February 25, 2011
Government of Alberta – Public Safety
Response to

Canada Gazette Notice SMSE-018-10
Consultation on a Policy and Technical Framework for the 700 MHz Band
and Aspects Related to Commercial Mobile Spectrum

Executive Summary
The Government of Alberta is pleased to have this opportunity to provide input to Industry Canada through responding to SMSE-018-10 “Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum”.

The Ministry’s of Municipal Affairs and Solicitor General and Public Security, Government of Alberta has reviewed SMSE-108-10 with specific regard to the Public Safety aspects of the discussion paper, heretofore referred to as the Government of Alberta – Public Safety Response (GOA–Public Safety Response). This response will complement a response by the Government of Alberta – Rural Broadband response being prepared by the Ministry of Service Alberta. The GOA – Public Safety Response believes that Industry Canada questions relating to competition amongst the telecommunications services carriers are best dealt with by those carriers.

The Government of Alberta is currently in the process of developing a province-wide two-way mobile radio system, currently known as the Alberta First Responders Radio Communications System (AFRRCS), which will operate primarily in the 700 MHz Public Safety band. While this system is intended to provide voice communications with and amongst mobile radios and dispatchers, it will accommodate short messages (such as status, location, license plate and CPIC enquiries) through the P25 signaling system. It will not provide broadband data service.

Public safety users in Alberta currently require access to broadband data services. That need is expected to expand significantly over time. While most of the current broadband data needs outside the larger communities can be met through the use of commercial services provided by carriers, this is not the case in urban areas. Where the carriers cannot provide suitable service some municipalities are currently building systems in 4.9 GHz, but this is not expected to meet the long term data needs of public safety. Industry Canada must allocate an appropriate amount of bandwidth to public safety in order to permit construction of dedicated systems.

Proposals in the U.S. may see the D-Block allocated directly to public safety, creating a total of 10 +10 MHz of broadband spectrum. GOA - Public Safety Response is recommending that Industry Canada do the same. The GOA - Public Safety Response further believes that if the public safety broadband allocation in the current U.S. band plan is not modified to include a total of 10 +10 MHz of broadband spectrum, Industry Canada must consider a variance to the U.S. plan to accommodate such an allocation for Canada.
Detailed Response

Sections 1 through 3
These sections introduce Industry Canada’s Intent, Policy Objectives and the Background leading up to the issuance of SMSE-018-10.

Section 4 – Commercial Mobile Services
This section is intended to solicit specific information from existing broadband service providers, and as such is not addressed in this document, but is addressed in the GOA - Rural Broadband response.

Section 5 - 700 MHz Band Plan Issues and Considerations

Sub-section 5.1 700 MHz Band Plan Architecture for Commercial Mobile Systems

This sub-section applies mostly to commercial systems, and as such will be addressed by the broadband service providers. Question 5-1 is addressed in the GOA - Rural Broadband response, however, question 5-2 contains implications for public safety.

Question 5.2. The band plans presented in the options above include guard bands. Should the Department auction the guard bands, or should these frequencies be held in reserve for future use such that they are technically compatible with services in the adjacent bands? Also comment on any related aspects not addressed above or other possible options, including combinations of options.

GOA – Public Safety Response to question 5-2:

It should be noted that in the U.S. band plan, the existing guard bands between the D and C blocks were intended to provide interference isolation between the original 10+10 MHz public/private shared public safety/commercial broadband network and the commercial C block. The GOA - Public Safety Response recommends that a minimum of 1MHz wide guard bands be used to isolate public safety broadband and the commercial broadband networks to reduce adjacent channel interference. The coverage impact of interference is of major concern for public safety as incidents cannot be planned around areas where coverage may suffer from interference from systems operating in adjacent bands. These guard bands must be held in reserve rather than auctioned.

