Look Communications Inc.

Response to

Gazette Notice No. DGRB-010-07

Consultation on Proposed Conditions of Licence to Mandate Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements

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January 22, 2008

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Director
Spectrum Management Operations
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street
Ottawa, ON K1A 0C8 Sent via email: AWS@ic.gc.ca

Look Communications Inc. Response to Proposals in:

> **Canada Gazette, Part I, Vol. 141, No. 49 — December 8, 2007: Notice No. DGRB-010-07– Consultation on Proposed Conditions of Licence to Mandate Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements**

Dear Director:

Look Communications Inc. ("Look") is pleased to provide input to the consultation process detailed in the notice *"Consultation on Proposed Conditions of Licence to Mandate Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements"*(the "Consultation") ". Look has separated its responses to all questions where comments are solicited into Mandatory Roaming and Mandatory Tower and Site Sharing.

Look is a Multipoint Distribution Service (MDS) provider that operates in Ontario and Quebec with licences from the Canadian Radio-Television and Telecommunications Commission. A pioneer in digital television in Canada, Look has deployed an extensive (2596 – 2686 MHz) MDS broadcast network in Ontario and Quebec to provide television and wireless internet services to Canadian families and businesses. The wireless internet product offered by Look utilizes the MCS and MDS return bands spanning 2150 – 2162 MHz.

Look recognizes that this Consultation is an important step in the growth and development of wireless markets in Canada. The ongoing efforts by Industry Canada to make additional spectrum available for wireless applications and its effort to entice new entrants into the wireless market will provide Canadian consumers with a wider range of wireless services and products that will meet their individual needs.

The Canadian wireless industry has seen great advancements over the past 20 years and is reaching a mature state of development through the existing service providers. The introduction of new wireless spectrum and mandatory roaming and tower and site sharing will inject new life into the wireless industry and is likely to facilitate a significant increase in the level of wireless services for all Canadians. Look commends Industry Canada for addressing these issues and believes that the changes proposed will promote competition resulting in lower prices, better service and improved choices for users in Canada.

It is our hope that the comments set out in the attached Appendix A will assist Industry Canada in drafting its final policy for mandatory roaming and mandatory tower and site sharing. Look's management and technical group are available to discuss any or all of these matters and Appendix B to this document entitled, "*2008 AWS Spectrum Auction Pre-Auction Questions for Industry Canada*" should be considered as part of this response as the questions indicate some of the more detailed issues that will arise with respect to mandatory roaming and mandatory tower and site sharing.

We look forward to continuing to work with Industry Canada as it continues its review of this important matter.

Yours truly,

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Attachments

A) Mandatory Roaming

Industry Canada's Question #1

> Are the timelines for responding to requests to share and roam and for submitting agreements that have not been finalized to an arbitrator appropriate? Are there other timelines that should be considered?

Look endorses the proposal, outlined in the consultation, of a 30 day deadline to respond to a request, but recommends a 60 day limit (from the initial date of request) to negotiate an agreement, after which the matter may be submitted to binding arbitration, which is to be completed within a period of 90 days from the date of request.

To facilitate a smooth process with reduced duplication of work for both the requesting party and the incumbent, requests to enter into roaming agreements as well as the responses to those requests should be copied to Industry Canada and archived on the Industry Canada website. The documents should be available to the general public as this will assist other parties in establishing mandatory roaming agreements. Final agreements may be kept confidential, but Look suggests as much transparency throughout the process as is possible.

Industry Canada's Question #2

> Specific provisions regarding arbitration may vary from province to province. Would it be useful to adopt a national code such as the ADR Institute of Canada's National Arbitration Rules in default of any specific arbitration agreement? Are there any special provisions which should be made applicable to the arbitrators concerning sharing and roaming?

Look agrees with the suggestion that a national code be adopted to establish the rules and practices for arbitration. The finalization of roaming agreements might be a contentious issue and clear guidance is required, which would be better facilitated by a core group of professionals, the benefits of which would be consistency and predictability for capital markets, faster resolution of disputes and potentially fewer future conflicts. The adoption of a national code of arbitration rules is especially important considering the strength of the oligopoly (Bell, Rogers, Telus) and the direction that Industry Canada has proposed with regard to commercial negotiations for mandatory roaming.

