhetoric of being uniquely disadvantaged is woven throughout Rogers' submission. TELUS respectfully suggests that the Department consider each of Rogers' auction recommendations and in particular its recommendations with respect to changes to the spectrum aggregation limits and both bid restrictions and flexibilities in light of Rogers' apparently self-serving intent.

#### **Unsolicited Recommendations to Alter Published 700 MHz Band Plan and Spectrum Aggregation Limits**

29. Rogers suggests that it is not too late to open up the SMSE-002-12 spectrum aggregation limits decision. In Rogers' view, the Department could still let Rogers bid on two prime paired blocks of spectrum. Rogers notes that to keep the new entrant and regional operators whole, the Department should require "associated large wireless providers" (which we presume refers to TELUS and Bell) to bid jointly subject to a single cap and be limited to a single prime paired block in the lower band. TELUS strongly opposes this recommendation and considers it to be outside the scope of this consultation.
30. Rogers also suggests that it is not too late to open up the SMSE-002-12 band plan decision and aggregate the TDD blocks into one block because Rogers simply claims that "there is no benefit in offering the unpaired spectrum as two 5 MHz blocks". It would appear that Rogers assumes to have the perspective of every other potential bidder in mind. Despite Rogers clearly implying that Rogers itself, if it bid on unpaired spectrum, would bid for both or no blocks, Rogers' proposal would take away a degree of freedom from any bidder priced out of buying both blocks but still interested in one. In short, Rogers' proposal destroys bidder flexibility and choice that is inherent in the Department's already determined band plan. TELUS does not support this recommendation, which, in any event, is outside the scope of this consultation.
31. Mobilicity suggests<sup>8</sup> an amendment to the SMSE-002-12 spectrum aggregation limits decision that boils down<sup>9</sup> to simply making the A block prime spectrum. It is generally accepted that the ecosystem around the A block is years behind the prime blocks and the

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<sup>8</sup> Mobilicity submission paragraph 93(a).

<sup>9</sup> Mobilicity misleads when they suggest in 93(a) that "the 700 MHz A block should be included under the general two block cap". The A block already is included under the general two block cap in the SMSE-002-12 decision.

Department properly excluded the A block from the prime category.<sup>10</sup> Given the structure of the spectrum aggregation limits, this recommendation serves only to affect the five “large carriers” in Canada. Large carriers would have no ability to bid on two paired blocks by combining the A block with a prime paired block. Carriers such as Mobilicity would be unaffected as this recommendation would have no impact on the spectrum aggregation limits or bid flexibility of non-large carriers. Large carriers would now have to bid for a prime paired block *or* the A block but not both. TELUS maintains that this proposal would be very negative for rural deployment. TELUS does not support this recommendation and considers it to be outside the scope of this consultation.

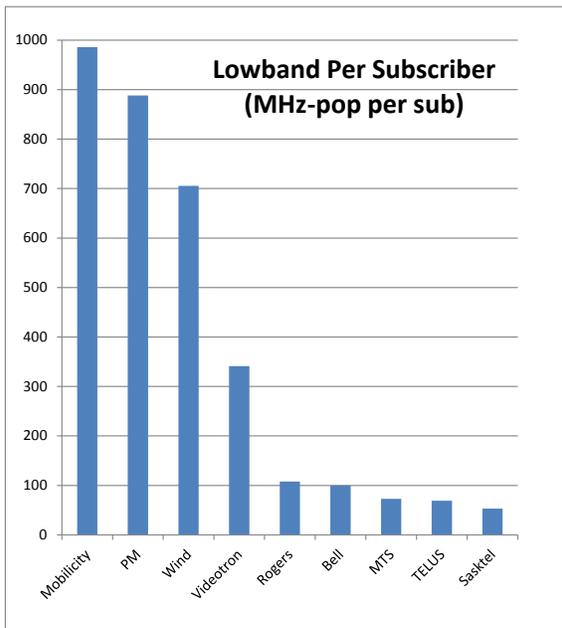
32. Mobilicity further suggests<sup>11</sup> an amendment to the SMSE-002-12 spectrum aggregation limits decision that would have the unpaired blocks count toward a bidder’s spectrum aggregation limits. Given the structure of the spectrum aggregation limits, this recommendation largely serves only to affect the five “large carriers” in Canada. Large carriers would have to choose between one paired block or unpaired spectrum, but not both. Carriers such as Mobilicity would be able to acquire both paired spectrum and unpaired spectrum. TELUS maintains that this proposal would be very negative for rural deployment and is self-serving given the relative subscriber bases of the five established carriers and the newer providers. TELUS also suggests that, as the following table demonstrates, one paired block of 700 MHz spectrum would give entrants somewhere between 30 and 40 times the lowband spectrum per subscriber that TELUS operates with. TELUS does not support this recommendation and considers it to be outside the scope of this consultation.

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<sup>10</sup> See the Department’s comment in SMSE-002-12, paragraph 122, where it stated that “the utility of block A will be lower than the other paired frequency blocks (B,C, C1 and C2) in the short to medium term.

<sup>11</sup> Mobilicity submission paragraph 93(b).

**Figure 2 – Post 700 MHz Auction Low Band per Subscriber (assuming all won one paired block<sup>12</sup>)**



### Extraordinary Bid Constraints

33. Rogers recommends that the Department implement two extraordinary constraints on all bidders presumably in an attempt to mitigate the impacts Rogers reports it expects to have to absorb in the way of “vexatious” bidding. TELUS does not support these recommendations. TELUS supports open auctions and market forces. TELUS is of the view that Rogers’ rationale for these extraordinary constraints is less than compelling and that the proposals seem to be predominantly aimed at mitigating some specific concern that Rogers is facing in its auction planning.
- a. Rogers recommends that no bidder be able to bid on the lower A block whenever they include in their package in that round the C1 and/or C2 blocks in the same licence area. Rogers suggests that there is no commercial purpose for such a bid. While TELUS believes that the commercial purposes in the short term for such bids would be modest, for example for inbound roaming purposes, this will potentially change in the medium term based on ecosystem developments in the

<sup>12</sup> This graph is developed on the basis that each potential bidder listed in the chart acquired one paired block of 700 MHz spectrum, ignoring the fact that it would not be possible for every bidder to do so, given the amount of spectrum at auction, although it would be close.

US. TELUS does not support the imposition of extraordinary constraints based on the speculation about bidder behaviour or the prejudging of which bids make commercial sense and which do not. TELUS supports market forces and market outcomes and as such does not support this recommendation.

- b. Rogers recommends that no bidder be able to bid on the lower A block and the lower D or E blocks whenever they do not include in their package in that round the B and/or C blocks in the same licence area. Rogers suggests that there is no commercial purpose for such a bid. TELUS rejects that there is no commercial purpose for such bids since, for one, the A block is in fact contiguous with the E block. TELUS is happy to provide more insight to the Department on this as required, but does not support this recommendation.

#### 4. Auction Format and Rules

Industry Canada is seeking comments on its proposal to use the CCA format, as well as the general attributes outlined above, including:

- the categories of generic licences;
- the guarantee of contiguity across blocks A and B in the lower 700 MHz band in a specific service area;
- the combined eligibility point and revealed preference activity rule in the clock rounds, and the revealed preference limit in the supplementary round;
- the use of a second-price rule; and
- the information to be disclosed during, and post-auction.

35. TELUS in its original submission detailed a number of general concerns with the Department's proposed auction format, but stopped short of recommending the Department abandon a CCA. TELUS' concerns revolved around risk, complexity and uncertainty for bidders as well concerns of transparency and potential inequity. Having read and considered other interested parties' submissions, TELUS can offer only limited and qualified support for the proposed format based on the same TELUS concerns expressed in its initial submission. As TELUS stated in paragraph 18 of its initial submission:

*In summary TELUS' view is that the proposed CCA format, while perhaps attractive from an auction theory perspective, in practice will not be simple for bidders which during the bidding process will be unable to predict how much they may end up paying. Further, there is a reasonable probability that the outcomes will be perceived as unfair, potentially amplified by transparency issues related to the disclosure, workings and outcomes of the "solver" algorithm for winner determination and price determination.*

36. TELUS notes in the following paragraphs its updated detailed recommendations for finalizing the CCA auction rules in order to maximize the incentives for truthful bidding and the probability of an efficient outcome.