Please also reference the comments provided in the GOA - Rural Broadband response, as it pertains to guard bands outside of the GOA - Public Safety Response requirements.
Subsection 5.2 Options for use of 758-768 MHz Paired with 788-798 MHz for Public Safety and/or Commercial Systems

Question 5.3. Do public safety agencies need spectrum for broadband applications? If so:
   (a) How much and for which type of applications?
   (b) What are the anticipated deployment plans and the possible constraints, if any, in implementing these plans?
   (c) Is there suitable alternate spectrum to the 700 MHz to meet these broadband requirements?

GOA – Public Safety Response to question 5-3 (a).

Spectrum is the primary building block for any form of wireless communications. With the advances in commercial broadband technology available today, including the newest generation of broadband known as 4G, public safety has identified an urgent need to have access to broadband data and video communications during emergency and planned incidents. Aside from the obvious answer that more spectrum is always the best choice for public safety, or for any licensee of wireless communications, public safety in Canada must be assured of sufficient contiguous and dedicated broadband capacity to serve public safety’s mission critical broadband communication requirements.

The GOA - Public Safety Response requests that Industry Canada allocate 20 MHz (contiguous 10+10) of 700MHz spectrum to support our first responder’s broadband applications; not only for those envisioned today, but for future applications that will evolve. 20 MHz of spectrum for public safety will allow the best use of broadband technologies, such as Long Term Evolution (LTE), to provide the necessary capacity for future data-intensive applications. As standards develop, the deployment of LTE would bring compatibility and enable interoperability amongst first responders in both Canada and the U.S. where the public safety community has already sanctioned the use of LTE protocol. Deployment of LTE by commercial operators in the adjacent 700 MHz bands may provide further roaming opportunities for public safety onto commercial networks for their non-mission critical communications.

It should be noted that the Federal Communications Commission (FCC) in the U.S. initially allocated 5+5 MHz of broadband spectrum to public safety and attempted to auction an additional adjacent 5+5 MHz (known as the D Block) to a commercial operator with conditions that it be built to Public Safety standards. With the failure to create this public/private broadband network, public safety has been strongly urging both Congress and the FCC to reallocate The D Block directly to public safety. Public safety organizations are forecasting broadband spectrum capacity requirements that cannot be met by the 5+5 MHz broadband spectrum block.

Any single public safety agency using public safety broadband network must have sufficient capacity to handle day to day operations as well as managing major incidents. In capacity models built to analyze projected broadband needs, four levels of incidents were considered including day to day, major incidents, major planned events and
catastrophic incidents; and projections were made for the number of public safety personnel, front-line vehicles, and command vehicles that would normally respond.

In addition, the broadband demand at an incident scene can be divided into three general classes of usage:

1. Individual Computer Aided Dispatch (CAD) functions: Overhead functions associated with a person or vehicle, including incident data, GPS information, medical telemetry and other status messaging and queries. While each individually consumes relatively low down/uplink bandwidth, it can be significant when considered in aggregate across many personnel and vehicles.

2. Incident scene database lookups, downloads and information searches: In general, all expected initial data, including downloads of manuals, incident scene images, maps, topography information and building plans, must be downloaded and available in the first 10 minutes of an incident so commanders can quickly assess the scene and develop a response strategy. Demand is scaled with size and complexity of the incident.

3. Video: Personal video cameras for responders in the hot zone, incident car videos positioned around the perimeter, and situational awareness cameras deployed around the scene. Video is uplinked via the network and a subset of streams is down-linked and switchable on command to the on-scene commander. Ten years from now video cameras are expected to be part of the equipment worn by all first responders. They will need better resolution than commercial Smartphones, and therefore will need dedicated or non-blocking networks.

**GOA - Public Safety Response to Question 5-3 (b).**

The Government of Alberta is currently constructing a primarily 700 MHz P25 voice and data radio communications system. The data abilities of the system will accommodate most of the individual Computer Aided Dispatch (CAD) functions described above, but these data capabilities are not broadband and are secondary to voice communications. To overcome this limitation some public safety agencies in Alberta are constructing private broadband networks in 4.9 GHz band. However, 4.9 GHz spectrum is insufficient to meet the increasing demand for public safety broadband. The needs of the GOA - Public Safety are currently being met by commercial providers.

