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November 3, 2017

**via E-mail**

Senior Director  
Spectrum Licensing and Auction Operations  
Innovation, Science, and Economic Development Canada  
235 Queen Street, 6<sup>th</sup> Floor  
Ottawa, ON K1A 0H5

Dear Senior Director,

**Re: Gazette Notice SLPB-005-17, Consultation on a Technical, Policy and  
Licensing Framework for Spectrum in the 600 MHz Band**

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Attached are the Reply Comments of Saskatchewan Telecommunications (SaskTel), in response to the *Canada Gazette* notice regarding the above referenced consultation and as amended in Notice No. SLPB-008-17 - *Extension to the reply comment period: Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band*.

SaskTel thanks the Department for this opportunity to provide reply comments and input into the consultation process.

Sincerely,

A handwritten signature in purple ink, appearing to be "W.N. Beckman", written in a cursive style.

W.N. (Bill) Beckman  
Senior Director - Regulatory Affairs  
RAB/nb

Attachment

# SaskTel Reply Comments:

Gazette Notice SLPB-005-17

Consultation on a Technical, Policy and  
Licensing Framework for Spectrum in  
the 600 MHz Band

November 3, 2017

## EXECUTIVE SUMMARY

1. The following is a summary of SaskTel's Reply Comments in response to comments regarding Gazette Notice SLPB-005-17 *Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band* ("the Consultation") as posted on the Innovation, Science and Economic Development (ISED) website.<sup>1</sup>
2. This consultation is timely. It is appropriate for the Department to move ahead with the development of the policies and a licensing framework for auctioning the 600 MHz band spectrum not only to allow this low band spectrum to be used to meet growth in demand for mobile broadband services in rural and remote areas, but also as a key band for future 5G network deployments and services.

### **Supporting Rural Deployment and Competition**

3. SaskTel strongly supports the set-aside measures proposed in the licensing framework for the 600 MHz auction. Various responders oppose these measures and their arguments can be categorized into six main premises: 1) anticipated bidders are well capitalized so they have the financial means to compete in an open auction; 2) regional providers have not deployed their 700 MHz spectrum so they don't need more; 3) there is an unfair imbalance of sub-GHz spectrum amongst national carriers; 4) set-aside eligible bidders will game the non set-aside auction; 5) only national carriers will deploy the 600 MHz in rural markets; and 6) the 600 MHz spectrum cannot be denied to the national carriers who will be the first to deploy for 5G purposes.
4. SaskTel has examined these arguments in detail and has found nothing substantive or germane to the core issue of how to best deploy and leverage this spectrum for rural coverage purposes. SaskTel submits that for its serving territory none of the above arguments opposing the set-aside warrant the removal of the pro-competitive measures. Having a set-aside will ensure that "all operators", national and regional alike, are given a fair opportunity to access "this critical" spectrum. Further detail on

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<sup>1</sup> As posted on the ISED website at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11337.html>

SaskTel's response to the opposing premises can be found in the main body of this document.

5. Because low band spectrum is limited, and the 600 MHz band is so critical for rural deployments, it is essential that the 600 MHz spectrum be acquired by the entity best suited to deploy and utilize the spectrum. SaskTel firmly believes that only an established mobile wireless service provider currently providing wireless services and actively providing facilities-based telecommunications services in the licence area of bidding interest would be in a position to be able and willing to deploy 600 MHz spectrum in a region such as Saskatchewan. To do otherwise would allow the spectrum to lay fallow.
6. After a review of all of the comments submitted, SaskTel still strongly believes that only active mobile wireless service providers would have the ability and incentive to effectively deploy the 600 MHz spectrum in regions such as Saskatchewan. Many respondents agreed with SaskTel on this. Furthermore, SaskTel believes that the approach of the Department in defining "national incumbent" on the basis of market share and areas being served is most appropriate. SaskTel does not agree with some comments submitted that suggests this definition should be based purely on revenues, as this would be arbitrary and misleading, and therefore inappropriate.
7. SaskTel has very serious concerns about the eligibility criteria for set-aside bidders as proposed by the Department in the Consultation. The current proposal only requires registration with the CRTC as a facilities-based telecommunications carrier, and to be providing some sort of telecommunications service in the licence area of bidding interest. Simply being registered as a telecommunications service provider cannot guarantee in any way that the entity has the ability or desire to deploy any mobile wireless spectrum. The Consultation gives no criteria whatsoever that could be used to evaluate the extent that the entity is providing service in the licence area of bidding interest.
8. With the requirements and the evaluation criteria being so loose, this almost guarantees that speculators will be allowed, and in fact invited to bid on set-aside spectrum. SaskTel strongly opposes set-aside spectrum being allowed to be acquired by pure speculators with no ability or intention to deploy the spectrum. In