In addition to adopting a national code of arbitration rules, guidance that would assist the arbitration process should be established in advance. This guidance applies particularly to establishing and posting on websites:

a) commercial rates for mandatory roaming within Canada for Tiers 1, 2 and 3; and
b) commercial rates for mandatory roaming outside Canada.

Look believes that it would be highly undesirable to determine the rate structure for roaming between numerous parties on a case-by-case basis. This would prolong the negotiations if done on a city, regional, provincial and international basis with individual agreements being made between the three established incumbents and each of the new wireless entrants. These mandatory roaming rates should be consistent from one applicant to another and in all cases a "most favoured nations" clause should be implemented to safeguard against price gouging.

As an alternative, the Tier 1, 2 and 3 and international rates could be submitted to the Canadian Radio-television and Telecommunications Commission ("CRTC") for review and publication. These tariffed rates could be reviewed on an annual basis and adjusted as needed. In our opinion, tariffed rates would greatly benefit new entrants seeking funding from capital markets and the credibility of the CRTC would further enhance the enforceability of these rates. The concept of tariffed roaming rates was adopted by the European Union in May 2007, which resulted in a significant reduction in roaming charges across Europe.

Since disputes over mandatory roaming agreements are likely to be of a city/regional/national nature, a natural choice for an arbitrator for mandatory roaming disputes is the CRTC and Look formally proposes the CRTC as the arbitrator for mandatory roaming agreements.

Industry Canada's Question #3

Are there any other licence conditions required to facilitate sharing and roaming?

(I) Roaming should be available to licensees in all mobile bands

Roaming among Cellular, PCS and AWS licensees has been mandated for the benefit of new wireless entrants as defined in the document entitled *"Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range"* issued in November 2007. This new policy decision will necessitate a change to the Cellular and PCS licences of incumbents. As the AWS spectrum set-aside only covers 14% of all available wireless spectrum, Look proposes that the modifications to the cellular and PCS licences of incumbents should not be limited to mandating roaming only amongst PCS, cellular and AWS licensees. These PCS and cellular licence modifications should also apply to any current or future licences in mobile wireless spectrum bands.

If mobile wireless bands are added to the Canadian radio spectrum and a mandate is issued for operators in these bands to be granted roaming access to existing cellular, PCS and AWS networks, then the incumbent licences should permit this. Hence, further modifications to cellular, PCS and AWS licences would not be required and licensees in these new mobile bands, should they be made available, would be included in this mandatory roaming policy decision.

(II) Roaming agreements should contain service level agreements

The mandatory roaming agreement to be negotiated between parties should include a Service Level Agreement ("SLA"). Typically, the SLA should include Quality-of-Service provisions for the service offered. History would indicate that an SLA is likely to be a particularly contentious issue. In the 1990s, roaming access to analog cellular networks was offered to new PCS operators (mobile or otherwise) and incidents of dropped calls was a common event due to analog cellular to PCS handoffs. In today's market, users will be highly intolerant to service disruptions (whether voice or data) when roaming transfers from PCS to AWS networks and vice versa.

This transfer should be seamless to the user. If not, the user experience will be frustrating and the negative impact would be significant to the new entrant trying to establish a position in the mobile market. The lack of an SLA to provide appropriate PCS/AWS network transitions, in effect, would compromise all the positive work done by Industry Canada to facilitate new entrants for the benefit of all Canadians.

(III) Allocation of available capacity

It is not clear as to how the available roaming capacity on incumbents' networks will be allocated between incumbents and new entrants. As was recently reported, Telus might be considering swapping its network technology to accommodate a GSM based network. If this is correct and in the transition to its new network, Telus wanted to roam on the Rogers network, new entrants might be prevented from roaming on the Rogers network due to capacity constraints.

Look proposes that new entrants be given priority over incumbents and that there should be a period commencing immediately and lasting for the five year build-out period in the licence areas and a ten year period outside of the licence areas following the issuance of AWS licences during which time incumbents may not enter into new roaming agreements with each other. In order to assist the planning and negotiating process, incumbents should be required to make public, prior to May 27, 2008, all technical limitations and capacity constraints existing on their networks in specific licence areas.

(IV) Roaming to include network functionality

Look proposes that mandatory roaming should include the broadest of definitions for roaming and that this definition should include, amongst other things:

a) access to all network features and functionality (e.g. call forwarding and call waiting) afforded Mobile Virtual Network Operators ("MVNO");
b) the use of the incumbent's billing systems;
c) the incumbent's administrative back office services, and;
d) advance receipt of the incumbents' automated provisioning protocols to ensure a transparent roaming setup for the new entrants' subscribers.