Eventually the Government of Alberta will be required to maintain and manage its own broadband network, especially as broadband becomes more vital to public safety communications and voice transitions from narrowband to broadband. While transitioning voice operations from narrowband to broadband networks will not occur for many years, having the necessary resources set aside today to support the public safety applications of tomorrow is critical for planning purposes.

Since there is not currently a public safety broadband spectrum allocation in the 700 MHz band Government of Alberta public safety agencies within Alberta have invested every effort into planning such systems. However, broadband is a quickly becoming a critical public safety communications tool. Providing a 20 MHz spectrum allocation in the
700 MHz band will facilitate network planning. The greatest constraint on plans for the GOA - Public Safety to deploy a 700 MHz broadband network is funding. The Government of Alberta does not intend, at this time, to construct a broadband network in parallel with the P25 network. The constraints are cost and the lack of available spectrum. Much of the current day-to-day public safety mobile broadband requirements can be met using commercial networks, but it is recognized that the broadband requirements of some large emergency and planned events will not be met due to capacity limitations of the commercial services,

**GOA - Public Safety Response to Question 5-3 (c).**

The GOA - Public Safety Response is of the opinion that no other suitable spectrum exists currently that could meet the wide-area mobile broadband requirements of public safety.

The 700 MHz band possesses several advantageous characteristics that make it very desirable to implement public safety broadband applications over other frequency bands including a good balance between in-building and longer distance coverage, and having sufficient channel bandwidth required to provide the necessary capacity for broadband. Additionally, the 700 MHz band will be available nation-wide and will be ideally harmonized with the U.S. fulfilling public safety technical requirements for national and international interoperability.

By definition, broadband communications require a broad channel. There is very little “green” spectrum that is open in the 1 kHz to 1 GHz range, resulting in no contiguous spectrum availability that has the operational capacity required for broadband communications. While there may be some opportunity for on-scene hot spot broadband implementation in the higher GHz bands including the 4.9 GHz band, the reduced coverage footprint and the related increase in infrastructure costs make this spectrum much less favorable for any wide-area public safety use.

**Question 5-4. Comments are sought on the need for public safety broadband radio systems to be interoperable:**

(a) between various Canadian public safety agencies;  
(b) between Canadian and U.S. public safety agencies

**GOA - Public Safety Response to Question 5-4 (a).**

The need for interoperability with respect to public safety radio communications has been well documented and noted over the past several years. Thousands of incidents that require mutual aid and coordinated responses occur every day. The GOA - Public Safety Response believes that Industry Canada should allocate a contiguous nationwide block of spectrum for broadband applications to ensure that broadband user devices will function on any public safety network in Canada. The need for interoperability with respect to Public Safety radio communications has been well documented and promoted over the past several years. It is therefore mandatory that a common contiguous block of spectrum be allocated nationwide for public safety broadband requirements to ensure that broadband user devices will function on any public safety network in Canada.
Public Safety Canada recognizes in the Canadian Communications Interoperability Plan (CCIP) that “One of the most important issues facing Canada’s emergency responders is communications interoperability”.

The CCIP indicates that “communications interoperability [is] commonly defined as the ability of emergency responders—police officers, firefighters, emergency medical services—to communicate with whom they need to, when they need to, as required and authorized.”

The ‘ability to communicate’ includes increasingly both voice and data communications. As the use of public safety data applications spreads, these applications are becoming more relied upon and considered mission-critical to the first responder agencies. Day-to-day operations, responses at an incident scene or larger scale event/disaster relief are increasingly dependent on the sharing of data, images, and video amongst first responders.