order to prevent spectrum speculation and hoarding, and to avoid valuable 600 MHz spectrum laying fallow, SaskTel strongly recommends that eligibility for set-aside bidding be restricted to active non-national incumbent mobile wireless service providers that are providing facilities-based telecommunications services in the licence area of bidding interest as of the release date of the Consultation.

### **Opposing spectrum caps on the sub-GHz spectrum**

9. The potential use of spectrum aggregation limits or spectrum caps in the 600 MHz auction was raised by a few of the commenters. SaskTel is not in favour of a 600 MHz auction spectrum cap and specifically not in favour of a sub-GHz spectrum cap in general. Every argument supporting a spectrum cap presents a scenario where SaskTel is excluded from this spectrum - negatively impacting rural residents in Saskatchewan who will pay the price in terms of being underserved. More detail specific to SaskTel's position on spectrum caps is contained in the core of this document.

### **Auction Formats**

10. After our review of the comments submitted by the various parties on the auction format options proposed by the Department, as well as a closer examination of the FCC 600 MHz auction format and rules, SaskTel objects to the proposed use of any form of combinatorial clock auction format. SaskTel cannot comprehend why the most complex auction system in the world is needed to conduct a simple, fair and 'transparent to users' auction – the Department's stated objectives of the auction format<sup>2</sup>. The proposed CCA format runs completely counter to the spirit of the federal government's efforts to reduce the regulatory complexity and expenses incurred by businesses in its dealings with government. Very few people in Canada understand the intricacies of the CCA format let alone the proposed modifications. Further, it can be argued that the complexity of the proposed auction would act as a barrier to smaller regional telecom providers from even participating. With these points in mind, SaskTel would now recommend the use of the Simultaneous Multiple Round Auction (SMRA) format for the 600 MHz auction. The SMRA format is simple and equitable, and would address the concerns of many parties regarding the complexity of the

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<sup>2</sup> Para. 46 in the Consultation.

auction formats. The format is well known, and the rules used by the FCC in their 600 MHz auction could be used as a guide and easily adapted for the Canadian market.

11. SaskTel is opposed to the proposed ECCA format because the format and rules are untested, and the proposed rules will in fact inflate second price rule prices paid by winner's closer to first price rule prices. Some commenters also opposed the ECCA format, while a few others favoured the ECCA format. However, it was quite clear from the comments of those favouring the ECCA format that the primary reason they were favouring the ECCA format was because the ECCA format offered a guarantee that bidders would win their final clock round package bid, and mitigate the risks and uncertainty of losing their package bid through the supplemental round.
12. This guarantee is important to regional operators such as SaskTel in ensuring that a smaller regional package bid is not trumped by a large national package bid. Therefore, SaskTel is proposing an alternate CCA auction format that retains the guarantee portion of the ECCA, but avoids the flaws of the ECCA format. Further information on our proposed CCA auction format can be found in our detailed reply comments below.
13. Should the Department choose to implement a CCA auction format, SaskTel would recommend utilizing our proposed CCA alternate auction format because we believe it would achieve the simplicity and transparency that bidders desire, along with the guarantees important to smaller regional bidders, and without the introduction of the flaws and inefficiencies of the proposed ECCA format.

## INTRODUCTION

14. Saskatchewan Telecommunications (“SaskTel” or “the Company”) is pleased to provide these reply comments in response to comments posted on the ISED website<sup>3</sup> regarding Gazette Notice SLPB-005-17 *Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band* (“the Consultation”).
15. The section numbering of this document corresponds to the section numbering of the Consultation. Failure to address any particular issue or item, or the Comments made by any other party, should not be construed as agreement with those Comments where such agreement is not in the interests of SaskTel.

