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January 14, 2002

Mr. Michael Helm
Director General
Telecommunications Policy Branch
Industry Canada
300 Slater Street
Ottawa, Ontario
K1A 0C8

Dear Mr. Helm:

Subject: Gazette Notice No. DGTP-009-01 – Consultation on an Application to Use Mobile Satellite Spectrum to Provide Complementary Terrestrial Mobile Service to Improve Satellite Coverage (“Notice”)

1. Rogers Wireless Inc. (“RWI”) is pleased to submit its Reply comments in response to the Comments received on 28 December 2001 regarding the above-noted Gazette Notice. Industry Canada issued Gazette Notice No. DGTP-009-01 in response to an application filed by TMI Communications and Company, Limited Partnership (“TMI”) requesting that TMI be permitted to use a portion of its mobile satellite assignment to establish an ancillary terrestrial service.
2. Failure to address any specific comment or issue raised in this proceeding should not be taken to constitute the concurrence of RWI, especially in those instances where such concurrence would be contrary to RWI’s interests.

Sincerely,

*Original Signed by
Diane Gilbert.*

On behalf of:

Ted Woodhead
Director, Government Relations
TW/dg

c.c.: Interested Parties to Gazette Notice No. DGTP-009-01

INDUSTRY CANADA

NOTICE NO. DGTP-009-01

**CONSULTATION ON AN APPLICATION TO
USE MOBILE SATELLITE SPECTRUM TO
PROVIDE COMPLEMENTARY TERRESTRIAL
MOBILE SERVICE TO IMPROVE SATELLITE
COVERAGE**

**REPLY COMMENTS OF
ROGERS WIRELESS INC.**

JANUARY 14, 2002

Introduction

1. RWI is in receipt of comments filed on 28 December 2001, in response to Gazette Notice DGTP-009-01 (“the Notice”), by Bell Mobility, ICO Global Communications (Canada) Inc. (“ICO”), Inmarsat Ventures plc (“Inmarsat”) Mobile Satellite Ventures (Canada) Inc. (“MSV Canada”), Telenor Broadband Services (“TBS”), Telus Mobility, Transport Canada Civil Aviation ANS & Airspace Branch (“Transport Canada”) and, W2N Inc. (“W2N”).
2. RWI considers it noteworthy that of the nine interested parties, including RWI, that filed comments, five were opposed to TMI’s Application and three supported it. Two of the three supporters of TMI’s proposal, Bell Mobility and MSV Canada, are in an affiliate relationship. The third supporter ICO, while not an affiliate, seeks to expand the nature of TMI’s application to include a re-allocation of the 2GHz band in which they operate for their commercial benefit. Conversely, those in opposition to TMI’s proposal include existing terrestrial operators and licensees, Transport Canada Civil Aviation authorities, and Inmarsat a competing mobile satellite service operator in the L-Band.
3. In RWI’s view, the record of this consultation, to date, overwhelmingly supports the position that TMI’s Application is not in the public interest. RWI re-iterates the fact that TMI’s Application raises serious questions about the real motivation for TMI’s request and even if legitimate, its chances of success. Moreover, RWI submits that if taken at face value, TMI’s objective in bringing its Application can be more effectively met by simply entering into commercial arrangements with existing licensed cellular and/or PCS providers.
4. RWI does not consider it necessary to repeat all of the arguments it has advanced to date in this proceeding. RWI relies on its submission of 28

December 2001 as the basis for its position on the issues raised by TMI's Application and the Notice. However, the Comment phase of this proceeding has raised a number of important technical and policy arguments that RWI believes deserve to be highlighted.

In Summary

5. The various respondents have argued that, if approval is granted by the Department, a number of serious and negative implications would result, as detailed below:

Technical

- Unacceptable interference to safety, aeronautical, and other mobile satellite services ("MSS");

Policy

- Contravention of established legislation, regulation and policy directions;
- A threat to the viability of the MSS and terrestrial mobile market, given the already slim margins earned by incumbent terrestrial providers; and
- Conference of privileges on one class of spectrum user at the expense of others while distorting the level playing field that currently exists in the terrestrial mobile services marketplace.