The use of these services could be limited to a period identical to the roaming time periods mentioned above.

Conclusions on Mandatory Roaming

The key points raised with respect to mandatory roaming include:

1. Look nominates the CRTC as the arbitrator for mandatory roaming disputes;

2. A total fixed period of 90 days from the date of request should be established for completion of the arbitration decision;

3. Submissions relating to disputes should be made public;

4. The CRTC should establish and administer tariffed rates on all applicable domestic and international Tiers;

5. The modifications to cellular, PCS and AWS licences to permit mandatory roaming should apply to the operators of all current and future mobile bands;

6. Roaming agreements should include an SLA and Quality-of-Service provisions to ensure the smooth transfer of users from one network to another; and

7. Incumbents should be excluded from entering into new roaming agreements on each others networks during the five and ten year build-out periods prescribed for new entrants.

B) Mandatory Tower and Site Sharing

Industry Canada's Question #1

Are the timelines for responding to requests to share and roam and for submitting agreements that have not been finalized to an arbitrator appropriate? Are there other timelines that should be considered?

Look endorses the proposal, outlined in the consultation, of a 30 day deadline to respond to a request, but recommends a 60 day limit (from the date of initial request) to negotiate an agreement, after which time the matter can be submitted to binding arbitration, which is to be completed within a period of 90 days from the date of request. Look believes that this is a fair and equitable arrangement for all parties.

To facilitate a smooth process with reduced duplication of work for both the requesting party and the incumbent, requests to share towers and sites as well as the responses to the requests should be copied to Industry Canada and archived on the Industry Canada website. In addition, a data library or register of tower and site plans for all the incumbents that would be regularly updated could be posted on Industry Canada's website. All the documents, such as structural and engineering studies and capacity evaluations, should be made available to the general public as this will assist other parties in establishing agreements and ascertaining the technical feasibility of tower and site sharing. Final agreements may be kept confidential, but Look suggests as much transparency throughout the process as possible.

Industry Canada's Question #2

> Specific provisions regarding arbitration may vary from province to province. Would it be useful to adopt a national code such as the ADR Institute of Canada's National Arbitration Rules in default of any specific arbitration agreement? Are there any special provisions which should be made applicable to the arbitrators concerning sharing and roaming?

Look agrees with the suggestion that a national code be adopted to establish the rules and practices for arbitration. This will be a contentious issue and clear guidance is required, which would be better facilitated by a core group of professionals, the benefit of which would be faster resolution of disputes and potentially fewer future conflicts.

In addition to arbitration rules, preparatory work that would assist the arbitration process should be established in advance. Of particular interest are the commercial rates for mandatory tower and site sharing. It would be highly undesirable to determine the rate structure for sharing between numerous parties on a case-by-case basis. This would prolong the negotiations if done on a site, regional and provincial basis with individual agreements being made between the three established incumbents and each of the new wireless entrants. Consideration should be given to incumbents setting commercial rates for Tier 3 licence areas and posting these on websites in order to expedite the negotiation process. In establishing the Tier 3 tower and site sharing rates, a "most favoured nations" clause should be implemented to safeguard against price gouging and to assist the ADR Institute of Canada.

As an alternative, these tower and site sharing rates could be submitted to the CRTC for review and publication. The rates could be reviewed on an annual basis and adjusted as needed. Industry Canada could be called upon to provide technical expertise at these "approval" hearings. Pre-approved rates with known escalation clauses would greatly benefit new entrants seeking funding from capital markets and the credibility of the CRTC would further enhance the enforceability of these rates.

Disputes over tower and site sharing could be handled at a local level and Look formally proposes the CRTC as the arbitrator for tower and site sharing agreements.