Radio interoperability is a part of an overall interoperability communications framework. In both Canada and the U.S., public safety agencies have widely adopted the Interoperability Continuum of the SAFECOM model. The agencies target the ‘far-right’ goal of Two-Way Standards-Based Sharing for data elements of the Technology category. Using standards, this approach permits applications to share information from disparate applications and data sources and to process the information seamlessly. As with other solutions, a two-way approach can increase access to information, improve user functionality, and permit real-time collaborative information sharing between agencies. This form of sharing allows participating agencies to choose their own applications. Two-way standards-based sharing does not face the same problems as other solutions because it can support many-to-many relationships through standards-based middleware.

It is expected that this model will significantly enhance the ability of a national and international response to an emergency situation for mobile broadband data without regards to borders as well as to improve the day-to-day and incident responses. Public safety operations have already benefitted enormously from similar approaches used in recent land mobile radio system deployments in Canada using a Standards-Based Shared System (voice) approach.

Independent networks by public safety agencies may foster inefficient use of spectrum. As an example, it is common for firefighters, particularly in the forestry industry, to travel to other provinces and the U.S. to assist in fighting forest fires. The firefighters bring their own equipment, but currently often must borrow radios from the host organization because theirs operate on different frequencies, often in different band segments.

**GOA - Public Safety Response to Question 5-4 (b).**

It is imperative that the 700MHz Canadian public safety broadband spectrum allocation align with the U.S. band plan identified in Figure 5.7 -Canadian and U.S. Band plan for Public Safety, including the potential allocation of the D Block to public safety. This will ensure that broadband user devices will function on any public safety network and in either country. This not only provides the required cross border interoperability
functionality, but creates a much larger market for specialized public safety devices creating scale and lower costs. The 10+10 (20 total) MHz of spectrum should be set aside for public safety even if the D Block is not allocated to public safety in the U.S. This will maintain the larger market for specialized public safety devices while meeting the long term Canadian public safety needs for broadband communication capability.

**Question 5-5.** What are the challenges faced today by public safety agencies to have cross-border radio interoperability in other frequency bands?

**GOA - Public Safety Response to Question 5-5.**

Many obstacles exist today between public safety agencies when attempting to achieve communications interoperability with their partners across the Canada - U.S. border. This includes the limited availability of common spectrum, and some restrictions that impede the free movement of user equipment for mutual aid responses.

Agencies for the most part, operate in different frequency bands from their counterparts on the opposite side of the border including the VHF, UHF 400 MHz, and 800 MHz bands. These allocation plans for are not aligned and have evolved differently in both countries with dissimilar services being authorized across the border. These bands also lack established common channels for the purpose of first responder interoperability. As these bands are very congested along the border, the identification and coordination of channels to be shared, and to fill coverage gaps become a very difficult and very lengthy process. This is considered by first responders as a significant barrier in providing timely and effective emergency responses.

These challenges have been mitigated somewhat with the advent of network connectivity, IP gateways, ISSI and soon with multi-band radios when widely available. These methods, however, add levels of complexity and great costs/redundancy, with each agency having often to deploy an additional overlay to their own infrastructure to provide interoperability communications distinct from the daily operations. Other solutions also involve carrying multiple user radios to be compatible with the other agencies; this has an operational and economic impact on the agencies.

The future holds promises with the 700 MHz public safety narrowband plan with channels reserved for the purpose of interoperability and associated with a common technical standard and a clear set of rules, all harmonized between Canada and United States.

The GOA - Public Safety Response highly recommends that Industry Canada work closely with the public safety agencies and their associations in order to include spectrum management and harmonization measures that will facilitate cross-border radio interoperability in the future bands from the outset, including the proposed 700MHz broadband allocation.
Question 5-6. Notwithstanding your responses to questions 5-3 to 5-5, the Department seeks comments on whether public safety broadband needs can be met by using commercial systems with priority access rights for public safety, at commercial rates. (a) Your views and comments are invited on priority access rights, including pre-emption, and on the feasibility of such a system. (b) What public safety technical and operational requirements cannot be met by commercial systems, from either a public safety or commercial operator point of view? (c) What specific rules, if any, should be mandated by the Department to make such a system viable?

GOA - Public Safety Response to Question 5-6.