## Relaxed Activity Rule via the Revealed Preference Constraint in Clock Rounds

37. Like TELUS, most respondents support the relaxed activity rule in the clock rounds as proposed. Rogers suggests an even more relaxed activity rule<sup>13</sup> though TELUS finds the recommendation somewhat ambiguous. If the effect of Rogers' recommendation is simply to not require the intermediate top up bids required in the proposed rules in order to execute a flexible bid based on any previous level of eligibility it had, then TELUS believes that this is a modest recommendation with no adverse impacts and would not oppose it. To be clear, TELUS only would support this recommendation as long as the bid still satisfied the revealed preference constraints at each intermediate eligibility-dropping juncture between the current round, and the last round at which the bidder had the desired level of eligibility. If Rogers' recommendation is in fact more broad than this, and Rogers is looking to violate revealed preference at the interim eligibility dropping junctures, then TELUS opposes it. For further clarity, TELUS would never support such a proposal applied to the supplementary round where TELUS contends all interim bids must be made.
38. As TELUS noted in its initial submission, the Department might consider setting the required activity level below 100% in the early stages of the auction in order to increase efficiency. At paragraph 22 TELUS submitted that:

*With exposure eliminated via package bidding, TELUS concurs that the Department's proposal to set the required activity level at 100% from clock round 1 is workable but TELUS would not be opposed if the required activity level was set somewhat lower (say 80%) in the early stages if it was deemed to increase the efficiency of the auction.*

## Supplementary Round Bid Constraints / Winner Determination

39. The responses make it clear that there are strongly polarized views on how the supplementary round should generally be implemented. Many of the regional carriers call for the bidding rules in the supplementary round to be made much more restrictive than proposed in order to further increase the probability that bidders are able to retain their final clock round packages. Some of these respondents go so far as recommending that the

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<sup>13</sup> See Rogers' submission in paragraphs 39 to 51 and 62(c).

supplementary round be abandoned altogether to make certain that bidders retain their final clock round packages. On the other hand, Rogers makes the case that the proposed supplementary round rules have been made far too restrictive and do not provide a genuine role for supplementary round bids other than vexatious bids to raise the prices of rival bidders.

40. TELUS believes that this tension between opposing views suggests that Department has likely struck an appropriate balance already by way of its proposed rules which differ from recent European CCAs in such a way as to significantly increase the probability that bidders are able to retain their final clock round packages should they so desire, as acknowledged in SaskTel's paragraph 25. The introduction of a new relative cap rule in the supplementary round eliminates the possibility of a surprise knockout bid as TELUS noted in its original submission<sup>14</sup>. A bidder can guarantee its final clock round package by topping up its bid by an amount easily calculated amount based on unallocated licences – the “safety increment” as one respondent termed it.
41. TELUS notes the concern of many regional carriers that this safety increment is constant for all bidders and is therefore relatively more onerous the smaller one's final clock package is. However, a bidder with a small final clock package need not raise its bid on its final clock package beyond its peak valuation (as this could potentially create a negative surplus). Given the second price rule, it is unlikely that such a bidder would lose its final clock package or have to pay its full value unless there were one or more bidders willing to pay more for it.
42. TELUS does not support Videotron and Mobilicity who suggest eliminating the supplementary round altogether. TELUS' primary concern with such a proposal is the issue of dealing with unallocated licences, especially if there are a significant number of unallocated licences after the final clock round which is entirely possible given the workings of a CCA. Given combinatorial bidding and the associated fitting problem, it is quite possible that there could be unallocated licences in even the most populous licence areas. Sequential auctions raise significant issues of strategy especially if there are large

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<sup>14</sup> TELUS initial submission, paragraph 16(a).

licences unallocated and to be auctioned in a follow on process. TELUS does not support eliminating the supplementary round.

43. SaskTel does not suggest eliminating the supplementary round, but simply rewriting the winner determination algorithm such that bidders automatically win their final clock packages and the supplementary round is reduced to simply resolving the unallocated licences after the final clock round. SaskTel's proposal is essentially equivalent to eliminating the supplementary round. For the same reasons expressed in the above paragraph this proposal would mean that would end up being two sequential auctions. TELUS does not support this recommendation.
44. As a fallback position, SaskTel suggests that the "safety increment" for a bidder should only be related to unallocated licences in the service areas that the bidder has bids on in its final clock package. While there is some natural appeal and sense of fairness to this recommendation, TELUS suspects that given that the auction format provides for package bidding across all service areas, this suggestion could not be so easily implemented. Further, such a rule would have to account for the possibility that the geography of a bidder's final clock package might differ from the geography of all of its package bids in the clock and supplementary rounds that remain active through the winner and price determination process. TELUS does not support this recommendation.
45. Videotron suggests three potential updates to the rules of the supplementary round in order to protect regional bidders. TELUS does not believe that any of these are helpful.
  - a. Videotron's first suggestion is that any bidder without a final clock package should not be allowed to bid in the supplementary round. While there is some natural appeal and sense of fairness to this recommendation, TELUS suggests that the revealed preference constraints already serve to adequately manage this situation.
  - b. Videotron's second suggestion is that bidders be only allowed to bid in the supplementary round on packages that they had bid on in the clock rounds. TELUS is concerned that this would not provide bidders with adequate flexibility,

nor can TELUS see how this would serve to address the issue that Videotron is trying to resolve: the protection of regional bidders' final clock packages.

- c. Videotron's third suggestion is that bidders only be allowed to bid in the supplementary round on their final clock package plus any unallocated licences. This would appear to not allow bidders to increase their bid amounts on packages that they had previously bid on in line with revealed preference constraints and their increased bid on their final clock package. This suggestion appears to be tantamount to Videotron's fall back recommendation of eliminating the supplementary round altogether and holding a residual auction of unallocated licences. As stated above, TELUS does not support such an approach.
46. Conversely, Rogers makes several recommendations purportedly aimed at providing "a genuine role" for supplementary round bids which Rogers summarizes in its submission in paragraphs 62(a), 62(b) and 62(d).
47. In its paragraph 62(a), Rogers suggests removing the constraint that a supplementary round bid on a larger package than one's final clock package must not exceed the cost of the package evaluated at the prices in the last clock round and reverting to a form of supplementary round relative cap rule used in CCAs in Europe including Switzerland. TELUS examines and rejects this recommendation below.
48. The formats of the clock and supplementary phases are distinctly different. The clock phase uses a multi-round format in which, each round, the auctioneer announces prices and bidders respond with package bids. Conversely, the supplementary phase is a single round in which bidders indicate dollar values for the packages bid on in the clock phase as well as potentially new ones. Whereas the clock phase provides visibility into which packages are the most relevant, supplementary round bidding generally constitutes the final information on which winning bids and prices are determined.
49. In order to link the two phases and promote meaningful bidding in the clock phase, the CCA places constraints on bids that are based on revealed preferences. The constraints are designed to ensure that bids placed during clock rounds and the supplementary round are

mutually consistent. Based on the CCA framework, in each eligibility reducing clock round, the bidder is deemed to have revealed that the selected package maximizes surplus and is weakly preferred to all other packages that were feasible in that round given the prices. These choices imply upper bounds on the relative values of the packages that were not selected in the round.

50. To maintain internal consistency, the CCA prevents bidders from bidding on larger packages (i.e. which exceed eligibility points) that, based on prior rounds' choices, are revealed to be less preferred than other feasible packages at the current round's prices. (Such a package would not have maximized surplus.) In addition, relative cap rules in the supplementary round limit the values that bidders are allowed to bid for packages based on preferences revealed during the clock phase bidding.
51. Rogers' recommendation to loosen the relative cap rule by removing constraints applied to final round bids, and apply the Swiss type relative cap rule would provide bidders with some ability to increase bids for larger packages to levels that are out of line with the preferences expressed during the clock rounds. Ausubel and Cramton provide a much more detailed discussion in <http://www.ausubel.com/auction-papers/ausubel-cramton-activity-rules-for-cca.pdf>. Suffice to say, eliminating this constraint, as Rogers suggests, would render clock round bids less meaningful and would encourage non-straightforward bidding.
52. In its paragraph 62(b), Rogers suggests that the revealed preference constraint should be applied to all packages. TELUS has no issue with this suggestion.
53. In its paragraph 62(d), Rogers suggests that the revealed preference rule for the supplementary round should only be applied to the last round in which a bidder had eligibility to bid on a package. Rogers highlights the situation where a bidder's final clock package could have been based on a flexible bid that exceeded the bidder's current eligibility. As a result, this flexible bid would be uncapped in the supplementary round, but it is the wrong "anchor" bid for this purpose. TELUS agrees that the situation Rogers highlights is problematic and the rules must be clarified / adjusted. TELUS recommends

that the only uncapped bid in the supplementary round would be the last bid in the clock rounds that did not exceed the bidder's final eligibility when it was made.

