

## **NPA 819 RELIEF PLANNING COMMITTEE - TIF REPORT**

**Date Submitted:** 24 November 2009

**WORKING GROUP:** NPA 819 Relief Planning Committee (Ad Hoc)

**REPORT #:** NPA 819 TIF Report 1                      **File ID:** 819RE01A.doc

**REPORT TITLE:** Relief Planning Committee (RPC) Recommendation for the NPA 819 Planning Document and Relief Implementation Plan

**OUTCOME:** Consensus

**RELATED TASK(s) #:** None

### **BACKGROUND:**

On 28 May 2009, the CRTC issued Telecom Notice of Consultation CRTC 2009-308 *Establishment of a CISC ad hoc committee for area code relief planning for area code relief planning for area code 819 in western Quebec*, in which it established the CISC ad hoc Relief Planning Committee (RPC) for NPA 819.

The NPA 819 RPC developed the attached Planning Document (PD) which was prepared in accordance with the CRTC-approved Canadian NPA Relief Planning Guideline dated 2 June 2009. The purpose of the PD is to identify and assess NPA 819 Relief Options and to make recommendations to the CISC and CRTC for the preferred relief method for NPA 819.

Based on the assessment of Relief Options and other issues contained in the PD, the RPC submits the attached PD to the CISC and CRTC for approval. The PD contains various recommendations including but not limited to the following:

- 1) The Relief Option should be a new distributed overlay on NPA 819;
- 2) NPA Code 873 should be used for relief of NPA 819;
- 3) The Relief Date should be 1 June 2013 in order to provide Carriers and customers with sufficient lead-time to implement relief;
- 4) The local dialling plan should remain as 10 digits for all local calls originating within the NPA 819 area.

For additional details and recommendations see the PD.

On November 9, 2009 the NPA 819 Relief Planning Committee agreed that a Relief Implementation Plan (RIP) for area code 819 be submitted to the CISC and CRTC at the same time as the NPA 819 PD.

The attached RIP was prepared in accordance with the recommendations contained in the PD. The RIP establishes a public framework and timeframe for implementing relief for area code 819. This RIP also addresses the activities, deliverables, and issues impacting more than one individual TSP. It does not cover activities internal to each TSP. In addition, this RIP does not cover areas for which there is already an established

process for coordination between TSPs to establish service (e.g., interconnection agreements between carriers).

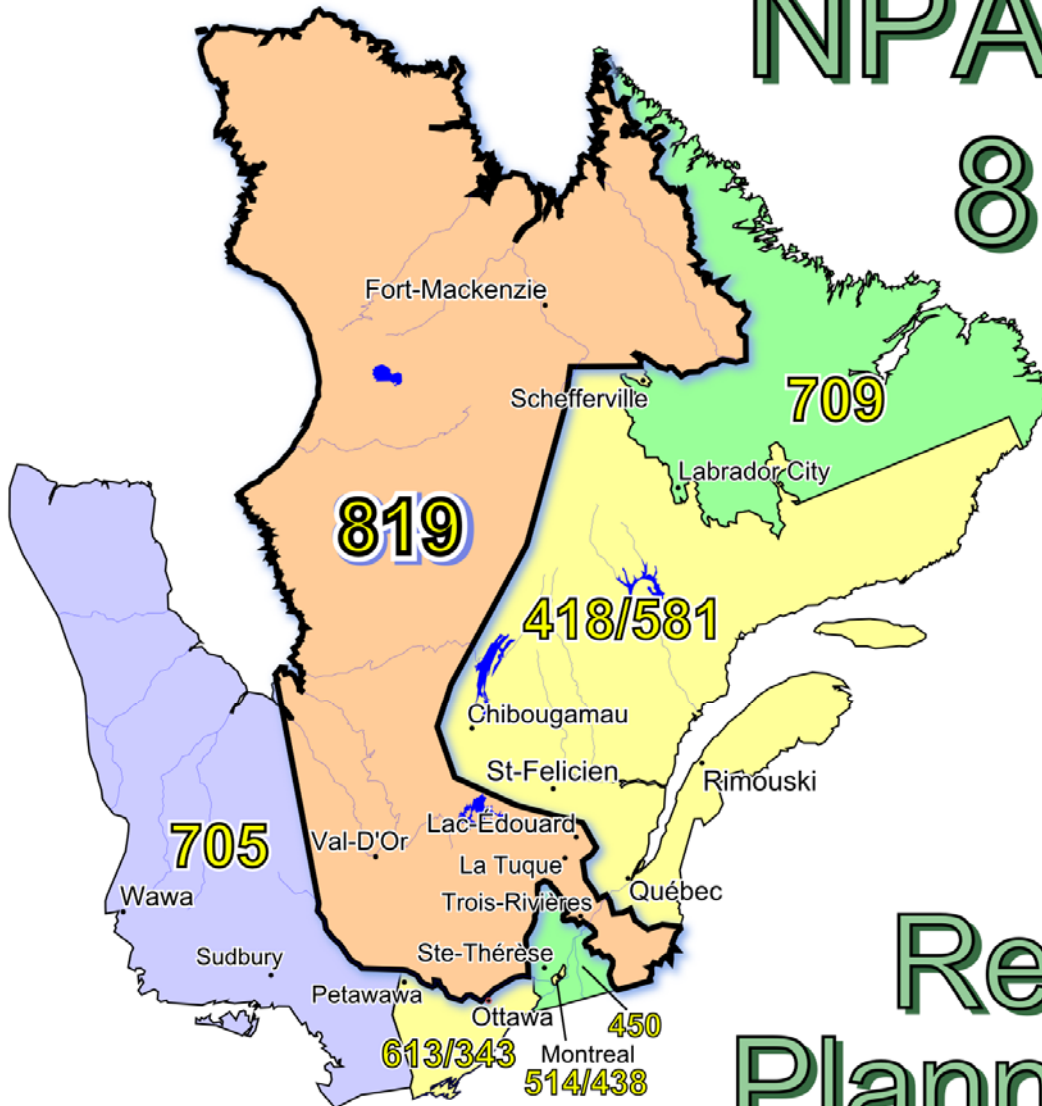
**RECOMMENDATIONS:**

The NPA 819 RPC hereby recommends that the attached NPA 819 Planning Document and Relief Implementation Plan be approved by the CISC and CRTC.