Each one of these points is expanded below.

TECHNICAL ISSUES

6. MSV Canada considers that the proposal as outlined in the TMI Application will not be the cause of harmful interference.¹ Bell Mobility supports this notion:

Although the complementary terrestrial mobile service would be required to operate on a non-interfere basis with MSS, such an operation would not present any difficulty because of close coordination amongst the five L-band operators subject to the 1996 Mexico City Memorandum of Understanding for the Intersystem

¹ MSV Canada, Comments DGTP-009-01, December 28, 2001, Page 8.

Coordination of Certain Geostationary Mobile Satellite Systems
(the MOU).²

7. However, the record shows in great detail that these claims are not technically sound. Inmarsat, TBS and Transport Canada advance a number of technical reasons demonstrating how terrestrial mobile use of the L-band would cause interference to current MSS operations. The MSS operations put at risk include aviation safety communications, Global Navigation and Maritime Distress and Safety Systems. Inmarsat, TBS and Transport Canada provided ample and detailed submissions establishing that to permit such secondary interference would contravene international agreements and regulatory requirements.
8. Most tellingly, Transport Canada refers to the priority access to spectrum that is required for the urgency and safety communications requirements of the Global Maritime Distress and Safety System (GMDSS) and the Aeronautical Mobile-Satellite Route Service (AMS(R)S). Transport Canada submits that:

Footnotes in the ITU Radio Regulations (S5.353A, S5.356 & S5.357A) provide priority and preemptive access for these two services (Global Maritime Distress and Safety System and Aeronautical Mobile-Satellite Route Service)...Account must be taken to address any proposed operation to terrestrial mobile service that is not covered or authorized by the aforementioned ITU footnote provisions. Such use is inconsistent with the current and planned use of these bands. ***Terrestrial mobile service would not be compatible with aviation safety communications.*** (Emphasis added)³

9. Transport Canada also submits that Department approval of TMI's in-fill terrestrial proposal would pose a new potential interference source to the Global Navigation Satellite System that is used for, among other things, aircraft approach and landings at Canadian and other airports. In that regard, Transport Canada states:

² Bell Mobility, Comments – Canada Gazette – Part 1 Notice No. DGTP-009-01, December 28, 2001, Paragraph 14.

³ Transport Canada, Comments – DGTP-009-01, December 28, 2001, Page 1-2.

As mobile terrestrial services are not authorized in the ITU Radio Regulations Article 5, an amendment to the Radio Regulations would be necessary to permit the use of mobile terrestrial services as an extension to MSS. ***This would not be supported by Transport Canada.***⁴ (Emphasis added)

10. TBS and Inmarsat echo Transport Canada's concerns. Inmarsat has gone to great lengths and into considerable detail to demonstrate the likely interference that would be caused by TMI's proposal. TBS provides an overview of Inmarsat's research findings:

Calculations made by Inmarsat, show that the base stations and mobiles in the system proposed by Motient, may cause interference to the MSS systems operating in the same band, and potentially cause serious limitations to the frequency reuse and capacity planning of existing and new MSS systems. Motient's proposal of using MSS L-band, would potentially cause problems to Inmarsat's existing network, which currently supports over 220,000 users with services that include safety/distress to the maritime and aeronautical communities. As a service provider for many of these users, and as an Inmarsat gateway operator and owner, TBS is extremely concerned about any such adverse impacts.⁵

11. Further, Inmarsat provides additional technical illustrations, including five specific examples of how terrestrial mobile use of the L-band would result in interference:

- The in-band signals of proposed terrestrial mobile terminals would cause unacceptable interference to the signals being received by the Inmarsat satellites;
- The out-of-band emissions from proposed terrestrial mobile terminals would cause unacceptable interference to the signals being received by the Inmarsat satellites;
- Proposed terrestrial base stations' in-band signals would create unacceptable interference into the receivers of nearby Inmarsat mobile terminals;
- Proposed terrestrial base stations' out-of-band emissions would create unacceptable interference into the receivers of nearby Inmarsat mobile terminals; and

⁴ Ibid., Page 2.