54. In paragraph 56 of its Annex B in the consultation, the Department notes that it will submit a reserve price bid for every licence. Rogers in its paragraph 74 suggests that:

*Industry Canada should implement reserve prices as a constraint on winning prices, not through dummy bids, in order to avoid unnecessarily creating unallocated blocks even when there is demand for these blocks.*

TELUS concurs as does Public Mobile in its paragraphs 56 - 61. Industry Canada's proposed dummy bids adversely affect winner determination by introducing demand into the solver that does not exist.

55. Rogers in its paragraphs 63 – 65 recommends that the Department increase the maximum number of supplementary round bids from 500 to “a more reasonable number” and suggests that a limit of 2000 would not cause any processing constraints for the Department. TELUS has no issue with the Department increasing the number of bids allowed in the supplementary round. Bidders should not be artificially constrained as this can reduce the overall efficiency of the auction.

#### **Price Determination**

56. For the same reason as expressed above with respect to winner determination, the Department should implement reserve prices as a constraint on winning prices, not through dummy bids. The Department's proposed dummy bids adversely affect price determination by introducing demand into the solver that does not exist.
57. Several respondents raised the issue of the nearest Vickrey weighting in price determination. TELUS is of the view that this is a somewhat minor concern, but TELUS believes that weighting based on reserve prices is arbitrary and a weighting based on final clock round prices makes more sense.
58. Given the complexity as highlighted at length by TELUS in its original submission, TELUS strongly reiterates its request the Department commit to releasing the auction

software to the industry in a timely manner prior to the auction. TELUS understands that releasing such software has been standard practice, and something done well in advance of the auction, in other jurisdictions where CCAs have taken place. TELUS believes it is essential that all bidders be given every opportunity to better understand the actual “solver” software prior to committing significant capital to acquire the spectrum. In short, releasing the software well in advance of the auction to all bidders is integral to a transparent and fair auction process.

#### **Generic Block Groupings and the Assignment Stage**

59. In its initial submission TELUS noted that it was concerned whether the benefits in terms of the enhanced substitution of the proposed generic block groupings outweighed the complexity of the assignment stage they required:

*TELUS questions the real need for this marginally enhanced substitution when there are so few blocks, bidders are capped and the CCA design itself provides the flexibility of package bidding.*

60. TELUS’ thinking has progressed on the utility of the proposed generic blocks and TELUS now cautiously supports the generic blocks proposed.
61. Rogers has proposed a very detailed automatic assignment protocol involving frequency based and geographic automatic assignment rules to reportedly facilitate an efficient allocation. TELUS appreciates the spirit of the objective to minimise or eliminate the assignment stage and create a practical assignment. TELUS recommends that the Department carefully and fully consider the logic and implications of the Rogers proposal.

#### **Bidder information disclosure**

62. Based on the initial responses to this consultation from the various parties, TELUS recommends that the Department revert to open bidding in the 700 MHz auction.
63. TELUS notes the arguments for and against anonymous bidding for this auction of 700 MHz spectrum but having had the benefit of the differing views now considers that the benefits of open bidding significantly outweigh the benefits of anonymous bidding in the 700 MHz auction. TELUS sees anonymous bidding as an effective tool to materially limit

certain undesirable bid behaviours such as retaliatory bidding, foreclosure, and/or demand reduction. However, anonymous bidding in the 700 MHz auction would increase the complexity for bidders as they speculate during the auction about which bidders they are competing with and the implied potential scenarios for industry structure into the future (e.g. cableco or new entrant partnering<sup>15</sup>.)

64. It is interesting to note that the Department on one hand supports the efficient use of spectrum by the industry through the entering into of certain arrangements, yet on the other hand proposes an auction attribute that makes it extremely challenging for participants to achieve compatible spectrum, which is already difficult enough given that the upper and lower 700 MHz bands are incompatible. This impacts operators both large and small who may be seeking capital efficiencies as evidenced by the large number of entities<sup>16</sup> noting the existence of current or potential arrangements. Anonymous bidding in the single instance of the multi-band 700 MHz auction stands to frustrate the objectives the Department has outlined to encourage competition, investment and innovation to the broadest number of Canadians, and in particular rural Canadians, in a timely fashion.
65. Transparency during the auction is desirable. An auction is not only an allocation process, that is a process of who gets how many blocks, but an assignment process, that is a process determining who gets which blocks. The Department should favour an auction design that promotes more efficient assignments and which does not dampen competition. In contrast, anonymous bidding increases the risk of a pattern of footprints that is inefficient. This risk can, paradoxically, reduce bidder willingness to raise price. In the end government revenue, and consumer welfare can be lower. As a practical matter, anonymous bidding in the 700 MHz auction could increase carrier investment requirements, slow the deployment of new technology, reduce rural coverage and increase roaming costs for the carriers and customers.

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<sup>15</sup> As one AWS entrant put it: *"It's never been more clear that new entrants have to work together. We can't get enough spectrum in the next auction, so we have to find ways to partner."* Tony Lacavera, chairman and chief executive officer of Globalive, in an interview following his keynote address at the Canadian Telecom Summit. From the Globe and Mail on June 6th <http://www.theglobeandmail.com/report-on-business/globalive-mulls-possible-partnership-plans/article4235302/>

<sup>16</sup> Rogers, TELUS, Bell, SaskTel, MTS, Tbaytel, Videotron, Globalive, Xplornet.

66. TELUS sees significant benefit to reverting to open bidding for the 700 MHz auction. While TELUS generally would endorse anonymous bidding as an effective tool to materially limit certain undesirable bid behaviours which were present in the AWS auction, such as retaliatory bidding, foreclosure, and/or demand reduction, these behaviours are already mitigated to a significant extent through the circumstances of the policy and proposed licensing framework as follows.
- a. Foreclosure is largely a non-issue in the 700 MHz auction due to the strict spectrum aggregation limits in place. Anonymous bidding is not required to limit foreclosure in the 700 MHz auction.
  - b. Without anonymous bidding, retaliatory bidding is partially addressed in the proposed 700 MHz CCA by the fact that all package bids remain live in the auction to encourage truthful bidding. Retaliatory bidding is also partially addressed by generic blocks whereby, in an open auction one still could only “retaliate” against a rival’s category of generic licence but not a specific block.
  - c. In a CCA the incentives to reduce demand are much less than in an SMRA. If two bidders are competing for one of n blocks, i.e., if there is only excess demand for one block (and there are n available), then continued competition for that last block (or region) will normally drive up the price of all n blocks in an SMRA, but only drive up the price of the n-th block, and not the other n-1 blocks, in a CCA.
67. On balance, TELUS believes that in the specific case of the 700 MHz auction, the risks of open bidding are sufficiently mitigated and the potential positive impacts on industry efficiency, particularly given the two incompatible upper and lower bands, are so significant that the Department should strongly consider reverting to opening bidding and wait to implement anonymous bidding in upcoming auctions.
68. TELUS notes that for Auction #66 in the US, the FCC used a competitive benchmark to determine whether to provide full disclosure; the required initial eligibility ratio<sup>17</sup> was 3.0.

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<sup>17</sup> The initial eligibility ratio describes the number of requested eligibility points divided by the eligibility points of all licences in the auction.

If the Department were interested in this type of approach, TELUS recommends a competitive benchmark of at most 2.0 for the upcoming 700 MHz auction because of the effect of the spectrum aggregation limits which the FCC's Auction #66 did not include.

69. When we survey the responses of others, we see that many respondents seek to gain spectrum efficiencies via compatible spectrum with potential partners. For instance, in its paragraphs 26 to 28, Globalive notes the benefits of network sharing arrangements. In addition, in its comments on the proposed associated entities rules, Globalive asks for the Department to allow parties to seek out "spectrum sharing arrangements in advance of the auction" and to put in place "processes that promote clarity for parties contemplating sharing agreements post auction" so that such arrangements would not be captured under the associated entities rules.<sup>18</sup>
70. In TELUS' view, Globalive, similar to other parties, has misinterpreted the proposed rules of associated entities because it appears that the rules prohibit parties negotiating sharing arrangements prior to the auction. In a section below, TELUS provides a full reply to these parties regarding their incorrect positions on the Department's proposed associated entities rules. Having said that, Globalive's concerns are largely rendered moot if the Department were to revert to open bidding. Similarly, there are at least nine carriers<sup>19</sup> whose responses suggest that the auction process would benefit from a reversion to open bidding for this critical spectrum band.