**ATTACHMENT:**

NPA 819 Planning Document, dated 24 November 2009  
NPA 819 Relief Implementation Plan, dated 24 November 2009

# NPA 819



# Relief Planning

Planning Document (PD)  
Version 1.0 – 24 November 2009

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# NPA 819 Planning Document (PD)

## 1. INTRODUCTION

The 819 area code or Numbering Plan Area (NPA) consists of 211 Exchange Areas serving western Québec, and includes the major communities of Hull, Drummondville, Gatineau, Shawinigan, Sherbrooke, Trois Rivières, Val D'Or and Victoriaville.

The majority of the projected growth in area code 819 is spread over 8 Exchange Areas; in the remaining Exchange Areas there is little projected growth. The Exchange Areas growing the most are Drummondville, Gatineau, Ottawa-Hull, Shawinigan, Sherbrooke, Trois-Rivières, Val d'Or, and Victoriaville. Annex B Table 1 includes a list of Exchange Areas in NPA 819.

On 23 March 2009, the Canadian Numbering Administrator (CNA) announced that NPA 819 had entered the relief planning window of 72 months according to the aggregate results from the 2009 General Numbering Resource Utilization Forecast (G-NRUF). The CNA advised the Canadian Radio-television and Telecommunications Commission (CRTC) and industry of this situation. At the Canadian Steering Committee on Numbering (CSCN) conference call held to review the draft aggregate 2009 G-NRUF results, the Bell Canada representative suggested, and the industry agreed, that planning for Ontario and Québec NPAs that are in the relief planning window (NPAs 705, 819 and 289/905) be accelerated so that decisions on the NPA Relief Methods and NPA Codes could be issued by Q3 2009. This would allow Bell Canada, and other companies if they desire, to minimize costs through single IS/IT modification coincident with the NPAs 613 and 450 modifications. Subsequently agreement was reached by the CSCN that the CNA should immediately request Relief Planning NRUFs (R-NRUFs) for NPAs 819 and 289/905.

On 28 May 2009, the CRTC issued Telecom Notice of Consultation CRTC 2009-308 *Establishment of a CISC ad hoc committee for area code relief planning for area code 819 in western Québec*, by which it established the CISC ad hoc Relief Planning Committee (RPC) for NPA 819. This Notice of Consultation also included the following direction: *In developing its recommendations, the 819 RPC is directed to set aside, at a minimum, 7 central office codes for initial code assignments for carriers already providing service in the 819 area, and 10 central office codes for initial code assignments for new entrants only.*

The June 2009 NPA 819 R-NRUF results, when adjusted for the minimum quantities of CO Codes set aside per the above Notice of Consultation, indicated that NPA 819 would exhaust in August 2014.

The Initial Planning Document (IPD) was developed by the CNA in accordance with the CRTC-approved Canadian NPA Relief Planning Guideline (the Guideline) dated 2 June 2009. A copy of the Guideline is available from the CRTC CISC guidelines web page at <http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm> or via a link from the CNA website at <http://www.cnac.ca/>.

The purpose of the IPD was to identify alternatives for providing relief in the NPA 819 geographical area. Based on the IPD, the NPA 819 Relief Planning Committee (RPC) developed this Planning Document (PD) to assess the alternatives, modify or add to them as necessary, and to make recommendations for relief to be submitted to the CRTC.

The purpose of identifying Relief Options and the objective of the NPA Relief Planning process is to ensure that CO Codes and telephone numbers are always available for use by Telecommunications Service Providers (TSPs) and their customers in the geographic area requiring relief.

Given the magnitude of this undertaking, inter-company commitment and co-operation are essential throughout the planning, provisioning and implementation stages of the introduction of a new NPA.

It is very important to closely monitor the CO Code requirements of all existing and prospective CO Code Holders so that relief can be timed to ensure that CO Codes and telephone numbers are always available for service providers and customers.

NPA Relief Planning is conducted under the regulatory oversight of the CRTC in accordance with the Guideline. The CRTC may exercise its authority under the Telecommunications Act to alter this process at any time. The CRTC has the authority, under the Telecommunications Act, to review, modify and give final approval to the Planning Document (PD) and the Relief Implementation Plan (RIP) developed and submitted to the CRTC by the RPC via the CRTC Interconnection Steering Committee (CISC) process.

## 2. NPA RELIEF PLANNING PROCESS

The roles of the participants (e.g., CRTC, CNA, CRTC Interconnection Steering Committee (CISC), RPC participants, Interested Parties) for NPA Relief Planning are identified in section 6.0 of the CRTC-approved Canadian NPA Relief Planning Guideline (the Guideline), dated 2 June 2009. A copy of the Guideline is available from the CRTC CISC guidelines web page at <http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm> or via a link from the CNA website at <http://www.cnac.ca/>.

To increase public awareness and participation in the NPA Relief Planning process, the CRTC has determined that NPA RPCs will be established as ad hoc committees of the CISC. Generally, a separate ad hoc committee is created to deal with relief in each area code. The CNA, in its function as NPA Relief Planning Coordinator, acts as chair of these ad hoc committees. Meetings and conference calls of the ad hoc NPA RPCs are all open to public participation and are conducted in accordance with the CISC Administrative Guidelines. A copy of the CISC Administrative Guidelines can be obtained from the CRTC website at <http://www.crtc.gc.ca/public/cisc/c-docs/CISC2001-03-31.doc>.