Commercial networks are typically designed to meet a business model for the carriers providing consumer type features and services primarily in more densely populated areas where substantial network usage provides a return on the carrier’s investment. The financial opportunity that the public safety community represents is a very small percentage of the commercial carrier’s total revenue. Meeting the mission critical requirements of public safety-grade network may not align well with the carrier business model.

Large scale incidents requiring public safety to supplement their communications with commercial services have shown that such carrier networks are often the least available. Reasons include large increases in consumer traffic during such incidents which overload the networks, network resiliency including the lack of adjacent site overlapping coverage during natural disasters, and lack of priority, including pre-emptive priority. Emerging consumer demand for streaming video, high resolution photographs, mobile TV and social networking is skyrocketing, and the challenges of public safety responders competing for access and capacity will only increase on the new commercial broadband networks. While a busy network, delayed or slow transmission or dropped call may be an inconvenience or even irritant to consumers, it may be a matter of life or death to a public safety responder and the citizens they are serving.

GOA - Public Safety Response to Question 5-6 (a).

During critical emergency conditions, communications must be dynamically prioritized for multi-layers of public safety response. Current mission critical voice systems allow prioritization and talk groups based on complex levels of communications urgency and needs including geographical and jurisdictional levels (by different types of provincial municipal, and federal agencies, and whether that agency is within its jurisdiction or it is providing mutual aid to a neighboring agency), intra-agency level (police, fire & EMS, public works), functional level (departments, geographic or tactical units within the agency), individual responder level (chief, sergeant, on-scene investigator, constable, firefighter, paramedic, trainee, social worker, highway maintenance driver, animal control officer), incident levels (gravity and type of incident). Mission critical broadband communications must to be able to provide the same types of prioritization capability. Adding to the broadband complexity are the broadband service and application levels (email, location, file transfer, text messages, pictures, fingerprint or video transfer).
The commercial implementation of broadband networks may not include dynamic prioritization to the complex levels indicated above. They may not be able to distinguish between incident types, i.e. whether an incident is a cat in a tree or a 3 alarm fire, but may only be able to prioritize services based on the device. In public safety, the device may be the least important in terms of gaining access to the network. The criticality of the broadband information is seldom based on just the device holder’s rank or service. A police constable likely does not need priority access over the firefighter requiring building plans en route to major fire. Without dynamic prioritization, the first agency operating on scene on a commercial network may end up dominating all the capacity, “starving out” other critical agencies that subsequently arrive on scene.

Pre-emption is the capability within a network to assign capacity to priority users while users with lesser priority actively engaged in a call are terminated. While this is a critical requirement for public safety networks, pre-emption is not typically supported or readily used by commercial networks, including the LTE carrier networks now being implemented in the U.S. Once a user is “connected” on a commercial carrier network, there is no mechanism implemented to terminate a session or call even if higher priority traffic is waiting for capacity to come available. In addition to the business practice of not enabling pre-emption, carriers may also have legal and liability reasons for not supporting this functionality. What if a commercial network user trying to make a 911 call is knocked off the network or cannot get on the network in time, so that a public safety responder can get access?

GOA - Public Safety Response to Question 5-6 (b).

As addressed in the above sections, technology designed for commercial networks is built to meet the business model and operational requirements of the commercial carrier based on the user market served, the vast majority of which are consumers. The standardization, development, and implementation of carrier based broadband networks like other commercial technology platforms are typically driven by consumer requirements. Because public safety users would at best represent less than 5% of the carriers’ user base, it would be difficult for a carrier to develop standards and to implement functionality that is specifically geared to such a small sub-set of their market.

GOA - Public Safety Response to Question 5-6 (c).

The GOA - Public Safety Response does not support the implementation of rules that would make public safety reliant on commercial networks for broadband service. Such a framework is not in the best interest of public safety or the citizens of Alberta. Commercial carriers have no incentive to build to the requirements of public safety and have demonstrated their reluctance to do so, as evidenced by the failed D-Block auction in the United States. Canadian carriers have stated that they are not prepared to implement preemption of their bandwidth by public safety users.
Question 5-7. Comments are sought on the need for regional (local, provincial, etc.) dedicated broadband networks to provide access to all public safety agencies, and the institutional feasibility of implementing such a system.

