**Best Practices: Mobile Roaming**

Mobile roaming enables consumers to use their mobile phones when travelling abroad or outside of their current network carrier calling area by connecting to partnered provider networks. Roaming agreements have undergone significant changes and advancements since they first became available to consumers. While roaming agreements and coverage have improved over time, the charges that could be attributed to unprepared travelers remains high. The objective of these guidelines is to provide corporate client with information to empower their consumers to make more informed choices between roaming pricing plans and to choose technological solutions that best suit their purposes.

This document focuses on the type of information that is considered useful to improve consumer awareness of roaming services, including associated charges, technologies and alternatives. The guideline consists of three sections:

- **International mobile roaming** gives an overview of the roaming market and provides information on various technologies and charges for roaming services.

- **Better access to consumer information** outlines ways in which we can use Bell as the mobile service provider to outline more transparent, clear and comprehensive information on roaming to their user base.

- **Substitute technologies** provides examples of alternative technologies that can be used by clients/consumers to communicate when visiting abroad (outside of Canada.)

1. **International Mobile Roaming:** Roaming technologies and capabilities vary between countries. Some local providers offer a wider variety of services and better information on roaming arrangements than others. In order to avoid unexpected high fees, consumers should be aware of these issues before and while they travel outside of the Bell service area.

There are a variety of roaming services and associated call charges available to consumers travelling abroad and into the United States, including:

- receiving voice calls originating from home carrier when in a visited country;
- receiving voice calls originating from third country when in a visited country;
- receiving voice calls originating from the visited country;
- making a voice call from a visited country to a home country;
- making a voice call from a visited country to a third country;
- making a voice call from a visited country to the same country;
- sending and receiving short message service (SMS) and multi-media service (MMS);
- premium mobile content;
- Internet Protocol (IP) data such as the use of the Internet, email, Voice over IP (VoIP) and other data services such as social networking using mobile telecommunications data
- specialized services such as premium mobile content, where additional tariffs/charges can often apply

There are a variety of mobile phone technologies used throughout the world. Bell Mobility clients should always check for available roaming partners at www.bell.ca or by calling customer service at 1-800-387-4869 before they travel, so they can determine which devices/rat plans are required to roam in certain regions. The consumer should also be made aware of whether their domestic service provider (Bell) has reciprocal roaming arrangements with a provider(s) at their international destination including the United States.

Roaming services are often automatically activated when consumers travel abroad. However, some external carriers require consumers to enable roaming on their handsets and/or contact their mobile service provider to request that mobile roaming services be activated. Mobile phone handsets should be considered as well before travel, for SIM locking features, which disable international roaming unless consumers request it to be unlocked before they travel.

Receiving party pays With international roaming, the receiving party often pays to receive a call. To avoid unexpected high mobile phone bills, please call Bell directly to determine if a ‘calling party pays’ option is available prior to travel.

Fixed or Flat Fees: Bell Mobility does provide 'fixed' or 'flat' fee roaming services in some areas. For example, a consumer can purchase 100 minutes of talk time to a certain region at a set price. These pricing arrangements allow for the easy comparison of roaming charges and allow customers to choose a predetermined charge rather than being charged at a different rate each time they roam on to a different mobile service provider's network. This reduces the possibility of inadvertently amassing a very high service fee, which is often referred to as 'bill shock'.

Alliance Partnerships: There are several alliances or partnerships between carriers to provide cheaper roaming rates between their members (3G, EVDO, HSPA, use of Home Only). Customers should be aware of the need to configure their mobile phone such that it roams only onto the partners' available networks.

Data Roaming: Charges for Internet data roaming are generally much higher than domestic Internet data charges. The high charges at an average run between US$15 - $53/MB. These rates should hinder consumers from using VoIP services (such as Skype) on their Internet enabled mobile phones when roaming.
2. Access to Information: It is important for corporate clients and end users to be aware of the risks associated with using their mobile devices while overseas and in the United States.

For consumers to be in a position to determine the best roaming service for their needs when travelling abroad, clear and comprehensive information is easily accessible on www.bell.ca or by calling customer service at 1-800-387-4869 before they travel. This information includes, the charging structures for different mobile service providers, available rate plans and how best to manage those charges. Consumers can access information that allows them to determine the most suitable solutions for their requirements and how to configure their mobile devices to access them.

**Best Practice Approaches:**

SMS/MMS or voicemail on arrival at an international destination/United States:

Upon arrival to a new country, an SMS/MMS or voicemail message is sent by the originating service provider that may explain the charging rates of their partner providers in the destination country. If details are not provided the SMS/MMS definitely advises that roaming charges will in fact occur. The message often provides the local carrier name and a customer service telephone number of the local provider from which service charges and further roaming information can be obtained. When users travel outside of Bell Territory they cannot use the device without adhering to the roaming policies set out by the US carrier/International carrier when they crossed the border (via car or flight) for data or voice. The window on the device pops up and states a message something along the lines of "outside of your home carrier local charges apply" Furthermore an automatic text from the local carrier is also sent asking the end user to approve the roaming fees - the end user would have to approve and acknowledge that international fees were applicable. In addition; a physical adjustment in the device menu is in fact necessary to connect to the new country roaming network.