Section 6.1.6 of the Canadian NPA Relief Planning Guideline requires the CNA to attempt to identify organizations including, but not limited to, municipalities to notify them of the initial meeting of the RPC as well as the IPD in order to allow such organizations the opportunity to register and participate in the activities of the RPC.

NPA Relief Planning is conducted under the regulatory oversight of the CRTC. Notwithstanding the process detailed in the Guideline, the CRTC may exercise its authority under the Telecommunications Act to alter this process at any time. The CRTC has the authority, under the Telecommunications Act, to review, modify and give final approval to the PD and the Relief Implementation Plan (RIP) developed and submitted by the RPC to the CRTC via the CISC process.

Any person wishing to participate in the NPA Relief Planning process can contact the CNA and request to be added to NPA-specific distribution lists. In addition, individuals can also register with the CRTC as interested parties to any proceedings that result from the NPA Relief Planning process. More information on how to participate in CRTC public processes is available at: [http://www.crtc.gc.ca/eng/info\\_sht/g4.htm](http://www.crtc.gc.ca/eng/info_sht/g4.htm).

Annex C contains a brief summary of Canadian geographic area code relief history.

### 3. NPA RELIEF METHODS

The term Numbering Plan Area (NPA) refers to a discrete geographic area within the area served by the North American Numbering Plan (NANP), to which one or more NPA Codes (also known as area codes) may be assigned.

The following paragraphs provide descriptions and general attributes of the NPA Relief Methods that may be considered when the necessity for NPA relief is established. The following descriptions and general attributes are primarily extracts from the Canadian NPA Relief Planning Guideline. Information relating to the elimination of 7-digit local dialling has not been included since mandatory 10-digit dialling is already in place in NPA 819. The NPA Relief Methods that may be considered are the Geographic Split, the Overlay (including the Distributed, Concentrated, and Boundary Extension), and the Boundary Realignment Relief Method.

#### 3.1 Geographic Split

##### 3.1.1 Description

*Under the split method, the geographic area served by an existing NPA is divided or “split” into two or more unique geographic areas (i.e., new NPAs). One of the areas retains the existing NPA Code, and the other area or each of the other areas changes to a new unique NPA. The projected lives of all the areas following the split should be similar. The area with the largest quantity of customers usually retains the existing NPA Code in order to minimize the quantity of number changes.*

*Provided that new NPA boundaries created by a split do not divide Exchange Areas, the boundaries may be chosen to correspond to jurisdictional, natural or physical boundaries (e.g., county, municipality and city boundaries, rivers, major highways, etc.). Alternatively the boundaries may correspond to none of the above features but be chosen only so they do not divide Exchange Areas while meeting criteria such as the need for a balanced split, maintaining contiguous NPA areas, minimizing the quantity of Local Calling Areas (LCAs) that cross the new NPA boundaries, and aligning with general regional identities.*

*In order to facilitate the transition to the new NPA Code, a permissive dialling arrangement is established. During the Permissive Dialling Period, long distance calls and any local 10-digit local calls to numbers that are being changed to the new NPA Code may be dialled with either the old or new NPA Code. During the Permissive Dialling Period, when calls to numbers in the new NPA Code are dialled using the old NPA Code, all Carriers in the new NPA shall play a standard network announcement before completing the call in order to advise customers of the change of area code.*

*The length of the Permissive Dialling Period prior to the Mandatory Dialling date should be sufficient to permit callers and customers to adjust their dialling habits and for customers to reprogram their equipment and notify others of their number changes before the Mandatory Dialling Date. This is typically about four months.*

*The Permissive Dialling Period ends on the Mandatory Dialling Date, which is the date when callers must dial the new NPA Code in order to complete calls to the area where the NPA Code has changed.*

*At the end of the Permissive Dialling Period, calls that are dialled to CO Codes whose NPA has changed shall be intercepted and sent to a mandatory dialling announcement that informs the caller to hang up and redial using the new area code. The mandatory dialling announcement should be retained for a specified period of time with exceptions if the same CO Code is assigned in both NPA Codes. The “phasing-in” of the mandatory dialling announcement is not permitted.*

*Calls that are dialled using the new NPA Code before the start of the Permissive Dialling Period may be routed to a “pre-permissive recording” that advises the caller that the new area code is not effective until a specified future date, and to redial using the old area code.*

*Once an initial relief has been provided using an overlay method and 10-digit local dialling has been introduced, subsequent reliefs will generally not be provided using a split method, as splits would be impractical, disruptive, and not provide significant benefits. A split would be impractical and disruptive because it would require many number changes including CO Code changes as well as NPA Code changes. A split could allow reintroduction of permissive 7-digit local dialling however this would provide little or no benefit and would cause customers, Carriers and TSPs to incur additional costs after already having incurred costs to change to mandatory 10-digit local dialling. It would also be inconsistent with the industry migration towards the Uniform Dialling Plan (i.e., 10-digit local and toll dialling).*

### **3.1.2 General Attributes**

- *A frequently implemented method of NPA relief in the past; last implemented in Canada in 1999.*
- *7-digit dialling is usually retained for local calls within area codes.*
- *If CO Code protection is not in place after relief is implemented, 10-digit dialling is required for local calls between different area codes.*
- *Number changes are required within new area code boundaries (NPA Code changes).*
- *The time required to transition to a new area code with a split is usually longer than the time needed to transition to mandatory 10-digit local dialling for a first-time overlay.*
- *Is generally not a practical method for relief for an area that has previously been relieved by an overlay or already has mandatory 10-digit local dialling, since it is costlier and more time consuming than an additional overlay would be, and does not provide the benefit of retaining 7-digit dialling.*
- *Reprogramming or replacement of equipment (switches, Primary Branch Exchange (PBXs), large quantities of cellular phones, etc.).*
- *Many existing customers are affected by telephone number changes.*
- *More economic burden may generally be caused by customer number changes (businesses, public costs, stationery, etc.) than an overlay.*
- *May not be as expensive to display numbers in telephone directories.*
- *Requires a permissive dialling period for customers' numbers in the new area code.*
- *Possible dispute over which portion of the area retains the existing NPA Code.*
- *Potential for associating NPA Codes with smaller geographic areas within the exhausting NPA.*
- *All Mobile Directory Numbers (MDNs) in the portion of the existing NPA that takes the new NPA Code will change to the new NPA Code. This creates a problem for Wireless*