GOA - Public Safety Response to Question 5-7.

Although the Government of Alberta is not planning to construct a province-wide dedicated public safety broadband network at this time, such a network will become a requirement when the currently under construction P25 narrow band system reaches the end of its operational life. This may be the only opportunity that Industry Canada has to dedicate sufficient spectrum for this purpose.

Question 5-8. Is there a need for a dedicated national interoperable broadband network to provide access to all public safety agencies? The Department seeks comments on the institutional feasibility of implementing such a system.

GOA - Public Safety Response to Question 5-8.

While the GOA - Public Safety Response believes that such a network would eventually be useful, the cost of construction of this network would be prohibitive. A preferred approach would be for the Department to establish standards for local systems that would allow user agencies to interoperate with each other on their systems.

Public Safety in Canada is looking at a system of systems approach, a network of interoperable broadband systems that conforms to commercial LTE standards. This strategy considers that these systems will be initially deployed in the higher density population centers where economies of scale and greater demand for this technology exist.

Question 5-9. If band plan Option 1, 2a, or 2b in Section 5.1 is chosen, which one of the three options described above should be adopted and why is this option preferred over the other options? Provide supporting rationale.

GOA - Public Safety Response to Question 5-9.

To meet the public safety broadband spectrum capacity requirements, Canadian public safety agencies require Option 3: 10+10 MHz designated for public safety.

The GOA - Public Safety Response does not believe that a broadband system based on a 5+5 MHz block defined in Option 1 will provide the capacity necessary as discussed in our response to 5.3. The shortfalls of Option 2 considering priority access on a commercial system are discussed in our response to question 5-6.
Question 5-10. If commercial operators are mandated to support public safety services, what tier size should be applied in order to ensure adequate public safety coverage?

GOA - Public Safety Response to Question 5-10.

The GOA - Public Safety Response does not support mandating commercial operators to support public safety services, as discussed in our responses to previous questions.

Question 5-11. If the APT band plan (See Option 3 in Section 5.1) is adopted:

(a) Given that the APT band plan requires a 55 MHz duplexing separation, can Canadian public safety services operate their current narrowband systems in this band plan configuration? If not, what are possible alternatives to address public safety needs?

(b) Should spectrum be designated for dedicated public safety broadband systems, and how much?

GOA - Public Safety Response to Question 5-11 (a).

The existing narrowband channeling established in SRSP511 was designed to align with the American band plan incorporating a 30MHz duplex separation assigning the uplink mobile transmitters to the upper frequencies (798 to 806MHz), and downlink base transmitters to the lower frequencies (768 to 776MHz). Current narrowband systems being manufactured for the North American market based on this band plan would not be able to accommodate a shift in channeling to align with the APT plan. This is not only due to the differing duplex separation (55MHz), but also due to the reverse configuration of the uplink and down link partitions incorporating mobile transmitters on the lower frequencies and base transmitters on the upper frequencies.

The adoption of the APT band plan in Canada would therefore necessitate the production of unique product for the Canadian public safety marketplace, which is highly unlikely. This concern is in addition to the fact that many Canadian public safety agencies are now well into the purchasing process for 700MHz narrow band systems based on product designed to the established band plan. Even if manufacturers could modify existing products, or could be convinced to produce unique products for Canada, the costs of delaying implementation and the likely increase in the cost of this hardware because of smaller production volumes would be significant, and therefore not acceptable.

Another major consideration if the band plan does not align with the American plan is cross-border interoperability. The existing SRSP 511 band plan sets out interoperability channels that are common on both sides of the border so that public safety responders can easily interoperate when responding to incidents at or near the Canada – U.S. border. These efforts to harmonize interoperability channels have been sponsored by Public Safety Canada, and the Department of Homeland Security in the U.S.

