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Pamela Miller
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Industry Canada
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RE: Canada Gazette, Part I, December 11, 2009, Notice No. DGTP-010-09: Consultation on the Spectrum Allocations and Spectrum Utilization Policies for the Frequency Range 1435-1525 MHz (L-Band)

Bell Helicopter Textron Canada Ltd (BHTCL) is pleased to respond to the above-noted consultation. BHTCL has participated with the Radio Advisory Board of Canada (RABC) to undertake a review of the Consultation Document. The company supports comments provided by the RABC except where noted in the following pages.

Industry Canada is proposing to:

1. designate new spectrum for AMT at the top of the band;
2. rescind the DAB designation in the middle of the band, to be replaced by a designation for flexible use licences; and,
3. provide more flexibility and develop a new band plan in the bottom of the band.

With respect to the first main proposal, the company strongly supports the plan to re-designate the band 1492-1525 MHz for AMT for the following reasons.

- In Mirabel, PQ. area, currently two aerospace manufacturers share 30 Mhz of spectrum. One of the manufacturers will start new development program in 2012. It is clear Bombardier and BHTCL could not conduct their respective product development without additional spectrum and that sharing the already limited spectrum would decrease capability such that flight test programs would be affected by unacceptable delays.
- BHTCL agrees with Radio Advisory Board of Canada (RABC) that further examination is required to determine whether AMT and SRS can co-exist within the areas in question.
- As for the other two main proposals, BHTCL is essentially in agreement.

Comments are provided in the following sections of this submission.

Louis Boucher, Eng.
Technical Staff Specialist
Flight Test Instrumentation

Thiery Hingre, Eng.
Chief
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Response to Specific Questions

Responses below adopt the same section numbering scheme as used in the Department’s Consultation document.

3.2.1 AMT

Item 1:

The Department proposes to designate the band 1492-1525 MHz for aeronautical mobile telemetry.

The Department seeks comments on this proposal, and on the potential locations of AMT test areas, and particularly whether they would be across Canada or only in certain areas.

The Department also seeks comments on whether other portions of the range 1452-1525 MHz could be used for AMT.

For a start, BHTCL strongly supports the proposal and “welcomes and agrees with the Department’s proposal to designate the band 1492-1525 MHz for AMT”. New AMT spectrum is the only viable solution for the two Mirabel area aerospace manufacturers to conduct their respective flight test programs. Furthermore, complexity of new aircraft, continuously increasing demands in flight test data, certification requirements, higher data rate and resolution are the main driver for increased AMT frequency spectrum. Future development programs will also depend on it.

BHTCL has ongoing telemetry operations based close to Mirabel Airport (YMX) near Montreal. The company does not foresee, on a short term basis, using L-band spectrum for AMT provided that DND still give access to S-Band spectrum 2360-2400 MHz for AMT. However, without additional spectrum, BHTCL and Bombardier would be forced to share an already limited amount of S-band spectrum. Both companies would suffer significant program delays if adequate spectrum resources are not available. If the available spectrum were only half the amount required, the effect would be to at least double the length of test programs. On a long term basis, in order to fulfill ever increasing telemetry needs, the company does not exclude possible use of the L-Band spectrum.

BHTCL also has the capability to quickly deploy to remote flight test sites. Other Flight Testing operations in Canada are usually done on a temporary basis in remote area, e.g., cold weather testing in the far North (Thompson, MB, LG2, QC,) could continue to be supported in the S-Band spectrum as long as DND continues to coordinate access for AMT.

Secondly, BHTCL telemetry flight-testing activities are generally limited to designated test ranges and airspace. These test areas typically do not extend beyond 320 km from the receive site because of line-of-sight limitations. Therefore, the Department might consider limiting new AMT spectrum allocations to a 320 km radius centered on points located on AMT test sites area of Mirabel (YMX) and Downsview (YZD).