*Carriers who require Mobile Identification Number (MIN) Block Identifiers (MBIs) to be associated with the Exchange Areas of the MDNs' corresponding CO Codes.*

## **3.2 Overlay**

### **3.2.1 Description**

*Under the overlay method, a relief NPA Code is superimposed or "overlaid" on top of part or all of an existing NPA or NPAs. With overlays, changes to existing telephone numbers are not required.*

*Once an initial overlay has been introduced, subsequent reliefs will generally be provided using additional overlays, as splits would be impractical, disruptive, and not provide significant benefits. A split would be impractical and disruptive because it would require many number changes including CO Code changes as well as NPA Code changes. A split could allow reintroduction of permissive 7-digit local dialling however this would provide little or no benefit and would cause customers, Carriers and TSPs to incur additional costs after already having incurred costs to change to mandatory 10-digit local dialling. It would also be inconsistent with the industry migration towards the Uniform Dialling Plan (i.e., 10-digit local and toll dialling).*

*When an overlay relief NPA Code is activated, mandatory 10-digit dialling must be in place for all local calls originating within the area being relieved, which means that local calls dialled with 7 digits will not be completed. When mandatory 10-digit local dialling is in place it will apply equally to calls originating from numbers in the existing NPA Code(s) and from numbers in any new overlay NPA Code(s). This is a CRTC policy that provides competitive equity for the communications industry since all customers in the area will have to dial the same number of digits regardless of the NPA Code in which the calling or called parties' numbers are assigned.*

*In some NPAs where relief is to be provided by an overlay, mandatory 10-digit dialling will already be in place because it was previously implemented for an earlier overlay or other reasons. This simplifies relief implementation for Carriers, TSPs, customers and users as no dialling changes are required.*

*Under the distributed overlay method, a new NPA Code is overlaid on top of the entire NPA (i.e., geographic area) requiring relief. The following types of distributed overlay may be considered:*

- a) *a distributed overlay over a single existing NPA served by a single NPA Code*

*Under this method a new NPA Code is overlaid over a single existing NPA (i.e., the geographic area) that is served by a single NPA Code; e.g., NPA Code 438 implemented as a distributed overlay on the NPA (i.e., the geographic area) served by NPA Code 514.*

- b) *a distributed overlay over a single existing NPA (i.e., the geographic area) served by multiple existing overlay NPA Codes*

*Under this method, a new NPA Code would be assigned to overlay a single existing NPA (i.e., the geographic area) that is served by multiple existing overlay NPA Codes;*

*e.g., potential future relief NPA Code implemented as distributed overlay on the NPA (i.e., the geographic area) served by NPA Codes 416 & 647 (Toronto).*

- c) *a distributed overlay over multiple existing NPAs (i.e., different geographic areas) served by multiple NPA Codes*

*Under this method, a new NPA Code is overlaid over multiple existing NPAs (i.e., different geographic areas served by multiple NPA Codes); e.g., NPA Code 587 implemented as a distributed overlay on the NPAs served by NPA Codes 403 (S. Alberta) and 780 (N. Alberta). This method may be considered where relief is required in two or more NPAs (i.e., geographic areas) within a province.*

*Under the concentrated overlay method, a new NPA Code is overlaid on top of part of the NPA (i.e., geographic area) requiring relief (e.g., NPA Code 778 was initially overlaid on part of the geographic area already served by NPA Code 604). A concentrated overlay may be considered in situations where the majority of the demand for new telephone numbers is expected to be concentrated in one section of an existing NPA, for example, a fast growing metropolitan area in an NPA that also contains a slowly growing rural area. The new NPA Code would be assigned to the section of the original NPA experiencing the greatest growth (e.g., the metropolitan area), and any need for new CO Codes in that section would be met by the assignment of CO Codes from the new NPA Code. In the area not covered by the new NPA Code(s), future needs for new CO Codes would be met by the assignment of CO Codes from the original NPA Code.*

*In order to ensure that sufficient CO Codes remain available for assignment from the original NPA Code to the section of the NPA that will not be covered by the new concentrated overlay NPA Code, relief using a concentrated overlay must be implemented sooner than relief using other overlay methods or a split. This may mean that there is insufficient time to implement a concentrated overlay, or, in some cases, CO Code assignment monitoring and CO Code conservation measures may have to be implemented prior to the introduction of the new concentrated overlay NPA in order to ensure that sufficient CO Codes will be available for growth in the area outside the concentrated overlay.*

*When subsequent relief is required in the original NPA due to growth in the sections outside the concentrated overlay, this could be provided by expanding the geographic coverage area of the concentrated overlay NPA Code with a boundary extension overlay, or by a new concentrated overlay of the exhausting sections, or by another Relief Method.*

*It is possible to implement two or more relief NPA Codes at the same time using concentrated overlays each covering a different section of a single existing NPA. This would avoid the need to advance the Relief Date to ensure that sufficient CO Codes remain available for assignment outside the concentrated overlay, but it is less efficient than implementing the same two or more relief NPA Codes as distributed overlays on a single existing NPA, since the number of planning areas will increase, and the next relief will occur sooner with multiple concentrated overlays than it will with the same number of multiple distributed overlays. Multiple simultaneous overlays should generally only be considered when the forecasted life for a single relief NPA Code is less than 72 months.*

*Under a boundary extension overlay method, the boundary of one NPA that has spare capacity is extended to overlay part or all of the coverage area of the exhausting NPA or NPAs. Unassigned CO Codes from the NPA Code(s) whose boundary is extended can be assigned within the overlay area of the exhausting NPA(s) as well as within the original coverage area. An appropriate use of boundary extension might be in a province consisting of two or more NPAs,*

where one NPA is exhausting and another has spare capacity (e.g., the NPA served by NPA Code 778, originally a concentrated overlay of part of the NPA served by NPA Code 604, was extended to cover all of the exhausting NPA served by NPA Code 250 as well as the rest of the NPA served by NPA Code 604, thereby creating a province-wide NPA over British Columbia).