We are not aware of any available alternative spectrum allocation for public safety radio systems, if the APT plan is adopted and narrowband is therefore excluded due to the
lack of equipment availability. The demand for additional narrowband spectrum is immediate, and incurring an additional lengthy delay to identify and transition an alternate spectrum allocation, is simply not acceptable.

**GOA - Public Safety Response to Question 5-11 (b).**

If the APT plan were to be adopted, public safety would request a 10+10MHz broadband allocation as addressed in the response to 5-9. The narrowband allocation of 6+6 MHz (guard bands would be additional) would also have to be accommodated. Public safety would further request that these allocations match the equivalent allocations in the U.S.

**Subsection 5.3 Tier Sizes for 700 MHz Auction of Commercial Spectrum**

This sub-section is intended to solicit specific information from existing broadband service providers, and as such is not addressed in this document.

**Question 5-12. The Department seeks comments on whether the auction of 700 MHz commercial spectrum should be based on uniform tier sizes across all spectrum blocks, or a mixture of tier sizes.**

**Question 5-13. Based on your answer above, what tier size(s) should be adopted?**

**GOA - Public Safety Response to Question 5-12 and Question 5-13.**

No comment. Refer to the GOA - Rural Broadband response.

**Subsection 5.4 Treatment of Existing Spectrum Users**

**Question 5-14. The Department seeks comments on the transition policy proposed above. (Regarding the transition end date of Low Power TV channels)**

**GOA - Public Safety response to Question 5-14.**

The GOA - Public Safety Response believes that for public safety radio systems, rural areas are as important as urban areas and that differing transition notification periods depending on the Low Power TV (LPTV) station location could cause implementation delays. We would prefer that a specific transition end date of March 31, 2012, be applied to all LPTV channels that presently occupy channels 63, 64, 68 and 69. It should be noted that SRSP 511 contains the provision for national low power, national high power, and national interoperability channels that could be used at any time and at any location. We therefore believe that the provision of one or two year notification periods for LPTV to transition to alternate channels does not align well operationally for 700MHz radio users who could be called to respond to any location in the country at a moment’s notice.
**Question 5-15.** The Department seeks comments regarding its proposal to permit low-power licensed devices, including wireless microphones, to operate in the band 698-764 MHz and 776-794 MHz only until March 31, 2012.

**GOA - Public Safety Response to Question 5-15.**

The GOA - Public Safety Response agrees with the proposed end dates for licensing of these devices and echoes the concerns of others relating to the requirement for an information campaign to address the devices that may continue to operate that were previously licensed or unlicensed.

**Section 6. Changes to Canadian Table of Frequency Allocations**

**Question 6-1.** The Department seeks comments on its proposed changes to the Canadian Table of Frequency Allocations for the band 698-806 MHz.

**GOA - Public Safety Response to Question 6.1.**

We believe that the Canadian table of frequency allocations should reflect the current status of radio channel allocations in Canada. We propose that the “BROADCASTING” allocation change to “broadcasting” to reflect the change in status from primary broadcast use to primary land and fixed mobile for the 700MHz band.

“The Canadian Table is intended to respond to Canadian domestic spectrum requirements, and consequently reflects Industry Canada’s spectrum allocation and utilization policies developed through public consultation. It should be noted, therefore, that the Canadian Table differs, where necessary, from the ITU.”

**Question 6-2.** The Department seeks comments on the spectrum utilization policy proposed above.

**GOA - Public Safety Response to Question 6.2.**

The GOA - Public Safety Response supports the proposed CMRS designation for the commercial services that may be allocated in this band. Please note that SP-768 has already designated 768-776MHz and 798-806MHz for public safety use.

**Sections 7 through 10**

These sections are intended to solicit specific information from existing broadband service providers, and as such are not addressed in this document. Please refer to the GOA - Rural Broadband response.
Sections 11 through 13

These sections cover administrative aspects of the Industry Canada consultation process, and are not addressed in this document.