August 25, 2006

Mr. R.W. McCaughrern
Director General, Spectrum Engineering
Industry Canada
300 Slater Street
Ottawa, Ontario
K1A 0C8

Dear Mr. McCaughrern,

Re: Canada Gazette Part I- Notice No. SMSE-005-06 – Consultation Paper on Public Safety Radio Interoperability Guidelines


MSV Canada provides a wide range of mobile satellite services (MSS) in Canada using the MSAT-1 satellite in conjunction with radiocommunication spectrum in the L-band. The MSAT-1 satellite provides coverage of all of North America, as well as Central America and the northern part of South America. MSV Canada is currently developing a next generation MSS system with its U.S. joint-venture partner, MSV LP, scheduled for launch in 2010.

In May 2004, the Department issued a new spectrum licensing policy which allows for the use of an ancillary terrestrial component (“ATC”) system in conjunction with MSS. In this decision, Industry Canada approved the use of terrestrial network “fill-in” base stations as a means of enhancing the reliability of MSS in urban areas where MSS signal paths are often blocked by buildings and other obstructions. Satellite/ATC systems dynamically allocate the MSS frequency band between the satellite spot beams and ATC cells within those spot beams such that there will be no interference. Furthermore, the high power of the spot beams allow the use of handsets which are similar in size and appearance to cellular phones.

The Notice deals with the issue of interoperability of public safety systems. Satellites are ideally suited for providing critical communications, and the developments which MSS/ATC systems bring to the next generation of services are particularly suitable for use by public safety and other priority service agencies.
Among the unique advantages of MSS technology supplemented with ATC for serving the needs of public safety and emergency services communities are the following:

- Providing truly ubiquitous coverage from the densest urban cores to the most rural and remote areas;
- The ability to continue to operate when events occur on the ground, such as power outages and natural disasters, because satellites are located thousands of kilometers above the Earth and are thus virtually immune from such disasters;
- The ability to offer a full range of voice and data services to small and inexpensive handsets;
- Facilitating interoperable communications networks resulting from ubiquitous coverage; and
- The ability to dynamically reassign spectrum resources to those geographic areas most in need of communications capabilities.

Events in recent years, from Y2K preparedness to the forest fires in British Columbia to the August 2003 Ontario blackout illustrate the need to have the flexibility to scale emergency networks from local to national coverage. MSAT-1 capacity was used in the Hurricane Katrina relief effort to provide critical communications to federal and state organizations in the U.S., the Red Cross, and energy and telecommunications utilities throughout Louisiana, Mississippi and Alabama. In most cases, MSS was the only available communications system, because of the devastation to land-based systems caused by the flooding. Today’s MSAT terminals are capable of being instantly converted to a talk group through the ‘dispatch radio’ feature. Had emergency responders had next-generation MSS/ATC-based systems, they would have seamlessly been transferred to the satellite component of the network when the terrestrial system became inoperable, and remained in contact with other emergency personnel.

MSV Canada urges the Department to consider the use of commercial mobile satellite systems in planning for emergency networks. In the development of standards, consideration should be given to including interoperability with MSS/ATC systems. Advances in chip technology allow for handheld devices to be dual-mode handsets similar in form to cellular telephones, thereby enabling wide flexibility in how the units can be packaged for emergency responder use. This technology is available for interoperability between land-based systems as suggested in the Notice, but can also be equally adapted to communicate with a mobile satellite.

This concludes MSV Canada’s comments. Should the Department require additional information, we would be pleased to respond.

Yours truly,

[signature]

Robert Power
Vice-President, Regulatory Affairs