#### **Other information disclosure matters**

71. Rogers recommends that the Department release winner but not base price information after the supplementary round and before the assignment stage to facilitate effective assignment stage bidding. TELUS supports this recommendation and notes that it would not be necessary or at least would not be controversial with open bidding in the clock rounds. Further, in paragraph 75 of Rogers' submission, Rogers states "Rogers generally supports maximum disclosure of information throughout an auction and afterwards, so as to facilitate price discovery."

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<sup>18</sup> Comments of Globalive, paragraph 30.

<sup>19</sup> Rogers, TELUS, Bell, SaskTel, MTS, Tbaytel, Videotron, Globalive, Xplornet.

72. TELUS strongly opposes the recommendation of Public Mobile in their submission in paragraph 36 that the Department not release all the bid information after the auction. TELUS believes that access to the complete detailed bid information is imperative for auditing purposes as opposed to understanding bidder strategies. It has been common practice in North American auctions, to provide access to bid information even when anonymous bidding is involved.
73. TELUS strongly opposes the recommendation of SaskTel in their submission in paragraph 67 that the Department not release the eligibility applied for by each bidder. Consistent with supporting opening bidding, TELUS believes that greater transparency helps in bid and strategy preparation for all players participating in the auction.

#### **Procedural Recommendations**

74. Based on suggestions made by the various respondents on procedural issues, TELUS has compiled what it views as a good set of recommendations that the Department should endeavour to implement wherever possible. This list can be found in Appendix A.

## 5. Bidder Participation — Affiliated and Associated Entities

Industry Canada is seeking comments on its proposed changes to the definition and rules related to associated entities. Specifically, comments are sought on:

- the types of agreements that should be captured under the definition of associated entities;
- the level of information to be disclosed to the public;
- the provision that typical roaming and tower sharing be specifically excluded from the revised definition of associated entities and whether other types of agreements such as the purchase of backhaul capacity should be deemed excluded;
- the proposal that entities that are deemed associated entities may apply to be treated as separate entities for participation in the auction;
- the proposal that associated entities may request to have the spectrum caps apply to them separately, based on an analysis of their association and of whether they intend to compete in the same licence service area;
- the criteria to be considered in determining whether the entities are competing; and
- the proposal that no changes be made to the affiliated entities rule.

75. TELUS supports the clarity provided around the definition of associated entities and the rules for their participation in the 700 MHz auction. As TELUS stated in its initial response:

*The Department notes that even if certain arrangements between entities cause them to be deemed associated entities, that “depending on the nature of the association, it may not preclude the ability of the entities to participate separately in the auction or to have the spectrum caps applied individually.” This is an important distinction and is in essence a simplifying proposal that TELUS supports. It means that if entities have entered arrangements that cause them to be deemed associated, there are circumstances (based on the nature of the association and the intent to compete) in which those entities can bid separately with separate caps in the 700 MHz auction.*

76. The Department has aptly recognized in its consultation the significant benefits of certain arrangements to Canadians in general and rural Canadians in particular, but the rules prohibiting collusion are immutable. Future arrangements between potential bidders in the 700 MHz auction must be realized or founder in the context of market forces. Given the limited 700 MHz spectrum available and the incompatible upper and lower 700 MHz sub bands, TELUS recommends that open bidding be implemented in this particular CCA.
77. At any time prior to the release of a 700 MHz Licensing Framework decision clarifying the way forward, it is TELUS’ understanding that it would be highly inappropriate for any

potential bidder to communicate with any other potential bidder about the acquisition or use of 700 MHz spectrum. Any such communication could result in association between such potential bidders whether intended or not.

78. Nevertheless, it appears that many respondents do not interpret the combination of the proposed rules of associated entities and the rules prohibiting collusion as TELUS does. This is a particularly important point given the significant number of entities<sup>20</sup> both large and small noting a need and/or interest in seeking capital efficiencies in some form or another through a current or potential partner arrangement.
79. As an example, both Globalive and Rogers recommend that operators should be able to negotiate agreements with other potential bidders regarding the acquisition or use of 700 MHz spectrum in advance of the deadline to apply to participate in the 700 MHz auction and before finalizing these agreements, approach the Department for an assessment as to whether they would still be allowed to bid separately. However, such views differ from that of TELUS, because such communication could, again, result in association between such potential bidders, whether intended or not. It is evident from the positions stated on this issue that clarifications are needed from the Department as to what communications or arrangements, provisional or otherwise, between potential bidders are permitted in advance of the 700 MHz auction.

#### **Exemption from Rules of Associated Entities**

80. Two partners, Rogers and Tbaytel, both call for an exemption from the rules of associated entities for the purposes of 700 MHz auction when it comes to their co-branding agreement in the Northern Ontario service area. Tbaytel calls for the exemption on no other basis than that the area in which they and Rogers co-brand, in Northern Ontario, is vast and sparsely populated. Rogers calls for an exemption from the rules of associated entities for the purposes of 700 MHz auction whenever the serving area in which associated entities do not compete is small compared to the total spectrum licence area, and suggests that the threshold should be 50% of the population in the licence area. TELUS believes that there should be a level playing field and the same set of rules should

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<sup>20</sup> Rogers, TELUS, Bell, SaskTel, MTS, Tbaytel, Videotron, Globalive, Xplornet.

apply to all carriers and that exemptions from the rules of associated entities for the purposes of 700 MHz auction should not be entertained. In the case of Rogers and Tbaytel, allowing an exemption in that case would allow each party to acquire a licence for Northern Ontario when they have no intention of competing with each other in that licence area. This effect, of course, causes spectrum scarcity for that licence area, potentially limiting other carriers from competing for customers in that geography and runs contrary to the associated entity rules as conceived by the Department. TELUS supports the associated entities rules as the Department has written them without exception.

#### **Other**

81. Public Mobile<sup>21</sup>, Mobilicity<sup>22</sup> and Eastlink<sup>23</sup> and Xplornet<sup>24</sup> all essentially reject the proposed definition and rules of associated entities, even those components that have not changed in over a decade. Each of these parties specifically refer to past arrangements that TELUS and Bell have regarding network sharing and claim that Bell and TELUS should be treated as associated entities and should not be permitted to bid separately in the 700 MHz auction.
82. The problem with these and other similar stated positions is that they all ignore the stated intent of the Department and the particular nature of the 700 MHz spectrum being auctioned. Of note, the changes to the rules are being considered because of, among other things, the scarcity of spectrum in the 700 MHz band, the high cost of network deployment, particularly in rural areas, and the network efficiencies that can be achieved in sharing arrangements. As such, the Department has stated that past agreements are not determinative of associated entities status for this auction.
83. In addition, if participants have entered into arrangements regarding 700 MHz spectrum prior to the auction, the Department has outlined that they have the opportunity to apply to participate in the auction as separate bidders. The Department is more than equipped to

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<sup>21</sup> Comments of Public Mobile, para. 19.

<sup>22</sup> Comments of Mobilicity, para. 39.

<sup>23</sup> Comments of Eastlink, para. 40.

<sup>24</sup> Comments of Xplornet para. 35.

make a determination after any such application whether the integrity of the auction would be affected by the arrangement and whether the participants should be permitted to bid separately. As a result, rather than making a blanket statement now that all 700 MHz arrangements require participants to be treated as a single bidder, potentially curtailing these arrangements altogether, the Department has allowed for participants to negotiate any arrangements they desire and make their case for separate caps at the auction. The proposal of the Department is prudent in light of the benefits from potential network sharing arrangements for 700 MHz spectrum and provides participants with the flexibility to seek arrangements as they see fit.

84. It is evident that the positions of Public Mobile, Mobilicity and Eastlink and Xplornet are all designed as a means to reduce the contention in the 700 MHz auction by demanding that Bell and TELUS (who vigorously compete for subscribers and who each serve almost one third of the nation's subscribers) be jointly limited to a quarter of the prime 700 MHz spectrum, despite coming into the auction holding only 34% and 12% of the nation's low band spectrum respectively. Their proposal would mean that Bell and TELUS together would be limited to the same amount of 700 MHz spectrum as Rogers which already holds 50% of the nation's low band spectrum serving only a third of the nation's subscribers roughly. TELUS is confident that the Department will dismiss those parties' self-serving recommendations.