*This solution has the advantage of not requiring a new NPA Code. The lives of the NPA whose boundary is being extended and the NPA being relieved will be shorter than if a new NPA Code is introduced, however it uses NPA Code capacity more efficiently (e.g. may provide an opportunity to use spare capacity from an NPA Code that would otherwise not exhaust until the distant future), and it reduces the number of relief planning areas. The boundary extension overlay would not normally be used to create an NPA that overlays more than one province.*

*Under a technology-specific overlay, a new NPA Code would be assigned to overlay an existing NPA(s) serving a specific geographic area, and the numbering resources in the new NPA Code would be used only for a specific type of technology (e.g., wireline telephones, wireless telephones, facsimile). This type of overlay has been utilized in certain other nations for wireless telephones. With the introduction of wireless number portability (WNP) in Canada, telephone numbers can be moved between wireline and wireless services and therefore the use of an NPA Code exclusively by wireline or wireless technology is not possible.*

### **3.2.2 General Attributes**

- *A frequently implemented method of NPA relief in recent years; the primary method used since 1999 for relief projects in Canada (e.g., 416/647, 289/905, 514/438, 519/226, 604/778, 581/418).*
- *Requires mandatory 10-digit local dialling throughout the area codes being relieved, and generally from adjacent area codes into area codes being relieved, usually prior to relief or a previous overlay relief.*
- *No number changes are required for existing customers.*
- *Least disruptive to end-users (allows users to retain current telephone numbers).*
- *Generally creates less economic burden for existing business than a geographic split.*
- *In a single residence or business there may be numbers in two or more NPA Codes.*
- *Directory costs may increase to print 10-digit numbers.*
- *If mandatory 10-digit dialling does not exist in the area codes being relieved and a transition to mandatory 10-digit dialling is required, the transition can be implemented in a shorter time than the Permissive Dialling Period required with an area code split.*
- *Favoured by Carriers and TSPs due to cost considerations (e.g., no number changes in Operating Support Systems (OSSs), no need to reprogram wireless handsets).*
- *If the overlay is concentrated; it must be implemented sooner than if the overlay is distributed, and it increases the number of areas for which future relief must be planned separately.*
- *If the overlay is of multiple NPAs, it reduces the number of areas for which future relief must be separately planned.*
- *If the overlay is a boundary extension, a new NPA Code will not be needed at the time of relief, and the number of areas for which future relief must be separately planned may be reduced.*
- *Carriers must use 10-digit signalling for all local traffic they send to other Carriers, and must be able to receive 10-digit signalling on local traffic they receive from other Carriers.*

### **3.3 Boundary Realignment**

#### **3.3.1 Description**

*The NPA boundary realignment method as described in this section is the realignment of the boundary between the NPA that requires relief and an adjacent NPA such that some of the customers in the exhausting NPA have their telephone numbers changed to use the NPA Code of the adjacent NPA. The boundary realignment in this method is distinct from the boundary realignment in the boundary extension overlay method described in a previous section. With the boundary realignment method defined in this section, CO Codes that are not utilized in an adjacent NPA may be used to serve customers in part of the geographic area of the NPA requiring relief. As a result, the geographic coverage area of the exhausting NPA is reduced in size and the geographic area of the NPA with spare capacity is expanded. The customers in the geographic area affected by the boundary change are required to change their telephone numbers on a specific date. This method is generally viewed as an interim measure because it tends to provide only short term relief relative to the long term relief provided when introducing a new NPA Code under the split and overlay methods.*

#### **3.3.2 General Attributes**

- *A method of NPA relief never used in Canada.*
- *Requires customer number changes in the affected geographic area. (NPA and CO Code changes).*
- *Generally viewed as an interim measure because it tends to provide only short term relief.*
- *Causes inconvenience and creates an economic burden for those required to take number changes.*

#### 4. NPA EXHAUST INFORMATION

As indicated in the following table, NRUFs for NPA 819 were used to determine Projected Exhaust Dates, i.e. the dates when CO Codes in NPA 819 would be expected to exhaust.

NRUF	Projected Exhaust Date
G-NRUF January 2007	February 2015
G-NRUF July 2007	June 2017
G-NRUF January 2009	February 2015
R-NRUF June 2009	March 2015
R-NRUF June 2009, adjusted per Telecom Notice of Consultation CRTC 2009-308 directive to set aside 7 CO Codes for initial code assignments for Carriers already providing service, and 10 CO Codes for initial code assignments to new entrants only	August 2014

Refer to Annex A, Figures 3, 4, 5, and 6 for graphs of forecasted CO Code exhaust and Miscellaneous & LEC + WSP CO Codes in area code 819.

## 5. RELIEF OPTIONS

The basic NPA Relief Methods described in this PD are the Geographic Split, the Overlay, and the Boundary Realignment.

The Relief Options that were identified by the CNA are examined in detail in the following sections of this PD:

- Geographic Split - 4 options (Plans 1a, 1b, 2a, and 2b)
- Boundary Extension Overlay – 1 option (Plan 3)
- Distributed Overlay - 1 option (Plan 4)

See Annex A, Figures 7 through 12 for diagrams of these Relief Options.