⁵ TBS, Comments - Gazette Notice DGTP-009-01, December 28, 2001, Page 6-7.

- MSV's terrestrial uses would degrade the performance of its own space-based services and reduce the traffic-carrying capacity of the MSV space segment, thereby increasing MSV's need for L-Band spectrum.

12. In RWI's view, the submissions by Inmarsat, TBS and Transport Canada make it clear that the public interest would most certainly be best served by the Department denying TMI's Application in its entirety.

POLICY ISSUES

13. In addition to the technical arguments outlined above, there are also a number of policy issues raised by parties.

Spectrum Cap

14. Industry Canada established the spectrum aggregation policy to encourage competition in the mobile industry through restricting the aggregate amount of spectrum that any operator can hold in a given geographic area. The majority of respondents who commented on the issue believed the spectrum aggregation policy should apply to TMI if they are permitted to utilize their MSS spectrum for the provision of terrestrial services. However, as W2N notes, if the spectrum aggregation policy was applied, TMI would not be found eligible and the approval of TMI's Application, "...will lead to a massive contravention of the spectrum cap rules".⁶ RWI agrees with this conclusion given TMI's affiliation with Bell Mobility and Bell Mobility's current spectrum holdings that already meet the 55 MHz limit in many areas of the country.

Viability of the MSS and Terrestrial Telecommunications Industry

15. Bell Mobility indicates in its submission that, "TMI, like other MSS providers, notes that it has struggled financially due to limitations surrounding the

⁶ W2N, Comments – Canada Gazette Notice DGTP-009-01, December 28, 2001, Page 10.

availability of its services”.⁷ In its Comments, Inmarsat, like RWI, states that if MSV Canada believes it needs to provide limited in-fill in areas where its satellite signal is blocked, it should use dual-band handsets that use PCS or cellular frequencies to communicate terrestrially.

16. It is clear from the record of this Consultation that TMI’s Application seeks to cross-subsidize its satellite operations with funds from margins it perceives exist in the Canadian terrestrial mobile industry. However, as Telus notes, “... the intense competition already existing in Canada’s terrestrial mobile industry has already driven out any excess margins”.⁸ RWI agrees with Telus and submits that terrestrial urban operations will not be a source of cross-subsidization for TMI’s rural satellite operations.

17. TMI should re-evaluate its business model rather than seek preferential treatment. As suggested by TBS, “...the prime condition for success is to target the appropriate markets with the appropriate services, rather than defining revolutionary and unrealistic visions about capturing mass markets”.⁹ TBS asserts that its business is thriving through the provision of products and services to niche markets such as aeronautical, maritime and land based users requiring communication in rural and unserved areas. Inmarsat reaffirms the fact that the MSS market is a viable one:

Inmarsat wishes to confirm to Industry Canada that Inmarsat is a successful commercial operator of a global MSS network and has no need for a complementary terrestrial component...Inmarsat has created a successful and growing business based on the deployment of a global satellite system that effectively and efficiently uses L-Band frequencies.¹⁰

Competitive Advantage

⁷ Bell Mobility, Comments – Canada Gazette – Part 1 Notice No. DGTP-009-01, December 28, 2001, Paragraph 9.

⁸ Telus, Comments – DGTP-009-01, December 28, 2001, Page 9.

⁹ TBS, Comments – Gazette Notice DGTP-009-01, December 28, 2001, Page 6.

¹⁰ Inmarsat, Comments – DGTP-009-01, December 28, Page 2.