## SASKTEL REPLY COMMENTS TO THE CONSULTATION ON A TECHNICAL, POLICY AND LICENSING FRAMEWORK FOR SPECTRUM IN THE 600 MHz BAND

### 6. *Pro-competitive measures*

**Q1A—ISED is seeking comments on its proposal to implement a set-aside as a pro-competitive measure in the auction process for the 600 MHz band.**

16. SaskTel has reviewed the comments posted on the contentious issue of proposed pro-competitive measures for the 600 MHz auction process. SaskTel strongly supports the proposed set-aside of 30 MHz and offers the following responses to the arguments opposing this competitive measure.
17. Various responders oppose these measures and their arguments can be categorized into six main premises: (SaskTel’s responses follow suit):
18. **Premise 1:** *The anticipated eligible set-aside bidders are well capitalized companies with the financial means to compete for spectrum in an open auction.*
19. **SaskTel’s Response:** SaskTel’s experience in recent auctions has been to be shutout from acquiring any of the targeted spectrum best suited to serve its predominantly rural geographic market due to the strategic bidding behavior by national carriers. Shutting out SaskTel in its geographic market is inefficient usage of spectrum - one of

<sup>3</sup> <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11337.html>

the most damaging unintended consequences of prior auctions. It made spectrum scarcer and more expensive than what it should be valued in the Saskatchewan context, which is the exact opposite of policies that are conducive to lower consumer prices. By its very nature, an open auction with national providers competing with regional carriers isn't a level playing field. The auction policies must ignore the "financial capacity" argument and instead focus on ensuring that the rural subscriber is adequately served by the carrier that is best able to deploy the spectrum in the rural market it serves. This auction isn't about who can afford it - it's about who can deploy it!

20. **Premise 2:** *Some responders suggest that the regional providers have not utilized the 700 MHz spectrum they already have, consequently rural Canada remains underserved.*
21. **SaskTel's Response:** In Saskatchewan, this statement is not valid. SaskTel is far ahead of its 700 MHz license deployment obligations where coverage to over 60% of the population has been achieved. SaskTel is executing its network expansion plan to continue the extended deployment of the 700 MHz coverage into rural and deep rural areas of the province.
22. **Premise 3:** *Not all carriers had the benefit of receiving national sub-GHz spectrum at the inception of the cellular communications industry therefore there is an imbalance in sub-GHz holdings between national incumbents.*
23. **SaskTel's Response:** Historically, the carriers in existence at that time were allocated 850 MHz spectrum to serve their respective markets – no carrier was unfairly shut out. To suggest that there is an unfairness due to an imbalance on a national basis is to disregard the conscious business decision by a regional carrier to expand into a geographic market where the 850 MHz spectrum was already allocated. It is not an unfair imbalance but a business reality that does not warrant any correction via a spectrum auction geared to balance national carrier holdings of sub-GHz spectrum. It is not logical to find fault in this reality and if a company is experiencing the spectrum strain from low sub-GHz holdings it must seek a solution in bidding aggressively for sub-GHz spectrum when it comes available.

24. **Premise 4:** *Set-aside bidding will enable egregious gaming.*
25. **SaskTel's Response:** SaskTel believes the generic block bidding will prevent set-aside eligible bidders from gaming the non set-aside prices therefore set-aside eligible bidders should not be prevented from bidding on more than the set-aside blocks.
26. **Premise 5:** *Rural sub-licenses should be excluded from the set-aside because only national carriers have the desire and ability to invest in rural areas.*
27. **SaskTel's response:** This premise gets to the crux of the matter. SaskTel is the only carrier in Saskatchewan that will deploy the 600 MHz to serve its rural and deep rural subscribers. Unlike other carriers who have neither the towers or the will, SaskTel is the only company in Saskatchewan with the network facilities and corporate will to purpose this spectrum as intended by the Department. To exclude rural sub-licenses from the set-aside thereby shutting SaskTel out from the 600 MHz spectrum only supports the strategic acquisition of the spectrum by a national carrier whose focus is urban area deployment. It is for this principle reason that SaskTel supports the set-aside eligibility rules as defined in the proposed licensing framework.
28. **Premise 6:** *The 600 MHz band will be the only spectrum which is both appropriate and available to support early 5G network deployments in North America therefore the national carriers must not be excluded from access to this spectrum.*
29. **SaskTel's Response:** The 3GPP document R4-1709871 was referenced to support this premise. In that document, the list provided by 3GPP clearly shows that 600 MHz is NOT the ONLY band that can support early 5G deployment. For sub-GHz spectrum, there is presently only the 850 MHz and 600 MHz bands being developed for 5G, but we expect the 700 MHz band should be developed shortly. This is in addition to multiple bands above 1 GHz that are being standardized for 5G. A more accurate statement is that there will be multiple band choices for 5G along with 600 MHz therefore a national carrier will have more than the 600 MHz option to deploy 5G.
30. Having a set-aside will ensure that “all operators”, national and regional alike, will be given a fair opportunity to access “this critical” spectrum. Also, the likely focus for the