#### **Associated Entities Disclosure**

85. TELUS reiterates its views on disclosure from TELUS' initial submission. Any commercial documents supplied to the Department in the course of the Department's review of associated entities status should be treated with the utmost confidentiality. The associated entities review process must not serve to undermine the confidentiality of the market plans and the trade secrets of mobile operators. Any public disclosure should be tightly coordinated with the parties subject to the associated entities review. Sensitive details should only ever be made public if the public interest in disclosure demonstrably outweighs the considerable competitive harm that could result from their disclosure and even then should be limited to basic summary facts and only those facts that directly

support the Department's decisions on associated entities issues. In TELUS' view, any information provided as part of an associated entities review process would likely fall under the exemptions listed in section 20(1) of the *Access to Information Act*.

### **5.1 Prohibition of Collusion**

Industry Canada is seeking comments on the rules prohibiting collusion that would apply to bidders in the 700 MHz auction.

86. TELUS reiterates its support for the Department's proposed updates to the rules prohibiting collusion that would apply to bidders in the 700 MHz auction.

## 6. Conditions of Licence for Spectrum in the 700 MHz Band

Industry Canada is seeking comments on its proposal to issue spectrum licences in the 700 MHz band with a 20-year licence term.

87. TELUS supports the proposed 20 year licence term and the proposed wording for this condition of licence.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to the spectrum aggregation limits.

88. TELUS believes that some minor updates to the wording for the proposed condition of licence on spectrum aggregation limits would help improve clarity. TELUS therefore proposes the following slight modifications (which are bolded) of the proposed language to enhance its clarity:

The licensee must comply with the spectrum aggregation limits as follows:

- A limit of two paired frequency blocks in the 700 MHz band (blocks A, B, C, C1 and C2) is applicable to all licensees.
- A **limit** of one paired spectrum block within blocks B, C, C1 and C2 is applicable to all large wireless service providers. Large wireless service providers are defined as companies with 10% or more of the national wireless subscriber market share, or 20% or more of the wireless subscriber market share in the province of the relevant licence area.

The spectrum **aggregation limits** put in place for the 700 MHz auction will continue to be in place for five years following licence issuance. Therefore, no transfer of licences or issuance of new licences will be authorized that allows a licensee to exceed the spectrum **aggregation limits** during this period. Any change in ownership or control **of a licensee that has the effect of granting a right or interest in a 700 MHz licence** to another licensee in this band may be considered as a licence transfer for the purpose of this condition of licence whether or not the licensee name is changed as a result. The licensee must request approval by the Minister of Industry for any change that would have a material effect on its compliance with these spectrum aggregation limits. Such a request must be made in advance for any proposed transactions within its knowledge.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to transferability and divisibility.

89. TELUS has several concerns with the Department's proposed wording of the condition of licence related to transferability and divisibility.
90. TELUS believes that the title of the COL should be expanded to more accurately reflect the fact that the COL addresses subordinate licensing. TELUS recommends a COL title of "Licence Transferability, Divisibility and Subordinate Licensing".
91. TELUS believes that, as written, the related but distinct concepts addressed in the COL are interwoven in the proposed language such that their clarity is compromised. TELUS therefore proposes the following rearrangement (and slight modifications which are bolded) of the proposed language to enhance its clarity:

**COL on Transferability, Divisibility and Subordinate Licensing**

The licensee may apply, in writing, to transfer its licence in whole or in part (divisibility), in both the bandwidth and geographic dimensions in accordance with Client Procedures Circular CPC-2-1-23, Licensing Procedure for Spectrum Licences for Terrestrial Services, as amended from time to time. Industry Canada's approval is required for each proposed transfer, whether the transfer is in whole or in part. Industry Canada may define a minimum bandwidth and/or geographic dimension (such as the grid cell) for the proposed transfer.

The transferor(s) must provide an attestation and other supporting documentation demonstrating that all conditions, technical or otherwise, of the licence have been met. The transferee(s) must provide an attestation and other supporting documentation demonstrating that it meets the eligibility criteria, including documentation related to associates and affiliates demonstrating that the transfer is in accordance with any spectrum aggregation limits.

The transferee must satisfy all applicable conditions of licence including, rural deployment and general deployment requirements.

Licensees may also apply to use a subordinate licensing process. Industry Canada's approval is required for each proposed subordinate licence. Subordinate licences **will** not count towards the subordinate licensee's spectrum aggregation limit **if the primary licensee and the subordinate licensee demonstrate to the satisfaction of Industry Canada that they will be competing in the licence area.**

Industry Canada is seeking comments on the proposed wording of the condition of licence related to eligibility criteria.

92. TELUS agrees with the proposed wording of the condition of licence related to eligibility criteria.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to the treatment of existing spectrum users.

93. TELUS supports the proposed conditions of licence to implement the Department's previous decisions to allow for displacement of services that might prevent a licensee from using its 700 MHz spectrum.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to radio station installations.

94. TELUS supports this proposed condition of licence.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to the provision of technical information.

95. TELUS supports the proposed condition of licence.

Industry Canada is seeking comments on its proposed condition of licence related to compliance with legislation, regulation and other obligations.

96. TELUS supports the proposed condition of licence.

Industry Canada is seeking comments on the proposed condition of licence related to technical considerations, and international and domestic coordination.

97. TELUS supports the proposed condition of licence.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to lawful intercept requirements.

98. The Department has a new condition of licence related to lawful intercept requirements.

The key provision is as follows.

**A licensee operating as a service provider using an interconnected radio-based transmission facility for compensation must provide for and maintain lawful interception capabilities as authorized by law and in accordance with the Solicitor General's *Enforcement Standards for Lawful Interception of Telecommunications*, as amended from time to time. [emphasis added]**

99. In its comments, TELUS noted that the proposed condition of licence for lawful intercept requirements represented a significant change from the current lawful intercept condition of licence contained in existing spectrum licences. Most notably, the proposed condition of licence would impose the lawful intercept requirement on any licensee operating as a service provider “using an interconnected radio-based transmission facility for compensation,” as opposed to a licensee that “using spectrum for circuit-switched voice telephony systems.”

100. Based on the comments filed by various parties on this issue, there is general agreement with the position of the Canadian Wireless Telecommunications Association (“CWTA”) on this issue. As noted by the CWTA, the proposed change is a significant departure from the existing condition of licence and potentially forces several additional services to interception requirements. In addition, parties supported the CWTA position that the condition of licence should be based on the legislative requirements that are in force at the time the licence is issued. This condition of licence can be subsequently amended to reflect any future legislation that might be enacted that changes the lawful intercept requirements.

101. On a related point, other parties have also noted that any changes to lawful intercept requirements should only occur after consultation with Industry. For example, Bell states that any revisions *Solicitor General's Enforcement Standards for Lawful Interception of*

*Telecommunications* should be subject to prior consultation with the industry.<sup>25</sup> TELUS supports this position and would be pleased to participate in such consultation, whether it is conducted by the Department, the Minister of Public Safety or by Parliament as part of the recently introduced Bill C-30.

Industry Canada is seeking comments on the proposed condition of licence related to the research and development requirement.

102. In its comments, TELUS endorsed the comments of the CWTA on this issue. The CWTA noted that the current R&D requirement contained in the existing conditions of licence is no longer necessary given that Canada is a world leader in deployment of advanced wireless networks and customers in Canada are massive consumers of wireless data, with extremely strong smartphone penetration. Moreover, TELUS believes the benefits from the R&D COL have long ago been realized. Retaining the requirement merely diverts necessary and scarce capital to sub-optimal activities and away from true productivity and innovation enhancing investments. In addition, licensees need as much flexibility as possible to deploy investments as they choose in light of market conditions, rather than being forced to comply to invest 2% of revenues in a prescribed list of R&D activities. TELUS also supported the CWTA's request for the Department to render a decision on DGRB-001-09 where comments were sought on the continued need for the R&D condition of licence. TELUS urges the Department to issue a decision and remove this condition of licence from current and future spectrum licences.

103. TELUS observes that the parties that submitted comments on this issue supported the position of the CWTA. As such, there is near consensus that on this issue and TELUS requests that this condition of licence be removed entirely.

Industry Canada is seeking comments on the application of the proposed wording of the licence condition related to rural deployment requirements. Specifically, comments are sought on the assessment of "access to two or more paired blocks of spectrum" for the purposes of this condition of licence.

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<sup>25</sup> Comments of Bell, para. 76.