The Relief Options that were considered but not examined in detail in this PD are:

- Single Concentrated Overlay - not examined because the majority of the demand for CO Codes is not concentrated in one section of NPA 819.
- Multiple Concentrated Overlay - not examined because Relief Methods that use a single additional NPA code will provide relief for more than 72 months.
- Technology-specific overlay - not examined because assigning NPAs to specific types of technology has not been possible since number portability between technologies came into effect.
- Boundary Realignment - not examined since growth is also occurring across adjacent NPAs, and Boundary Realignment is short-term measure that would require NPA and CO Code changes for telephone numbers.

### 5.1 *Geographic Split*

Four different Relief Options were evaluated to introduce a new area code in the NPA 819 area using the geographic split method of providing NPA relief. With each of these options, number changes are required in the area that does not retain NPA 819. Selecting a split option for NPA relief will impact 40% to 60% of the customers with a number change.

A split usually allows existing 7-digit local dialling to be retained in both portions of the split area code after relief. This attribute does not apply in NPA 819 because there is no existing 7-digit local dialling as 7-digit local dialling was eliminated in October 2006 when mandatory 10-digit local dialling was implemented.

After a split, local calls in NPA 819 and the new NPA would continue to be dialled using 10 digits.

#### **Split Options 1a and 1b – East West Split**

Plan 1a: Split – East West Split, Eastern region (94 Exchange Areas) retains NPA 819, and Western region (117 Exchange Areas) changes to a new NPA

Plan 1b: Split – East West Split - Western region (117 Exchange Areas) retains NPA 819, and Eastern region (94 Exchange Areas) changes to a new NPA

In these two geographic split options (Plans 1a and 1b); the split boundary is west and north of the St Lawrence River. The Eastern region, consisting of 94 Exchange Areas, is bordered by the split boundary to the West, NPA 418/581 to the East and NPA 450 to the West. The Western region, consisting of the remaining 117 Exchange Areas, is bordered by the split boundary to the East, NPA 450 to the South, NPAs 613 and 705 to the West, and NPA 418/581 to the East. The Western region will be served by one NPA and the Eastern region by another NPA.

With these options, the NPA 819 assigned CO Codes would split as follows:

<b>Area</b>	<b>Assigned CO Codes in NPA 819 (01-01-09)</b>	<b>% of Total NPA 819 CO Codes</b>
819 East	326 codes	54%
819 West	278 codes	46%

With these two options (Plans 1a and 1b) number changes would be required in one of the regions.

No local dialling exists between Exchange Areas in the Eastern region and Exchange Areas in the Western region. If such local dialling were to be introduced, then since 10-digit local dialling is mandatory throughout NPA 819, there would be no requirement for CO Code Protection to allow 7-digit local dialling between an Exchange Area in the Eastern region and an Exchange Area in the Western region.

### **5.1.1 Plan 1a: Split - East West Split, East (94 Exchange Areas) retains NPA 819**

#### Description:

The 94 Exchange Areas within the Eastern Region would retain NPA 819, and the remaining 117 Exchange Areas would be reassigned to a new NPA Code. The area that would retain NPA 819 contains the rapidly growing Exchange Areas of Drummondville, Shawinigan, Sherbrooke, Trois Rivières, and Victoriaville, while the new NPA would contain the rapidly growing Exchange Areas of Amos, Gatineau, Ottawa-Hull, Rouyn-Noranda, Ste-Agathe, and Val d'Or. Using this option, customers in 278 CO Codes would be affected by a telephone number change to the new area code.

After the split, NPA 819 and the new NPA would be expected to exhaust in 2044 and 2061 respectively.

#### Assessment:

See section 5.1.4

**5.1.2 Plan 1b: Split - East West Split, West (117 Exchange Areas) retains NPA 819**

Description:

The 117 Exchange Areas within the Western region would retain NPA 819, and the remaining 94 Exchange Areas would be reassigned to a new NPA Code. The area that would retain NPA 819 contains the rapidly growing Exchange Areas of Amos, Gatineau, Ottawa-Hull, Rouyn-Noranda, Ste-Agathe, and Val d’Or, while the new NPA would contain the rapidly growing Exchange Areas of Drummondville, Shawinigan, Sherbrooke, Trois Rivières, and Victoriaville. Using this option, customers in 326 CO Codes would be affected by a telephone number change to the new area code.

After the split, area code 819 and the new area code would be expected to exhaust in 2061 and 2044 respectively.

Assessment:

See section 5.1.4

**Split Options 2a and 2b – East West River Split**

Plan 2a: Split – East West River Split, Eastern region (80 Exchange Areas) retains NPA 819 and Western region (131 Exchange Areas) changes to a new NPA

Plan 2b:- Split – East West River Split, Western region (131 Exchange Areas) retains NPA 819 and Eastern Region (80 Exchange Areas) changes to a new NPA

In these two geographic split options (Plans 2a and 2b), the split boundary is the St Lawrence River, The Eastern region, consisting of 80 Exchange Areas, is bordered by the St Lawrence River to the West, NPA 418/581 to the East, and NPA 450 to the West. The Western region, consisting of the remaining 131 Exchange Areas, is bordered by the St Lawrence River to the East, NPA 450 to the South, NPAs 613 and 705 to the West, and NPA 418/581 to the East. The Western region will be served by one NPA and the Eastern region by another NPA.

With these options, the NPA 819 assigned CO Codes would split as follows:

<b>Area</b>	<b>Assigned CO Codes in NPA 819 (01-01-09)</b>	<b>% of Total NPA 819 CO Codes (01-01-2009)</b>
819 East	254 codes	42%
819 West	350 codes	58%

With these two options (Plans 2a and 2b); number changes would be required in one of the regions.