first 5G deployments by the national carriers will be their large urban markets. SaskTel states that the regional operators tend to focus more on rural areas in their regions, and would likely roll out 600 MHz spectrum and likely 5G to rural areas before the national carriers.

**Q1B—ISED is seeking comments on its proposal to set aside 30 MHz of spectrum in the 600 MHz band for eligible entities and to have open bidding (no pro-competitive measures) on the remaining 40 MHz in the band.**

31. SaskTel notes that a wide range of comments were submitted on the size of the proposed set-aside spectrum, ranging from no set-aside to a 40 MHz set-aside. After a review of these comments, SaskTel still strongly believes that the 30 MHz set-aside as proposed by the Department is appropriate.

**Q1C—ISED is seeking comments on its proposal to limit the eligibility criteria to bid on set-aside spectrum to those registered with the CRTC as facilities-based-providers, that are not national incumbent service providers, and that are actively providing commercial telecommunication services to the general public in the licence area of interest, effective as of the date of application to participate in the 600 MHz auction.**

32. SaskTel has reviewed the comments posted on this question, and the range of responses from commenters regarding who should be eligible and in some cases who should not be eligible to bid on the set-aside spectrum.

33. The key issue that must be considered here is which party is best positioned and best suited, and therefore most likely to deploy the 600 MHz spectrum in a timely manner, to the benefit of the consumer, in this case primarily rural residents. Timely spectrum deployment is in alignment with the Department's goal of facilitating the most efficient utilization of spectrum to the benefit of Canadians.

34. SaskTel still firmly believes that only an existing mobile wireless service provider will actually deploy 600 MHz spectrum, particularly in rural areas. An existing mobile wireless service provider can leverage their network infrastructure to deploy the spectrum in a timely manner. In our initial comments on this Consultation SaskTel provides more details on the need for set-aside bidders to be active mobile wireless service providers.

35. Many commenters recognized this, and have stated in their comments the necessity that the set-aside eligible bidders be established mobile wireless service providers who are not national incumbent service providers and are actively providing wireless services. These commenters included Bell Mobility Inc., Bragg Communications Inc., Quebecor Media Inc., Rogers Communications Canada Inc., Shaw Communications Inc., Tbaytel, and Xplornet Communications Inc.<sup>4</sup>
36. SaskTel has very serious concerns about the eligibility criteria for set-aside bidders as proposed by the Department in the Consultation. The current proposal only requires registration with the CRTC as a facilities-based telecommunications carrier, and to be providing some sort of telecommunications service in the licence area of bidding interest. Simply being registered as a telecommunications service provider cannot guarantee in any way that the entity has the ability or desire to deploy any mobile wireless spectrum. The Consultation gives no criteria whatsoever that could be used to evaluate the extent that the entity is providing service in the licence area of bidding interest. The requirements are so loose that it appears an entity able to resell some sort of telecommunications service and having at least one customer in the licence area could in theory be eligible to bid on the set-aside spectrum. This is foolish policy.
37. With the requirements and the evaluation criteria being so loose, this almost guarantees that speculators will be allowed, and in fact invited to bid on set-aside spectrum. SaskTel strongly opposes set-aside spectrum being allowed to be acquired by pure speculators with no ability or intention to deploy the spectrum. This is not good spectrum management policy, as idle spectrum only benefits hoarders and speculators. Low band spectrum is critical for rural deployments, and the supply of 600 MHz spectrum is very limited.
38. In order to prevent spectrum speculation and hoarding, and to avoid valuable 600 MHz spectrum laying fallow, SaskTel strongly recommends that eligibility for set-aside bidding be restricted to active non-national incumbent mobile wireless service