104. TELUS recognizes the importance of rural deployment in government policy and agrees that prime rural spectrum must be deployed in a timely manner for the benefit of Canadians. TELUS supports the intent behind decisions in SMSE-002-12 regarding rural deployment. TELUS supports the “two paired block” trigger for the most stringent rural deployment requirements in the band even though it is primarily if not solely targeted at established players. However, TELUS believes that stricter deployment requirements are necessary in order to ensure that the largest number of Canadians have access to as many competitive choices as possible and that this valuable spectrum is commercially deployed as expeditiously as possible. TELUS requests that the Minister address certain unintended gaps in the deployment requirements that would excuse certain existing and potential spectrum holders from any meaningful deployment requirement in this very scarce and valuable band.
105. TELUS supports Decision B4-2 of SMSE-002-12 as it pertains to established mobile operators with extensive existing HSPA network footprints. TELUS does not support Decision B4-2 of SMSE-002-12 as it pertains to mobile operators without extensive existing HSPA network footprints or in fact, no HSPA footprint as of March 2012. The effect of this construction of the COL, which TELUS considers must be an oversight or unintended, would excuse many mobile operators, other than the established ones from any meaningful build requirement. TELUS does not believe that this unintended result accords with the Department’s objectives for this valuable and scarce spectrum. TELUS’ proposed solution to this is detailed in TELUS’ proposals for general deployment requirements in the upcoming subsection. TELUS outlines a simple deployment requirement framework that TELUS believes is better for Canadian mobile broadband users, fairer amongst mobile operators and better equipped to discourage speculative investment in spectrum.

Industry Canada is seeking comments on the application of the general deployment condition of licence as stated above. Specifically, comments are sought on:

- the population coverage, as specified in Table 3, for each licence service area; and
- the time frame proposed whereby the requirement must be met.

106. In TELUS initial submission<sup>26</sup>, TELUS' fundamental concern was highlighted:

*The Department's proposal in paragraph 123 of the consultation that, for MBS spectrum, AWS spectrum population coverage levels "be required within 10 years of the licence issuance to allow market forces to determine the best pace of deployment" runs counter to the Department and Minister's objective to ensure that competition, investment and innovation using this spectrum is delivered to the broadest number of Canadians, in a timely fashion.*

107. TELUS raised a number of issues and unintended consequences that could and would arise from the Department's published rural and proposed general deployment requirements. We direct the Department to our initial submission for the full detail but these issues include:

- a. There is no meaningful deployment requirement for new or newer licensees obtaining up to two paired blocks of prime spectrum.
- b. There is an inadequate deployment requirement for an AWS operator obtaining up to two paired blocks of prime spectrum.
- c. There is an inadequate deployment requirement for an established operator obtaining prime spectrum.
- d. The proposed deployment requirements don't achieve the objective of encouraging competition, investment and innovation to the broadest possible number of Canadians in a timely fashion.
- e. The proposal does not differentiate between high band urban focused deployment requirements such as those developed for AWS spectrum and deployment requirements for low band spectrum particularly suited for economic coverage.
- f. The proposal does not adequately balance the build/roam incentives to ensure that operators are appropriately incented to build out to the greatest extent possible on their own spectrum.

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<sup>26</sup> TELUS submission, paragraph 84.

- g. The proposal does not adequately and in advance establish what remedial action the Department will take in a situation where a spectrum licensee fails to meet its deployment requirements.
- 108. TELUS continues to maintain that the deployment obligations outlined by the Department are not aggressive or ambitious enough to ensure that the 700 MHz spectrum is deployed in a timely manner in particular given the fact that key beneficiaries of the spectrum deployment are those located in rural areas.
- 109. There are four elements to TELUS' proposal for 700 MHz deployment conditions that as a package address the concerns listed above and that TELUS reiterates here unchanged:
  - a. Published Rural Deployment Requirements - UNCHANGED
  - b. NEW General Deployment Requirement for all prime MBS spectrum
  - c. Proposed General Deployment Requirement UNCHANGED but applicable only to lower A, D, and E blocks
  - d. NEW clauses to do with breach of deployment requirements Conditions of Licence
- 110. These details of these proposed amendments are outlined in the following two tables (unchanged) and represent TELUS' framework for 700 MHz deployment.

**Table 1 – TELUS Proposed Deployment Requirements Framework**

<b>Condition</b>	<b>End of Year 5</b>	<b>End of Year 7</b>	<b>End of Year 10</b>
Hold or have access to 2 or more paired blocks	90% of HSPA network footprint <b>(no change)</b>	97% of HSPA network footprint <b>(no change)</b>	n/a
Hold or have access to 1 or more prime blocks (See following table)	Population coverage per AWS metric (20-50% based on region) <b>(accelerated)</b>	Expanded AWS population coverage (25-70% based on region) <b>(new)</b>	n/a
Lower A, D, E blocks	n/a	n/a	20 – 50% pop coverage <b>(no change)</b>
<b>Supplemental Clauses (new)</b>			
Breach of deployment requirements via insufficient investment	Not use it or lose it like RP-019 (for Cellular 850). If 700 MHz licensee seeks (or seeks to continue) an in-territory roaming agreement on 700 MHz, roaming provider (or highest bidder for new roaming / subordinate licencing deal) has right to mandated sublicensing of roamers’ 700 MHz spectrum in the roaming territory on commercial terms for at least the life of the roaming agreement		
Breach of deployment requirements without material network and marketing investment	Any 700 MHz licensee who fails to meet the above deployment requirements and who has not yet built out any 700 MHz network and marketed it must sell their spectrum on the secondary spectrum market within a set time (e.g. 1 year) or face an Industry Canada recall		

**Table 2 – TELUS Proposed Deployment Requirements: Population Coverage for Prime MBS Spectrum**

Service Area		Deployment Floor – Prime MBS	
		5 Years	7 Years
2-01	Newfoundland and Labrador	30%	40%
2-02	Nova Scotia and P.E.I.	30%	40%
2-03	New Brunswick	40%	50%
2-04	Eastern Quebec	50%	70%
2-05	Southern Quebec	50%	70%
2-06	Eastern Ontario and Outaouais	50%	70%
2-07	Northern Quebec	30%	40%
2-08	Southern Ontario	50%	70%
2-09	Northern Ontario	50%	70%
2-10	Manitoba	50%	70%
2-11	Saskatchewan	40%	50%
2-12	Alberta	50%	70%
2-13	British Columbia	50%	70%
2-14	Yukon, NWT and Nunavut	20%	25%

111. For completeness, TELUS notes where the submissions of other parties lend support to TELUS’ proposed framework.
112. Eastlink recommends<sup>27</sup> that general deployment obligations be based on tier 4 service areas and operators should be required to provide services to 50% of the population base within 10 years. TELUS supports the intent of this recommendation should the Department decide to move in this direction and notes that TELUS in its response to SMSE-018-11 suggested a similar approach at the tier 3 level (but not at the tier 4 level)

<sup>27</sup> Eastlink submission, paragraph 55.

which TELUS would still endorse<sup>28</sup>. It is interesting to note that Eastlink has yet to put its spectrum into use.

113. SaskTel recommends<sup>29</sup> that the rural deployment obligation be applied to all paired spectrum. TELUS does not agree with this when it comes to the A block (because the supporting ecosystem still lags), but generally agrees for the B, C, C1, and C2 blocks. SaskTel's recommendation differs from TELUS' but reflects a very similar aim. SaskTel's recommendation does not account for the loophole in a deployment obligation based on one's build as of March 2012. That is why TELUS recommends all prime spectrum needs to be subject to population based metrics and that these should be synchronized with existing AWS deployment targets at AWS licence renewal.
114. SaskTel recommends that the "percentage of HSPA coverage as of March 2012" be generalized to "percent of coverage as of March 2012". TELUS has no issue with such a change if the Department was so inclined, but is not sure it introduces any practical difference.
115. SaskTel recommends<sup>30</sup> that there be recourse for not putting spectrum into use and has proposed a "use it or share it" condition. This condition would apply to service areas where licensees had indeed deployed network and were using a portion of their spectrum, but appeared to have no immediate plans to use the remainder of the (typically rural) geographic coverage. TELUS' breach of deployment recommendations are very similar with one major difference. TELUS advocates mandated sublicensing at commercial rates whereas SaskTel proposes that sublicensing be at no charge.
116. Bell recommends<sup>31</sup> that a large foreign controlled entrant with access to two paired blocks in a service area be obligated to match the largest HSPA footprint in that service area. While TELUS supports the intent of this recommendation, TELUS does not believe that it

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<sup>28</sup> TELUS did not resubmit this suggestion in initial comments as the Department had not picked it up in their licensing framework proposals after TELUS suggested it as part of SMSE-018-11.