Use of SMS messages and the carrier websites Mobile phone users are encouraged to utilize SMS and the Internet as an option to access information on account balances and service charges to Bell directly via a handset, or to the local carrier - in this way information can be delivered at a minimal cost. Access to the personal account balance should allow customers to receive a break-down of service use, including individual calls and data use.

Point of sale or Activation of service: All roaming information should be provided to clients upon the activation of the mobile service with their chosen hardware vendor. The information set up can further direct the client to www.bell.ca for more information.

3. Substitute technologies (alternatives available to consumers) Viable alternatives exist that are generally more cost-effective than roaming. In most cases, these substitutes have some disadvantages over roaming. Issues such as the customers’ phone number becoming inaccessible, forcing calls to be made from a fixed location, loss of coverage, increased complexity to dial a number, decreased voice quality and loss of access to contacts are examples of the problems associated with substitute technologies. However, these substitutes are an effective means of avoiding 'bill shock' and consequently, many customers choose to use them.
Restrictions on mobile services: Restrictions can be placed while roaming so that non-emergency voice calls are barred and only SMS, MMS or voicemail services function. This can limit the high charges applied to roaming calls while allowing the use of text, multimedia or voice messaging to communicate.

Local pre-paid SIM cards: Pre-paid SIM cards purchased in the local country generally offer cheaper calling and data rates than using a roaming service provided by Bell. The main disadvantage of using a locally bought SIM card is that a different phone number must be used. This means that incoming calls and messages to the user's original phone number will no longer get through to the consumer except when they insert the original SIM card. To get around this, a recorded message can be left on your home mobile number, providing your new mobile number abroad. Voice mail can also be set up so that it can be accessed from another phone. A similar alternative would be to use a dual SIM card handset, or two handsets. Multiple SIM card mobile handsets

Dual SIM card phones: allow two or more SIM cards to be inserted into one mobile handset. Dual SIM card phones can be a cost-reducing alternative to roaming. However, costs for receiving calls can still accrue and many handsets currently available in North America only allow a single SIM at any one time.

Global SIM cards: (also referred to as international SIM cards) are sold by several providers internationally. The SIM cards operate like a normal SIM card; however they generally offer cheaper rates than those charged while roaming on an ordinary mobile phone plan. Again, the disadvantage is that the domestic mobile number cannot be used. WiFi, WiMax and other wireless or fixed Internet networks Wireless or cable connections to Internet networks can allow consumers access to a range of internet services such as email, VoIP.

Voice over Internet Protocol: (VoIP) services VoIP allows voice calls to be made over the Internet. The services are often free or low cost. VoIP services can be a cheaper substitute to roaming depending on the VoIP services that are accessible in the new destination. A disadvantage of this is that the customer may be forced to access VoIP from a fixed computer terminal. Also, call quality may be of a significantly lower standard.

International Calling Cards: are a low cost solution to making international calls. Calls can be made via a local phone or a mobile phone with a local SIM card. Calling cards can often be used via a roaming mobile, however this system still incurs the airtime charge from the domestic leg of the call.

Although the substitutes described above may be more cost effective than roaming, the time required to search for and purchase alternative services can, at times, outweigh the benefits. Language barriers and the inconvenience of not having all the services available all impact on the quality of services consumers ordinarily expect from Bell.

Consumers should also be aware that if they choose to use their phone for roaming, they need to check whether their phone is SIM locked or network locked. If the handset is locked in any way, they should arrange for it to be unlocked by the local provider (Bell) or use a different handset altogether (perhaps purchased in the new local region).
In conclusion, roaming is a vital communication service used by many people who travel abroad. Yet the charges when roaming remain relatively high in comparison to calls that are made at standard local carrier call rates. This is of concern to both consumers and corporations paying for this usage.

Aside from considering approaches to regulating the roaming market, steps can be taken to improve current service arrangements. As a short term goal, clients must view the details on www.bell.ca for clear, targeted and transparent information before they roam internationally. In the medium to long-term, better consumer awareness and choice would likely encourage market competition and may have a downward effect on roaming charges.

Telicost: Consumer safeguards to help customers avoid 'bill shock': The Anomalous Solution (Telicost) - is a Bell Mobility exclusive for $5/subscriber per month. Data and Airtime can be measured manually via the device on a monthly basis by the end user. Customers are sent an SMS if they exceed a set unit charge or can be warned if they are trending toward depleting their available package limitations or services.