Local dialling exists between some Exchange Areas that would be in the Eastern region and Exchange Areas that would be in the Western region, however as 10-digit local dialling is mandatory throughout NPA 819, CO Code Protection would not be required to allow 7-digit local dialling between an Exchange Area in the Eastern region and an Exchange Area in the Western region.

### **5.1.3 Plan 2a: Split - East West River Split, East (80 Exchange Areas) retains NPA 819**

#### Description:

The 80 Exchange Areas within the Eastern Region would retain NPA 819, and the remaining 131 Exchange Areas would be reassigned to a new NPA. The area that would retain NPA 819 contains the rapidly growing Exchange Areas of Drummondville, Sherbrooke, and Victoriaville, while the new NPA would contain the rapidly growing Exchange Areas of Amos, Gatineau, Ottawa-Hull, Rouyn-Noranda, Shawinigan, Ste-Agathe, Trois Rivières, and Val d'Or. Using this option, customers in 350 CO Codes would be affected by a telephone number change to the new area code.

After the split, NPA 819 and the new NPA would be expected to exhaust in 2080 and 2035 respectively.

#### Assessment:

See section 5.1.4

### **5.1.4 Plan 2b: Split - East West River Split, West (131 Exchange Areas) retains NPA 819**

#### Description:

The 131 Exchange Areas within the western region would retain NPA 819, and the remaining 80 Exchange Areas would be reassigned to a new NPA code. The area that would retain NPA 819 contains the rapidly growing Exchange Areas of Amos, Gatineau, Ottawa-Hull, Rouyn Noranda Shawinigan, Trois Rivières, Ste-Agathe, and Val d'Or, while the new NPA would contain the rapidly growing Exchange Areas of Drummondville, Sherbrooke, and Victoriaville. Using this option, customers in 254 CO Codes would be affected by a telephone number change to the new area code.

After the split, area code 819 and the new area code would be expected to exhaust in 2035 and 2080 respectively.

#### Assessment of Splits (Plans 1a, 1b, 2a and 2b):

The RPC does not recommend any of the split options based on the following assessment:

Customers in 42% to 58% of the assigned CO Codes would be affected by a telephone number change, which would be very inconvenient for those customers and would be significantly more expensive than overlays for business customers as they would be required to change their advertising, stationery, etc.

In addition, costs for all Carriers would be higher for a split due to the need to modify operational, network, customer, and billing support systems due to telephone number changes. Additional costs would also be incurred by Wireless Carriers to reprogram wireless telephones due to changes in telephone numbers and Mobile Identity Numbers.

NPA 819 already has mandatory 10-digit local dialling. As it would be impractical and costly for customers and Carriers to change the local dialling plan back to 7-digits, one of the perceived benefits of a split would not be attainable.

One drawback of the split options is that the number of separate relief planning areas in Québec would be increased to 5 compared to 4 for the distributed overlay and 3 for a boundary extension overlay, thus increasing the quantity of geographic areas that would require future relief planning activity.

The use of a new NPA Code in a split configuration for the geographic area served by NPA 819 would be an inefficient use of numbering resources compared to the overlay options because it would require one new NPA Code in 2013 plus two new NPA Codes to be implemented in subsequent relief projects (in 2043 and 2060 under split options 1a and b, or 2034 and 2079 under split options 2a and b). This compares to one new NPA Code in a subsequent relief project in 2025 for the NPA 581 boundary extension overlay and one new NPA Code in 2013 plus a second new NPA Code in 2051 for a distributed overlay.

Split options in NPA 819 may cause discrimination against some customers and Carriers in the area served by the new NPA Code since some customers and Carriers may operate only in the East and some customers and Carriers may operate only in the West of existing NPA 819. Customers and Carriers that will operate in the area changing to the new NPA Code would incur additional implementation costs while customers and Carriers that only operate in the area retaining NPA Code 819 would not have to incur such costs.

Therefore, The RPC does not recommend any of the split options for consideration by the CRTC. The RPC views overlay options as preferable to the split options and, in fact, does not view any of the split options as viable.

## **5.2 Boundary Extension Overlay**

One Relief Option was evaluated using the boundary extension overlay method of providing NPA relief.

### **5.2.1 Plan 3: NPA 581 Boundary Extension Overlay**

#### Description:

Currently, NPA 819 and 581 are expected to exhaust in the years 2014 and 2036 respectively. This Relief Option would realign the boundaries of NPA 581 to include all 211 Exchange Areas comprising NPA 819. NPA 819 resources would not be assigned to the 258 exchanges in the current NPA 418/581 area. NPA 418 resources would not be assigned in the 211 Exchange Areas in the current NPA 819 area. Local dialling in NPA 819 and NPAs 418/581 is currently 10 digit. After the boundary extension overlay, local calls in the NPA 819/581/418 areas would continue to be dialled using 10 digits.

This Relief Option would reduce the number of separate Relief Planning areas in Québec from four to three.

After the boundary extension overlay, NPA 819 and NPA 581 would be expected to exhaust in 2026.

#### Assessment of NPA 581 Boundary Extension Overlay:

The RPC does not view the boundary extension overlay option as a practical option for providing relief and, therefore, does not recommend it for consideration and approval by the CRTC.

In section 5.1.4 the RPC determined that overlay options are significantly better than splits.

One advantage of the boundary extension overlay option is that the number of separate relief planning areas in Québec would be reduced to 3 compared to 4 for the distributed overlay and 5 for the split options, thus reducing the quantity of geographic areas that would require future relief planning activity.

The use of existing NPA 581 in a boundary extension overlay of the geographic area served by NPA Code 819 would be a more efficient use of numbering resources than any other option. NPA 581 has CO Code resources that would otherwise not exhaust for 27 years until 2036 and would not require a new NPA Code to be implemented at this time.