<sup>29</sup> SaskTel submission, paragraphs 55 – 57.

<sup>30</sup> SaskTel submission, paragraphs 61.

<sup>31</sup> SaskTel submission, paragraphs 105, 106.

is particularly practical for a build out to occur that quickly and therefore does not support this recommendation.

117. MTS recommends<sup>32</sup> that all licensees commence putting prime 700MHz spectrum to use within two and half years. TELUS supports the intent of this recommendation but would need to see more clarity on how this is measured and TELUS suggests that a population metric is required to make it workable.
118. Globalive recommends<sup>33</sup> increasing the seven year deployment obligation for licensees with access to two paired blocks from 97% to 103% of the population coverage of their HSPA network. While this would be a trivial matter for any carrier covering less than, for instance, 80% of the population of a given service area, this suggestion is unworkable for most if not all large carriers in the vast majority of their operating territory where HSPA deployment is already over 98% as it would require large operators to cover every single person in the service area. While TELUS supports the purported intent of this recommendation to bring mobile service to unserved Canadians, it is a clear attempt by Globalive, at no cost to them, to burden large carriers with an unachievable, uneconomic obligation.
119. TELUS acknowledges the various inputs on deployment requirements from carriers operating in low density environments as well as carriers who compared the deployment obligation percentages in their operating territory to the percentages of adjacent territories. TELUS has no issue with the Department adjusting on a holistic basis the percentages that TELUS has carried forward from the Department's proposal for year five and the additional percentages that TELUS has suggested for year seven.
120. It is worth highlighting that relative to other countries, the remedies proposed by TELUS for failing to fulfill deployment obligations are not particularly punitive. For example, the Austrian regulator in awarding mobile spectrum licenses, following its most recent CCA auction in 2010, will charge licensees who fail to build out their networks by the deployment deadline a penalty of EUR 25 million per annum until rectified. Should a

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<sup>32</sup> MTS submission, paragraph 125.

<sup>33</sup> Globalive submission, paragraph 65.

licensee build out but still fall short of the required coverage level, the penalty would be reduced pro rata.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to mandatory antenna tower and site sharing. Comments on the specifics of the requirements should be submitted through the process announced through *Canada Gazette* notice DGSO-001-12.

121. TELUS supports the proposed wording of the condition of licence related to mandatory roaming. TELUS has provided comments about the proposed mandatory antenna tower and site sharing requirements as part of the consultation announced in *Canada Gazette* notice DGSO-001-12.

Industry Canada is seeking comments on the proposed wording of the condition of licence related to mandatory roaming. Comments on the specifics of the requirements should be submitted through the process announced in *Canada Gazette* notice DGSO-001-12.

122. TELUS supports the proposed condition of licence related to mandatory roaming. TELUS has provided comments about the proposed mandatory roaming requirements as part of the consultation announced in *Canada Gazette* notice DGSO-001-12.

Industry Canada is seeking comments on the proposed condition of licence related to the requirement for annual reporting.

123. In its comments, TELUS noted that all reporting imposes significant overhead on licensees, so the Department must be certain that the benefits to any reporting outweigh the costs. As such, TELUS indicated that it supported recent Department modifications that reduce licensees' annual reporting requirements for spectrum licences, such as the removal of the requirement for an auditor's statement to accompany the research and development expenditures.

124. TELUS has proposed methods for which the annual reporting requirement could be streamlined even further. First, TELUS has asked that annual reporting for all spectrum licences, including spectrum in the 700 MHz band, be made at the most rolled up tier level

that an operator holds geographically contiguous spectrum in with additional disclosure detail made available to the Department on an as required basis. TELUS' proposal is based on the fact that reporting at this level will still give the Department a complete picture of the licensee's spectrum usage to date while reducing the associated data gathering and reporting requirements as much as possible.

125. Bell has raised a similar proposal where a licensee would be required to report based on its total operating area.<sup>34</sup> Bell agrees that reporting based on an increased level of detail would not be meaningful and only serves to increase the volume of reporting work for the licensee.
126. TELUS also supports Bell's proposal that the condition of licence allow for annual reports to be filed within 180 days the licensee's fiscal year-end.<sup>35</sup> The additional 60 days would be appreciated by licensees because it has been TELUS' experience that it does take time to compile the information requested, especially if the R&D condition of licence is retained.

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<sup>34</sup> Comments of Bell Mobility, para. 109.

<sup>35</sup> Comments of Bell Mobility, para. 113.

## 7. Auction Process

### 7.2 Opening Bids

Industry Canada is seeking comments on the proposed opening bids as presented in Table 4.

128. As detailed in TELUS' initial submission, TELUS recommends that reserve prices are decoupled from opening bids and that opening bids be made half the proposed reserve price to improve price discovery. The reserve price threshold could be set at the aggregate block level (e.g., across the 14 A block group of licenses) as opposed to at the individual licence level.
129. TELUS' recommendation above stands whether or not the Department adjusts some reserve prices based on the input of others. TELUS supports the comment of Rogers that the reserve price of the A block in the top 2 markets has been proposed at a very high level and potentially above a market clearing level. However, we leave it to the Department to assess Rogers' recommended fix which involves reducing the price of all prime spectrum in Southern Ontario and Southern Quebec.

### 7.3 Proposed Eligibility Points for the 700 MHz Spectrum Auction

Industry Canada is seeking comments on the proposed eligibility points for spectrum licences in the 700 MHz band, as outlined in Table 5.

130. TELUS continues to support the Department's eligibility point proposal with the minor modifications suggested<sup>36</sup> to make the unpaired 5 MHz blocks half the eligibility of the paired 5+5 MHz blocks.

*TELUS recommends that the Department round up all FDD eligibility point levels to be divisible by 2 (taking the total for a one paired block nationally to 1228 from 1220 because 8 service areas would need to be rounded up by 1) and then make the corresponding TDD blocks in each service area exactly half the eligibility points such that one TDD block nationally would be 614 eligibility points.*

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<sup>36</sup> TELUS provides a detailed rationale for its suggested modifications in paragraphs 115 – 121 of its initial submission.

131. TELUS provides the following eligibility point guidance as the Department considers all the input to its consultation:
- a. All 5 paired licences in the same service area should be the same number of eligibility points.
  - b. Paired licences should have a number of eligibility points that is divisible by 2.
  - c. Unpaired licences should have a number of eligibility points that is equal to half the number of eligibility points of the paired licences in the same service area.
  - d. The relative distribution of points across the 14 service areas could be:
    - i. The Department's proposal based on a rounded MHz-pops which are then scaled whether deemed a top 2 service area (2.6x), the next 3 service areas (1.2x) or the rest, 9 service areas not scaled (i.e., 1x). TELUS has no issues with the Department's proposal.
    - ii. Eastlink would remove the scaling from the Department's approach. TELUS can support this proposal.
    - iii. Public Mobile's simple scheme does not make for a practical auction when a bidder could combine a few blocks in say Northern Ontario and Northern Quebec and this could be the equivalent eligibility points of 1 block in Southern Ontario, etc. TELUS does not support this.
132. TELUS would support any adjustment to reserve prices that the Department deemed necessary in line with any adjustment to eligibility points.