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<sup>4</sup> Comments of Bell Mobility para. 36, Bragg Communications Inc para. 31, Quebecor Media Inc. para. 48, Rogers Communications Canada Inc. para. 93, Shaw Communications Inc. para. 77, Tbaytel para. 28, and Xplornet Communications Inc. page 4.

providers that are providing facilities-based telecommunications services in the licence area of bidding interest as of the release date of the Consultation. This would ensure that eligible set-aside bidders will have the ability, incentive, and commitment to effectively deploy the valuable and scarce 600 MHz spectrum in a timely manner to the benefit of all Canadians.

39. SaskTel has noted the comments of Corridor Communications Inc., and strongly disagrees with their proposed definition of a national incumbent service provider as “*companies with national telecommunications revenues of greater than \$100 million*”<sup>5</sup>. SaskTel strongly disagrees with this definition purely based on revenues. SaskTel submits that the definition of service providers should be based on markets being served and market share, and not on an arbitrary revenue figure. The amount of revenue or capital a company has is not relevant, the determining factor is what areas are being served. SaskTel agrees with the Department’s approach in using national market share to define national incumbent service providers.

#### **Spectrum Caps**

40. Although not specifically proposed by the Department, the potential use of spectrum aggregation limits or spectrum caps in the 600 MHz auction was raised by a few of the commenters. Among those that proposed a form of cap, most agreed it should be 20 MHz, either on set-aside spectrum or a general cap on 600 MHz spectrum holdings. Xplornet proposed a conditional cap between 10 and 30 MHz on set-aside spectrum, while TELUS also proposed a cap to cover all spectrum holdings below 1 GHz, a sub-GHz cap.
41. SaskTel is not in favour of a spectrum cap. Every argument supporting a spectrum cap presents a scenario where SaskTel is excluded from this spectrum - negatively impacting rural residents who will pay the price in terms of being underserved.
42. It is quite clear from the comments submitted to the 600 MHz consultation that the auction process will be very competitive. The 600 MHz spectrum is valued quite highly to provide wider coverage essential for rural deployments, as well as providing

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<sup>5</sup> Comments of Corridor Communications Inc., page 3

good building penetration in urban areas. Standards are also being developed by the 3GPP for this band to be used for future 5G network deployments.

43. With this valuable spectrum and the large number of potential bidders that will surely be participating, it is not expected that any one party will be able to acquire a large number of blocks. SaskTel believes that market forces should be allowed to operate in the auction, without the artificial limits of any spectrum cap.
44. 600 MHz Spectrum Cap: However, despite our arguments given above, should the Department choose to implement some form of spectrum cap, SaskTel believes that a 20 MHz spectrum cap on either set-aside spectrum or overall 600 MHz spectrum holdings would not be unreasonable. The 20 MHz of spectrum should be sufficient to allow a service provider to deliver the bandwidth being demanded by consumers.
45. SaskTel would be strongly opposed to a 10 MHz limit. With the high bandwidths being demanded by customers today, service providers truly interested in meeting customer demands would be very hard pressed to provide a decent service with this small of a cap.
46. Sub-GHz Spectrum Cap: As mentioned previously, SaskTel is not in favour of a spectrum cap, and not in favour of a sub-GHz cap. SaskTel is committed to serving all of the residents of Saskatchewan, and particularly in overcoming the challenges of bringing service to rural and remote areas. Spectrum below 1 GHz is critical for regional service providers such as SaskTel to serve rural customers. A sub-GHz limit would restrict SaskTel in providing service to rural residents and meeting demands for bandwidth that are just as high as urban residents. SaskTel needs low band sub-GHz spectrum to meet these bandwidth demands in rural areas.
47. Because of the critical role sub-GHz spectrum plays in rural deployments and serving rural customers, SaskTel is opposed to a sub-GHz spectrum cap.
48. However, should the Department choose to impose a sub-GHz spectrum cap, a 60 MHz limit on sub-GHz spectrum holdings would not be unreasonable. This would allow operators to acquire at least some 600 MHz spectrum in a more fair manner, as opposed to the proposed 50 MHz sub-GHz limit which would effectively shut out

some operators and in effect would be arbitrarily picking winners and losers in the auction prior to commencement.