APPENDIX A
Comments on Mandatory Roaming and Tower and Site Sharing

Upon review of the proposed Conditions of Licence for mandatory tower and site sharing, it is not clear what occurs in the event that a licensee and a requesting operator disagree on the technical feasibility of a tower and site sharing arrangement. From Look's reading of the text, it is not absolutely clear that the operator making the request can settle the matter by requesting binding arbitration. Look refers you to the following paragraph in Gazette Notice DGRB-010-07:

> *"Aside from questions of technical feasibility, it is recognized that coming to a negotiated business agreement can delay roaming and sharing. Therefore, the proposed conditions which follow state that where it is technically feasible, but where licensees cannot finalize negotiations, parties will submit their business disputes to independent binding arbitration in order to finalize the matter."*

In reading the above paragraph, one interpretation is that arbitration will only follow if business negotiations fail. It appears that no such arbitration process is mandated if the two parties disagree over the technical feasibility of tower and site sharing. Look envisages that it is possible for technical and commercial disputes to occur and believes that an independent review ordered by an arbitrator is the fair solution in the event that technical feasibility is disputed prior to the parties entering the tower and site sharing rate negotiations stage.

Furthermore, Look proposes that paragraph 3b in Gazette Notice DGRB-010-07 be amended in drafting the final policy to include the wording shown in italics:

> "3b. In the event that the request to share is not technically feasible, the Licensee must provide the requesting Operator with a response detailing the reasons why it is not feasible (accompanied by any applicable technical information) in accordance with CPC-2-0-03".
>
> "*When the response is sent, the Licensee (current site operator) must include an offer to the requesting Operator for immediate access to the site to perform their own inspection. It is preferable that this offer to inspect the facility occurs before the 30 day deadline for the response to the initial request. The requesting Operator will have the right to take measurements and photographs to document their visit. If the Operator making the request to share feels that sharing is technically feasible and is unable to convince the Licensee (current site operator) of this, the two parties will submit their dispute to independent binding arbitration to settle the dispute."*

APPENDIX A
Comments on Mandatory Roaming and Tower and Site Sharing

A concern with the arbitration process for mandatory tower and site sharing is the highly technical nature of the dispute. A court appointed arbitrator will need to rely on a number of technical consultants to review submissions and evaluate technical arguments. The cost of the consultant's services will be borne by one or both parties involved in the dispute. It is common practice for both parties to nominate one or more potential candidates and it is left to the arbitrator to make a final selection for a technical consultant. This is the approach recommended by Look. The technical consultant can review engineering submissions from each party and seek the advice of other professionals (structural engineers, electrical engineers, etc.) as needed.

To minimize technical disputes and to facilitate the sharing of information related to tower and site sharing, all incumbents should be required to submit detailed engineering site plans to Industry Canada who would be responsible for posting these site plans on the Industry Canada website. This posting requirement will apply not only to the site owners, but also to operators permitted to share a site. The site plans should be accessible to the general public and will greatly assist new entrants in planning their network rollout and will greatly minimize potential disputes over the technical feasibility of tower and site sharing. Information updates should be made mandatory with penalties for late filings.

APPENDIX A
Comments on Mandatory Roaming and Tower and Site Sharing

Industry Canada's Question #3

Are there any other licence conditions required to facilitate sharing and roaming?

(I) Tower and site sharing to include infrastructure sharing

While tower and site sharing may be denied on the grounds that sharing is not technically feasible, there are certain other issues resulting from the band plan design for cellular, PCS and AWS licensees that may also lead to sharing conflicts between licensees.

Industry Canada has addressed the potential conflicts resulting from FDD/TDD systems in its Gazette Notice DGRB-011-07 and expects licensees to fully co-operate to resolve such conflicts through mutual arrangements. Look, however, believes that Industry Canada should consider expanding mandatory tower and site sharing to include "infrastructure sharing" as this expanded policy would expedite dispute resolution arising from emerging technologies. An example of this level of cooperation is the MCS network operated by the Inukshuk Wireless Partnership whereby a common platform is installed at multiple Rogers and Bell Mobility sites and the same portable Internet service is marketed independently by Rogers and Bell.

Given the contentious nature of the tower and site sharing problem, Look believes that an arbitrator should be named in advance to settle such disputes. Look nominates the CRTC as the arbitrator to resolve tower and site sharing disputes.

(II) Refusal of Tower and Site Sharing Based on Site Limitations

Tower and site sharing may be refused if not technically feasible. Of particular concern is that some sites simply do not have enough space to add an additional shelter to accommodate another operator. In some cases, it may be possible for more than one operator to ask to share a site with an incumbent. In a roof-top system, a landlord may not permit additional shelters being added to a roof, along with additional power lines, antennas and fiber connections. This in itself is an impediment to sharing, which could result in severe coverage gaps for new entrants and delay the overall network rollout.