18. TMI has characterized its Application as a request for flexibility to initiate a purely ancillary and adjunct terrestrial service. A number of respondents believe that TMI's Application is not related to providing an in-fill service to its primary MSS service at all.

19. TBS notes that, "... it can easily be envisaged how such an operator can change the scope from a MSS system with an ancillary terrestrial component to a cellular system with an ancillary MSS component".¹¹

20. W2N also believes that TMI's focus will be the deployment of a terrestrial network; however, W2N believes TMI's resources will be directed towards the US market and that plans for deploying a terrestrial network in Canada would be purely for roaming purposes:

A Canadian network has a role, albeit a modest one, in the ambitions of Motient and TMI. Customers of the USA-based Motient/TMI network will understandably want to roam into Canada, and TMI can be expected to deploy its Canadian terrestrial network at least to satisfy that limited objective.¹²

21. Therefore, RWI considers that if the Department were to approve TMI's Application as proposed, it would be conferring privileges on TMI at the expense of other licensed holders of terrestrial spectrum. Terrestrial licensees have totally different obligations and conditions of licence, and have paid considerable sums for the right to operate in the last spectrum auction. TMI's Application is clearly a terrestrial spectrum application. As concluded by Telus:

Telus submits that if the service is the same, the use is the same then the licensing processes, license conditions and prices paid for the spectrum should also be comparable. To argue otherwise is to seek an unjustified bestowal of competitive cost advantages and/or enrichment from the Canadian taxpayer.¹³

¹¹ TBS, Comments – Gazette Notice DGTP-009-01, December 28, 2001, Page 7.

¹² Ibid., Page 7.

¹³ Telus, Comments – DGTP-009-01, December 28, 2001, Page 3.

22. RWI agrees that if TMI's Application is granted, all licence conditions should apply including and not limited to the application of terrestrial mobile fees and conditions applied to advance policy objectives such as spectrum aggregation limits, Research and Development requirements, and lawful intercept provisions.
23. Moreover, in RWI's view, acceding to TMI's request and assigning spectrum without regard to market forces is contrary to stated government policy. By way of example, the Department recently released the 2001 Edition of the *Guidelines on the Licensing Process and Spectrum Release Plan*. This document makes it quite clear that a competitive licensing process would typically be adopted in situations where demand is likely to exceed supply. The record of this proceeding has established the existence of demand for this spectrum. W2N has declared its interest in applying for any new terrestrial mobile spectrum that may become available.
24. Since significant issues remain unresolved by TMI, its Application should be denied. However, should the Department consider it prudent to re-allocate the satellite spectrum to permit terrestrial mobile service, RWI submits that to uphold stated government policy, the Department would have to initiate a new competitive licensing process to allow all interested parties to apply.

Conclusion

25. A number of respondents believe there is a far simpler solution. As Telus suggested in their Comments, "...a better way of accomplishing the stated objective of enhancing rural service via an economically sound MSS service offering is for Industry Canada (the Department) to require the applicant to make a commercially viable arrangement with an existing terrestrial mobile operator for the terrestrial portion of this service"¹⁴. Inmarsat also believes

¹⁴ Telus, Comments – DGTP-009-01, December 28, 2001, Page 1.

that this is a 'practical solution, "MSV could either enter into a contractual arrangement with a CMRS provider or merge with a terrestrial provide to create a more robust service, and to provide in-building service and coverage of areas where MSS signals may be blocked by buildings or terrain."¹⁵

Moreover, as TBS concluded, "MSS systems should rather aim at complementing the cellular system coverage, rather than duplicating and thereby attempting to compete head-to-head".¹⁶

26. In conclusion, the record demonstrates that the majority of interested parties who participated in this proceeding do not believe that approval of TMI's Application would be in the public interest.

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¹⁵ Inmarsat, Comments – DGTP-009-01, December 28, 2001, Page 37.

¹⁶ TBS, Comments – Gazette Notice DGTP-009-01, December 28, Page 8.