## 7.4 Pre-auction Deposits

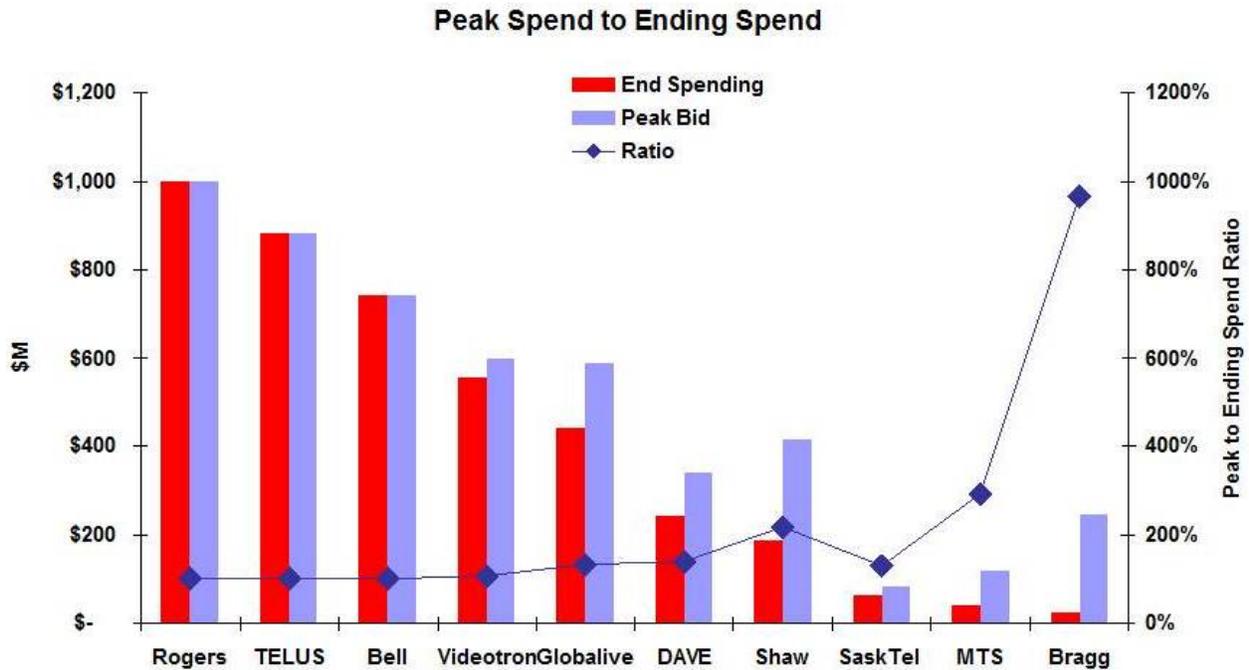
Industry Canada is seeking comments on the proposed pre-auction deposits as outlined.

133. TELUS supports the deposit process outlined as well as the proposed pre-auction deposit level of \$130,000 per eligibility point which essentially means that an applicant must put up a deposit approximately equal to the reserve price of the spectrum sought.
134. TELUS supports any minor modification to the above rate (of \$130,000 per eligibility point) that the Department deems necessary based on changes to eligibility points as suggested by TELUS in the preceding section.
135. Although in the form proposed TELUS does not find it practical, TELUS supports the *intent* of Bell's recommendation that:

*“over the course of the auction, prior to the commencement of each day's bidding, bidders be required to provide Industry Canada with a financial guarantee via a letter of credit equal to 100% of the value of their previous day's last package bid. This measure will provide a strong market disincentive to discourage bidders from engaging in gamed bidding designed solely to drive up the price of spectrum that they have no meaningful interest in acquiring.”*

136. TELUS notes that in the 2008 AWS auction, while the national incumbents' peak bid levels were consistent with their ending spectrum expenditures, some of the entrants and regional carriers dramatically exceeded their ending spectrum expenditures in the auction as depicted in the chart below.

Figure 3 – 2008 AWS Auction Metrics: Peak to End Spend by Bidder



137. The bidding behaviour displayed above indicates that industry participants might have taken advantage of the bidding process to bid up the value of licences even though they might not have had a serious intention of actually acquiring these licences. As a result, the auction process should include a mechanism whereby participants must be willing to demonstrate the legitimacy of their submitted bids. Therefore, TELUS supports the Bell proposal in that bidders must back their bids with sufficient deposits to finance their bid packages. TELUS believes that such a process is further justified by the CCA format in which all bids remain active throughout the entire auction and can theoretically win.

138. TELUS recommends a modified version of Bell's proposal which is more practical but would still have the full intended effect. TELUS recommends that deposits be subject to a weekly top up process as follows:

- a. Starting at the end of the bidding for the day on the first or second Friday of the auction and every Friday thereafter, Industry Canada would advise bidders of their peak dollar bid<sup>37</sup>, auction to date.
- b. Any amount over a bidder's current financial deposit would have to be deposited with Industry Canada by the following Tuesday according to the same or similar process as used for initial deposits.
- c. A final top up deposit would be due 2 business days after the final clock round and one day before the supplementary round.
- d. There would be no top ups associated with bids placed in the supplementary rounds or the assignment stage.

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<sup>37</sup> TELUS recommends that deposit top ups be based on the price of the package with the highest dollar value that the bidder has entered up to that point in the auction. (Bell recommended an end of day package bid value.)

## 10. Licence Renewal Process

Industry Canada is seeking comments on the proposed renewal process for spectrum licences in the 700 MHz band.

139. TELUS reiterates that it has concerns with one aspect of, but otherwise supports, the proposed renewal process for spectrum licences in the 700 MHz band. Several other respondents concur.

140. The Department refers to annual fees upon renewal in paragraph 153 of the consultation:

*“As noted in the FSAC, licence fees that reflect some measure of market value will apply to licences issued through a renewal process.”*

141. The “FSAC” reference is to the updated Framework on Spectrum Auctions in Canada released March 14, 2011, section 3.6:

*“For licences issued through a renewal process, licence fees that reflect some measure of market value will apply.”*

142. On March 14, 2011, the government also released DGSO-002-11, the Cellular and PCS Renewal Decision, just as licence terms were expiring:

*“At the time that the renewal consultation paper was issued, it was intended that the fee order would be reviewed and possible fee changes implemented. However, in November 2010, the Minister announced that fees for cellular and PCS licences would be frozen for the time being. Until further notice, the existing annual licence fee will apply consistently to all cellular and PCS licences irrespective of the initial licensing process. This includes licences issued through the renewal process which were initially issued through the auction process. The Minister may review and amend the fees during the licence term after consulting with licensees.”*

143. TELUS submits that there must be a separate and thorough consultation conducted with respect to the determination of annual licences fees on mobile spectrum as well as how to apply and the level at which annual spectrum fees should apply to auctioned spectrum licences at renewal.

144. A consultation specifically on these spectrum fee issues originally contemplated by the Department in 2009 was never issued. At the time, the Minister determined in November

2010 that annual licence fees were to remain indefinitely frozen at current rates (2nd highest in the world and 38 times higher than in the US) and that until further notice annual fees would apply to auctioned spectrum upon renewal, a step other jurisdictions had not taken.

145. Under this interim fee structure, in 2019, the AWS band would require licensees to remit some \$104 million per annum to the government in annual licence fees of which over \$46 million would come from AWS set aside licensees.
146. TELUS notes that the phrase “some measure of market value will apply” underscores the need for a broad consultation on this issue at the earliest opportunity given the Department’s uncertainty on this point. In TELUS’ view, freezing rates at current levels for any further prolonged period of time is inappropriate given the very high fee levels in place and the trends with respect to the fee issue for both granted and auctioned spectrum in other jurisdictions.
147. TELUS maintains that the industry and the Department still need to go through the intended consultation process at the earliest opportunity in order to properly establish fees, if any fees are justified, particularly for auctioned spectrum in order to come to a well measured resolution.

## Appendix A – Procedural Recommendations

148. Based on suggestions made by the various respondents on procedural issues, TELUS has compiled what it views as a good set of recommendations that the Department should endeavour to implement wherever possible.

### a. Availability of Information

- i. Release as soon as possible a precise schedule for the auction, the mock auction(s) / online training session(s), and the release of guides, tools, templates, formulae, file formats and software.
- ii. Release supplementary round bid upload template 3 months in advance.
- iii. Disclose the formula for bid increments at least 3 months in advance. TELUS supports bid increments that range between 5% and 10% and are capped at \$10m.
- iv. Provide sample clock round output files at least 3 months in advance.
- v. Make the online bidding tool available at least 3 months in advance.
- vi. Release standalone winner and price determination tool at least 3 months in advance.
- vii. Release detailed user guide including bid interface screenshots for clock and supplementary round bid entry/upload 3 months in advance.

### b. Auction Training / Mock Auction(s)

- i. Hold at least two mock auctions / online bid tool training sessions at least 2 months apart with the last one at least 3 weeks in advance of the auction.
- ii. Consult on the detailed clock phase and supplementary round bid processes. Take comments after the first online training session.

c. Bid Tool

- i. Improve display of supplementary round package bids in bid tool.
- ii. Support add/change/delete of supplementary round bids in bid tool (not just upload).

d. Auction Process

- i. Confirm and disclose in advance of the start of the auction that all participants be qualified to hold the spectrum they are bidding on, an essential pre-condition for an auction to function in a fair manner.
- ii. Grant 3 or more 60 minute extension rights consistent with other CCAs. A bidder could proactively invoke one to buy an hour of time. One would automatically kick in if a bidder misses the bid submission deadline.
- iii. Provide advance notice to all bidders if/when the Department plans to override the bid increment formula.
- iv. Announce rules for exceptional circumstances during the auction.
- v. Hold the supplementary round 3 business days after the final clock round to give bidders sufficient time to prepare.

End of document