Where possible, an incumbent should share facilities, including space in the equipment shelter, power, antennas and backhaul links (e.g. fiber). Look believes that "infrastructure sharing" should be added to the tower and site sharing policy, where it is technically feasible. At the very least, arbitrators should have the power to order "infrastructure sharing" as a means to resolving disputes, even to the point of ordering site upgrades, at the expense of the new entrant.

(III) Refusal for tower and site sharing due to incumbent build out plans

If a request to share towers and sites is refused on the grounds of lack of capacity either due to:

a) the incumbent's plans to add more equipment to the site, or
b) due to a sharing arrangement with another operator,

then these build out plans should be monitored to ensure compliance with the plans. In these circumstances, a licensee should have to inform Industry Canada of such plans and from that point on regular reporting against those plans to Industry Canada should occur. These site modification plans should be sent to Industry Canada and such plans should be stored on Industry Canada's website and be accessible by the public. If the site modification plan is not commenced in a timely fashion (i.e. 60 days from submission) and a request to share a tower or site is made, then the licensee should forfeit its protection from sharing the site on the basis that the proposed site modifications will make sharing technically infeasible.

(IV) Allocation of available capacity

It is not clear as to how the available tower and site sharing capacity on incumbents' networks will be allocated between incumbents and new entrants wanting to share towers and sites. As indicated earlier, it was recently reported that Telus might be considering swapping its network technology to accommodate a GSM based network. Should this report be correct and Telus wanted to share towers and sites with other incumbents, new entrants might be prevented from sharing the incumbents' towers and sites due to capacity constraints or other technical limitations.

Look proposes that new entrants be given priority over incumbents and that there should be a period commencing immediately and lasting for the five year build-out period in the licence areas and a ten year period outside of the licence areas following the issuance of AWS licences during which time incumbents may not enter into new tower and site sharing agreements with each other. In order to assist the planning and negotiating process, incumbents should be required to make public, prior to May 27, 2008, all technical limitations and capacity constraints existing on their networks in specific licence areas.

Conclusions on Mandatory Tower and Site Sharing

The key points raised with respect to mandatory tower and site sharing include:

1. Look nominates the CRTC as the arbitrator for tower and site sharing disputes;

2. A total fixed period of 90 days from the date of request should be established for completion of the arbitration decision;

3. Submissions relating to disputes should be made public;

4. The CRTC should establish and administer standard rates for tower and site sharing;

5. A national database should be created for site engineering plans to better assist operators in drafting their requests to share towers and sites. This will also help to minimize disputes over the technical feasibility of sharing towers and sites;

6. There appears to be no mechanism to resolve disputes over the technical feasibility of tower and site sharing. It is imperative that such a process be created and be fair to all parties. The CRTC should also be the arbitrator for these technical disputes;

7. Industry Canada should expand tower and site sharing to cover infrastructure sharing to avoid:

    a) possible interference resulting from FDD and TDD systems, and
    b) space limitations at sites;

8. Incumbents should be excluded from entering into new tower and site sharing agreements on each others networks during the five and ten year build-out periods for new entrants.

APPENDIX B
Pre-Auction Questions For Industry Canada

The following are questions being posed to Industry Canada in response to AWS DGRB-010-07, the amending AWS DGRB-012-07 and the Policy Framework for the Auction for Spectrum Licenses for Advanced Wireless Services and other Spectrum in the 2 GHz Range.

(I) Questions regarding the general rules for the AWS auction:

1. Can the incumbents use an existing association/partnership or form a new association/partnership to bid for spectrum blocks A, E or F?

    a. If incumbents are "affiliated or associated" by virtue of other spectrum holdings, will they automatically be considered "affiliated or associated" for the AWS auction?
    b. If incumbents bid for blocks A, E or F as a single entity, can they subsequently transfer the spectrum to an "affiliated or associated" group? (i.e. the Inukshuk Wireless Partnership between Bell and Rogers)

2. Will Bell, Rogers or Telus, either jointly or individually, be able to bid for and win the entire 50 MHz of AWS spectrum not set-aside?

3. Once a sub-licensing agreement is reached, will sub-licensees get the same benefits related to mandatory roaming and tower and site sharing as mandated for new wireless entrants?

    a. Will sub-licensees have all of the same rights and obligations as the original license holder?