49. SaskTel is strongly opposed to a 50 MHz sub-GHz spectrum cap, but as stated above a 60 MHz sub-GHz spectrum cap would not be unreasonable should the Department choose to implement a sub-GHz aggregation limit.

**9. Auction format and rules**

**9.3 Structure and benefits of auction format options**

**Q5—ISED is seeking comments on:**

- a) The advantages and disadvantages of the three auction formats being considered for the 600 MHz auction:**
  - i. Combinatorial clock auction, using the WARP-based activity rule (annex A);**
  - ii. Combinatorial clock auction, using the GARP-based activity rule (annex B);**
  - iii. Enhanced combinatorial clock auction (annex C).**
- b) Where there is a preference for one of the options, respondents are asked to provide a rationale and explanation.**

50. After our review of the comments submitted by the various parties on the auction format options proposed by the Department, as well as a closer examination of the FCC 600 MHz auction format and rules, SaskTel would now recommend the use of the Simultaneous Multiple Round Auction (SMRA) format for the 600 MHz auction. Our reasoning is discussed below.

51. However, if the Department chooses to utilize a CCA auction format, in the following paragraphs SaskTel proposes an alternative CCA auction format that avoids the undesirable flaws in the ECCA format, but retains the very desirable certainty and guarantees proposed as part of the ECCA format.

**SMRA Auction Format**

52. In the comments, Bragg, Rogers, Sogetel and others proposed a simultaneous multiple round auction (SMRA) as an alternative to the three combinatorial clock auctions proposed by the Department. We support the simple Roger’s proposal because it satisfies multiple important auction design objectives: it is transparent, simple, and equitable (in the sense that two bidders that buy the same set of licenses

pay the same price). The SMRA is much simpler for bidders than the CCA and will reduce the costs of participating in the auction. Moreover, it dramatically reduces price uncertainty in the auction.

53. A practical way to run the auction is to follow the design used in the recent successful U.S. 600 MHz auction. The SMRA auction would start as a simple clock auction with a supply of 4 unrestricted and 3 restricted blocks in every area (28 products). Since the licenses would be generic, the auction would be simpler and much faster than previous SMRAs with specific licenses.
54. The clock portion of the auction would decide how many licenses of each type each bidder gets in each area. It would be followed by an assignment auction that would determine allocation of specific licenses while guaranteeing contiguity of allocations.
55. Since the U.S. recently successfully used this format, the rules are already tested. Moreover, the advisers that are helping ISED to design the Canadian 600 MHz auction were involved in the FCC's software development so presumably they could adapt the software at a low cost. Finally, the auction in Canada would be simpler since it does not include the reverse auction portion (where the TV stations bid to relinquish their broadcast licences) nor would it have multiple stages or the different categories of licenses due to partial impairment.

#### **ECCA Auction Format**

56. In their comments, interested parties are divided in their support for the ECCA. For example, SaskTel, Rogers, TELUS, and Rogers strongly opposed the ECCA, while Quebecor, Tbaytel, and Xplornet supported the ECCA because of its increased certainty.
57. Our reading of the record is that the commenters agree that there are two main innovations in the ECCA format:
  - **Phantom bids:** bids that the auctioneer would artificially impute from the actual bids,
  - **The guarantee:** each bidder is guaranteed to win one of its bids (as long as its bid in the final clock round is non-zero).

58. All commenters seem to agree that the phantom bids are not a desirable design feature – as we explained in our filing, they undermine the second-price rule which is a crucial element of the CCA design to achieve efficiency. At the same time, several commenters value the transparency and certainty provided by the guarantee aspect of the ECCA design (but also, as Bell points out in its comments, if the regular rounds end with non-negligible excess supply, the price estimates from the clock rounds would turn out to be very imprecise).
59. Phantom bids would overstate true opportunity cost and hence undermine the second-price logic of the CCA. As Bell demonstrated in its second examples,<sup>6</sup> in the ECCA bidders have much weaker incentives to bid their true valuations for packages than in the CCA. Once bidders express non-truthful valuations, there is a real risk of an inefficient outcome. Therefore, the ECCA is more prone to inefficient outcomes than the CCA.