Thirdly, “the aerospace industry has expressed an urgent need for an additional 25 MHz of AMT spectrum in order to meet requirement in the Mirabel area beginning in 2012. Two alternatives to satisfy the need have been suggested, including the use of the 1452-1477 MHz band on an interim basis (relocate the DAB licensees to spectrum above 1477 MHz) or to shorten the SRS notification and transition period, thereby making the 1492-1525 MHz band available for the 2012 time frame.” BHTCL agrees with both of these interim solutions.
Also, as suggested by the RABC, the company agrees that it may be possible for AMT to operate in the band 1492-1525 MHz with minimal interference and/or disruption to existing SRS systems thereby negating the need for an interim solution to AMT needs. However, further investigation and practical testing would be required to show possible coexistence with minimal impact on both SRS and AMT.

3.2.3 Treatment of Incumbent SRS

Item 3:

The Department proposes the following transition policy for SRS in the band 1492-1525 MHz:

- SRS which may cause or be subject to harmful interference from existing or planned AMT systems will be subject to a transition policy.
- The transition policy would provide a five-year notification period during which SRS are protected and may operate as licensed. Five years after receiving such notification, these systems may continue to operate on a no interference, no protection basis. Notification would be issued on an “as required basis.”

The Department seeks comments on the above proposal.

BHTCL agrees generally with RABC’s comments on the proposal. Also, the company would support activities to help resolve issues of coexistence between AMT and SRS.

4.2 Proposals for a Spectrum Utilization Policy for the Band 1452-1492 MHz

Item 4:

The Department proposes to rescind the DAB Allotment Plan for the band 1452-1492 MHz, including all associated channels to FM and AM stations across the full band 1452-1492 MHz.

The Department seeks comments on this proposal.

BHTCL supports the Department’s proposal.
7.1 Proposed Changes to the Canadian Table of Frequency Allocations for the Band 1492-1525 MHz

7.1.1 MSS

Item 11:

The Department proposes to remove allocation entry for the mobile-satellite service from the Canadian Table of Frequency Allocations in the bands 1518-1525 MHz and associated footnotes 5.348, 5.348B, 5.361A and C31, as outlined in Annex 1. Also, the Department proposes to adopt international footnote 5.343 next to the mobile allocation.

The Department seeks comments on these proposals.

BHTCL agrees with the Department’s proposal.

7.1.2 AMT

Item 12:

The Department proposes to merge the two sub-bands 1492-1518 MHz and 1518-1525 MHz, and to adopt international footnote 5.343 next to the mobile allocation.

The Department seeks comments on these proposals.

BHTCL agrees with the Department’s proposal.

7.2 Proposed Changes to the Canadian Table of Frequency Allocations for the Band 1452-1492 MHz

7.2.1 Broadcasting Satellite Service (BSS)

Item 13:

The Department proposes to remove the allocation entry of broadcasting-satellite service (BSS) from the Canadian Table of Frequency Allocations in the band 1452-1492 MHz and suppress associated footnotes 5.208B, C28 and C40, as outlined in Annex 1.

Comments are sought on this proposal.

The company agrees with the Department’s proposal.
7.2.2 Mobile Service

Item 14:

The Department proposes to elevate the status of mobile service to co-primary with broadcasting and fixed services in the band 1452-1492 MHz, as outlined in Annex 1.

The Department seeks comments on this proposal.

BHTCL agrees with the Department’s proposal.

7.2.3 DAB

Item 15:

The Department proposes to suppress Canadian footnotes C29 and C30 to reflect the co-primary nature of all allocations in the band 1452-1492, as outlined in Annex 1.

Comments are sought on this proposal.

BHTCL agrees with the Department’s proposal.

7.3 Proposed Changes to the Canadian Table of Frequency Allocations for the Band 1435-1452 MHz

Item 16:

The Department proposes to add international footnote 5.343 for the frequency range 1429-1452 MHz.

Comments are sought on this proposal.

BHTCL agrees with the Department’s proposal.

End of document.