4. If a new wireless entrant acquires a spectrum license in the AWS auction and an incumbent subsequently acquires the shares of the new wireless entrant within a five year period, can the new wireless entrant retain the spectrum license or will the new wireless entrant be forced to dispose of the spectrum license (i.e. Rogers acquisition of Shaw as an example)?

    a. Does it matter if the spectrum has been used by the new wireless entrant to develop a business? or;
    b. Whether the spectrum has been held as an investment and not used to develop a business?

5. Where an AWS, PCS or cellular spectrum license has been sub-licensed, will the build out requirements for an AWS, PCS or cellular spectrum license apply to either the:

   a. Licensee directly? or;
   b. The sub-licensee?

6. Will the licensee of a Tier 2 spectrum license be able to sub-license its license on a Tier 3 geographic basis?

7. The AWS auction rules allow for sub-licensing of spectrum. Given that, what is the earliest date that the AWS spectrum can be sub-licensed?

   a. Are there any limits on the amount of spectrum that can be sub-licensed?
   b. Can the incumbents sub-license to or from new wireless entrants?

8. In the case of a sub-licensing arrangement, will Industry Canada issue a new license to a sub-licensee and if so, how long will it take for the new license to be granted?

9. Can "set-aside spectrum" be transferred, leased to, divided among or exchanged with non new wireless entrants after the 5 year period following the date of issuance of an AWS license?

10. Will the MDS/MCS Policy Paper be made available for public comment prior to the March 3rd, 2008 application deadline or the May 27th, 2008 auction start date?

    a. On which date?
    b. What is the anticipated start date of the MDS/MCS auction?

11. Given the strategic importance of the AWS auction, is there any chance that the AWS auction will be delayed as a result of the consultations taking place in January and February 2008?

12. In the event of a sub-licensing arrangement, will a sub-licensee be able to further sub-license a part of, or all of, the sub-license?

13. Once the bidder application has been completed noting the spectrum licenses to be bid on, can a qualified bidder, during the course of the auction, bid on another license which was not originally listed on the application?

14. If at the conclusion of the AWS auction any portions of the spectrum licenses remain unsold, what does Industry Canada plan on doing with the spectrum?

15. Will the Canadian 700 MHz auction have the same characteristics as the US 700 MHz auction?

    a. When will Industry Canada release the consultation paper for the 700 MHz auction?
    b. What is the anticipated start date of the 700 MHz auction?

APPENDIX B
Pre-Auction Questions For Industry Canada

(II) Questions regarding the mandatory roaming rules for the AWS auction:

1. Under the mandatory roaming provision, will new wireless entrants have access to the entire network functionality and features of the incumbents' networks such as call forwarding and call waiting?

2. Does the mandatory roaming provision grant the new wireless entrants the same roaming rights and rates as those offered between the incumbents and the incumbents' present mobile virtual network operators (MVNOs)?

3. Will the incumbents' administrative back office systems be made available to a new wireless entrant for a period of time while the new wireless entrant builds their processing centre?

4. When a new wireless entrant submits a mandatory roaming request, can the incumbents restrict the roaming rights of new wireless entrants by asserting current or future capacity constraints and will they have to prove those constraints?

5. It was recently reported that Telus might be planning to swap their network technology to accommodate a GSM based network. If this were to be correct, could Rogers restrict the roaming rights of new entrants by asserting current or future capacity constraints resulting from Telus applying to enter into roaming agreements with Rogers for the purpose of building out a new GSM infrastructure?

6. Will mandated roaming arrangements from either Bell, Rogers or Telus be available on a:

   a. City basis? and/or
   b. Provincial basis? and/or;
   c. Regional basis?

7. Will the commercial roaming rates established be identical or different due to the geographic coverage area for each of the:

   a. Tier 1 service areas?
   b. Tier 2 service areas? and,
   c. Tier 3 service areas?

8. In accordance with the mandatory roaming provision of the AWS spectrum auction, will mandatory roaming be made a characteristic of all present and future mobile spectrum licenses in all frequencies?

   a. As of what date? January 1, 2008?
   b. Will the roaming rates be tariffed to ensure equality and consistency among new entrants?
   c. If the roaming rates are not tariffed, will the commercial roaming rates for Canadian new wireless entrants be equal to or less than those roaming rates offered to U.S. service providers such as AT&T?
   d. Will the incumbents be required to publish commercial rates to save time and speed up the arbitration process?
   e. Will there be special forms or documents provided by Industry Canada to facilitate the roaming request submitted to the incumbents?