#### **SaskTel's Proposed CCA Auction Format**

60. Importantly, the beneficial guarantee portion of the CCA can be introduced independently from the negative phantom bid and inefficiency-producing portions of the ECCA. A simple modification of the CCA (with either GARP or WARP activity rule) could achieve the benefits of the guarantee without introducing phantom bids.<sup>7</sup>
61. In particular, the CCA could follow the rule proposed in the ECCA in either the WARP or GARP options:
- A solver will be used to identify the highest value combination of valid bids, subject to the requirements described in annex A, with the additional requirement that each bidder who satisfied the protection requirement wins one of its packages.<sup>8</sup>
62. Then, prices would be computed using the Vickrey-Clarke-Groves (VCG) rule, as in the CCA, imposing the analogous constraint for the alternative allocation used to set

<sup>6</sup> Bell Comments, starting on page 25

<sup>7</sup> SaskTel's comments in 2012 responding to DGSO-002-12 "*Consultation on a Licensing Framework for Mobile Broadband Services (MBS) - 700 MHz Band*" discussed how such a guarantee could be implemented in the CCA. See paragraphs 33 - 37 of those comments.

<sup>8</sup> Paragraph 26, Annex C, page 64 of the Consultation

prices (that is, that in any alternative allocation used to determine prices, every other bidder wins one of its bids).

63. Each bidder's price would be capped by its bid for its winning package so that the price would be the minimum of the VCG calculated price and the bid, similar to the formula in paragraph 27 of Annex C (page 65) of the Consultation.

64. We believe that this design would achieve the simplicity and transparency that many bidders desire (and find CCA to fall short on), without the introduction of the phantom bids and the incentive and efficiency problems they create.

## **CONCLUSION**

65. SaskTel has reviewed the comments posted regarding the Department's proposals for the Technical, Policy and Licensing Framework for the 600 MHz spectrum band, including proposed auction formats and rules, licensing processes, conditions of licence, and proposals to support competition in the wireless market.

66. Based upon our review of the comments submitted in response to the Consultation, SaskTel has highlighted some issues of concern and provided reply comments and further clarifications of SaskTel's position on the following:

- SaskTel supports the set-aside measures proposed by the Department, is not convinced by arguments presented in opposition to a set-aside, and still believes this is the best approach to ensure the 600 MHz spectrum is acquired and deployed by mobile wireless service providers that are best suited to serve rural residents.
- Eligibility for the set-aside spectrum should be limited to non-national incumbent mobile wireless service providers that are currently providing mobile wireless services, and actively providing facilities-based telecommunications services in the licence area of bidding interest as of the date of the release of the Consultation to ensure that the spectrum is deployed and not acquired by speculators or others that will allow the spectrum to lay fallow, to the detriment of rural residents.
- Some commenters had proposed the imposition of spectrum caps, either caps on set-aside spectrum or 600 MHz spectrum in general, or a cap on total sub-GHz

spectrum holdings. Any cap on 600 MHz or sub-GHz spectrum holdings would negatively impact efforts to serve rural residents, and those rural residents will pay the price in terms of remaining underserved.

- SaskTel recommends that an SMRA auction format be used for the 600 MHz auction because it would be far less complex, more transparent, and was successfully used by the FCC for their 600 MHz auction. The FCC 600 MHz auction format and rules have already been tested, and can be used with perhaps some modifications for the Canadian 600 MHz auction.
- Alternatively, should the Department still choose to utilize a CCA auction format, SaskTel has proposed an alternate CCA auction format that can address the concerns regarding uncertainty and risks of bidding in a CCA auction format raised by many commenters, particularly smaller regional operators. The alternate CCA format proposed by SaskTel includes the guarantees provided in the proposed ECCA format, but would not include the flaws and inefficiencies contained in the proposed ECCA format.

67. SaskTel is pleased to have had the opportunity to provide these reply comments and further inputs and comments to the important issues raised in this Consultation, and hopes that our submission will provide a fuller view of these issues to the Department.