9. Should Industry Canada decide not to tariff the commercial roaming rates, will a most favoured nations clause be implemented to safeguard against price gouging (i.e. roaming rates charged to Canadian new wireless entrants should be equal to or less than those roaming rates offered to U.S. service providers such as AT&T)?

10. Once a new wireless entrant is granted roaming by any incumbent, how will billing occur from the incumbent to the new wireless entrant for roaming charges incurred by the new wireless entrant's subscriber?

11. Given the mandatory roaming provisions of the AWS spectrum auction, will existing AWS, PCS or cellular spectrum holders be able to roam on any spectrum:

    a. Acquired by new wireless entrants during the course of the AWS auction? or;
    b. Currently held by new wireless entrants?

12. Will new wireless entrants receive the automated provisioning protocols of the incumbents in advance to ensure a transparent roaming setup for the new wireless entrant's subscribers?

13. Will the incumbents be required to commence mandatory roaming negotiations with potential new wireless entrants:

    a. Prior to the commencement of the AWS auction?
    b. After the conclusion of the AWS auction? or;
    c. After the spectrum licence has been issued?

14. For roaming requests, when do the 30 day response period and the additional 60 day negotiation period commence?

15. Will incumbents be required to provide the new wireless entrants with a service level agreement ("SLA") to ensure the same quality of service as the incumbents provide to their own subscribers?

16. Will new wireless entrants be entitled access to the international roaming arrangements (i.e. pricing, etc.) currently in place between the incumbents and the US/International service providers?

17. Will the rulings and related documents of each roaming arbitration proceeding be made public?

18. Will a condition of mandatory roaming be such that the incumbents are required to post any and all technical limitations of mandatory roaming in advance with Industry Canada or the CRTC?

    a. If so, by what date?

19. When will the AWS spectrum first be made available for use?

    a. Following the issuance of a license? or;
    b. Following payment at the conclusion of the auction?

20. Will penalties be imposed on incumbents for unnecessarily delaying the roaming requests of new wireless entrants?

21. If spectrum holders in adjacent bands desire to use alternative technologies, such as FDD or TDD, will the party first to market have priority and which party will be required to sacrifice spectrum for the purpose of implementing guard bands?

(III) Questions regarding the mandatory tower and site sharing rules for the AWS auction:

1. When a new wireless entrant submits a mandatory tower and site sharing request, can the incumbents restrict the tower and site sharing rights of a new wireless entrant by asserting current or future capacity constraints and will they have to prove those constraints?

2. It was recently reported that Telus might be planning to swap their network technology to accommodate a GSM based network. If this were to be correct, could Rogers restrict the tower and site sharing rights of new entrants by asserting current or future capacity constraints resulting from Telus applying to enter into tower and site sharing agreements with Rogers for the purpose of building out a new GSM infrastructure?

3. Will tower and site sharing requests be submitted to a central body such as Industry Canada or the CRTC to ensure consistency in the evaluation of all tower and site sharing requests?

4. If tower and site sharing rates are not published, will a most favoured nations clause be implemented to ensure no price gouging?

5. Will the rulings and related documents of each tower and site sharing arbitration proceeding be made public?

6. Will a condition of mandatory tower and site sharing be such that the incumbents are required to post any and all technical limitations of mandatory tower and site sharing in advance with Industry Canada or the CRTC?

    a. If so, by what date?

7. Will penalties be imposed on the incumbents for unnecessarily delaying tower and site sharing requests or by asserting erroneous capacity or technical constraints?

8. If the incumbents refuse the new wireless entrants access to their towers and sites, due to, amongst other reasons, capacity constraints, whose permission is required to erect a new tower?

    a. In the event that access to the incumbents' towers and sites are restricted, will a building permit be automatically granted by the Federal Government of Canada?

9. On which date will the towers and sites be made available to all new wireless entrants?

    a. January 1, 2008?
    b. Will the incumbents be required to publish commercial rates to save time and speed up the arbitration process?
    c. Will there be special forms or documents provided by Industry Canada to facilitate the tower and site sharing request submitted to the incumbents?

10. Will all the towers and sites of Bell, Rogers and Telus be made available to all new wireless entrants?

    a. Will a list of all towers and sites be made public?
    b. What information, with respect to towers and sites, will be made public and on what date?