However, a major drawback of the boundary extension overlay option is that it reduces the PED of the area currently served by NPA Codes 581/418 by 10 years from 2036 to 2026, thus requiring subsequent relief in the new 581/819/418 region in about 2025. This compares to subsequent Relief Dates of about 2035 for NPA 581/418, about 2051 for the distributed overlay option. Thus, the life span of the boundary extension option is significantly less than the life span of the distributed overlay option.

Another major drawback is that the boundary of NPA 581 would be changed, resulting in customer confusion and resistance from Carriers.

Finally, costs for some Carriers would be higher for a boundary extension overlay than a distributed overlay due to the greater complexity of implementing and managing a boundary extension overlay over time.

### **5.3 *Distributed Overlay***

One Relief Option was evaluated to introduce a new area code using the distributed overlay method of providing NPA relief.

After the distributed overlay, local calls in NPA 819 and the new NPA would continue to be dialled using 10 digits.

#### **5.3.1 *Plan 4: Distributed Overlay of New NPA on NPA 819***

##### Description:

This Relief Option would introduce a new area code to overlay area code 819.

Area code 819 and the new area code would be expected to exhaust in 2014 and 2052 respectively.

Assessment of Distributed Overlay of New NPA on NPA 819:

The RPC views this option as the preferred Relief Option. The RPC therefore recommends that the distributed overlay option be approved for NPA 819 relief.

In section 5.1.4 the RPC determined that overlay options are significantly better than splits.

In section 5.2.1 the RPC determined that the distributed overlay option is superior to a boundary extension overlay for the following reasons. First, the life span of the relief using a distributed overlay (2052) would be longer than the life span of a boundary extension overlay (2026). Second, with a distributed overlay, the new NPA Code boundary is consistent with the NPA Code 819 boundary, and no other NPA boundaries are changed, thus avoiding the customer confusion that could arise by implementing a boundary extension overlay. Finally, a distributed overlay of a new NPA Code on NPA Code 819 would cost less for Carriers to implement and manage in the future than a boundary extension overlay.

Two minor drawbacks of the distributed overlay option are as follows. First, the number of separate relief planning areas in Québec would remain at 4, compared to 3 for the boundary extension overlay and 5 for splits. Second, the next new NPA to be assigned in the 819 region will be in about 2013 rather than about 2025 for the boundary extension overlay.

## 6. SUMMARY OF RELIEF OPTIONS

The following table summarizes the Relief Options, Projected Exhaust Dates, Relief Timing and Type, and Impacts:

Plan		Projected Exhaust Dates		Relief - Timing & Type		Quantity CO Codes affected by No. Changes	Local Dial # of digits
#	Description	NPA 819	New NPA	Relief Date	Type		
1a	Split - E-W Split, East retains NPA 819	2014 2044	2061	<b>2013</b> (819) <b>2043</b> (819) <b>2060</b> (new NPA)	S ? ?	278 ? ?	10 ? ?
1b	Split - E-W Split, West retains NPA 819	2014 2061	2044	<b>2013</b> (819) <b>2043</b> (new NPA) <b>2060</b> (819)	S ? ?	326 ? ?	10 ? ?
2a	Split - E-W River Split, East retains NPA 819	2014 2080	2035	<b>2013</b> (819) <b>2034</b> (new NPA) <b>2079</b> (819)	S ? ?	350 ? ?	10 ? ?
2b	Split - E-W River Split, West retains NPA 819	2014 2035	2080	<b>2013</b> (819) <b>2034</b> (819) <b>2079</b> (new NPA)	S ? ?	254 ? ?	10 ? ?
3	NPA 581 Boundary Extension Overlay	2014 2026		<b>2013</b> (819) <b>2025</b> (819/418/581)	BEO ? ?	Nil. ? ?	10 10 10
4	Distributed Overlay of New NPA on NPA 819	2014 2052	2052	<b>2013</b> (819) <b>2051</b> (819/new NPA)	O ? ?	Nil ? ?	10 10 10
Key	10-D = mandatory 10-digit local dialling, O = Overlay, S= Split, BEO = Boundary Extension Overlay ? = Unknown (population affected by number changes, subsequent relief type and dial plan)						

## 7. COMPARATIVE ASSESSMENT OF RELIEF OPTIONS

Six Relief Options were identified in section 5 of this document and summarized in section 6. Attributes as listed below were examined for each of these options, and given a Pro, Neutral or Con (P, N or C) rating. The resulting ratings and the overall ratings for each option are listed in the table following the list of attributes.

- A. NPA Code Conservation – quantity of new NPAs required in NPA 819 in Québec within the next 20 years (P = 1 new NPA; N = 3 new NPAs; C = 4 or more new NPAs)
- B. Number of separate Relief Planning areas in Québec in the long term (P = Decrease; N = Stays Same; C = Increase)
- C. Quantity of Number Changes for existing customers' numbers (P = None; C = Many)
- D. Level of Carrier Costs – e.g., including implementation, customer awareness, rate of return (P = Low; N = Medium; C = High)
- E. Time required to implement relief, i.e., time between the CRTC's Decision date and the date when CO Codes in the new/relief NPA can be activated (P = Shortest; N Medium = N; Longest = C)
- F. Longevity – the length of time between this relief and subsequent relief activity in NPA 819 (e.g., a new area code) (P = 15 or more years; N = 10 through 14 years; C = within 9 years)
- G. Geographic Identity – NPA boundaries align with boundaries of known areas (e.g., existing NPA areas, provinces) or identifiable geographical features (e.g., rivers, islands)(P = High; N = Medium; C = Low)
- H. Potential confusion due to boundary changes of established NPAs (P = Low; N = Medium; C = High)
- I. Potential confusion due to new NPA Code boundaries relative to existing NPA boundaries (P = Low; N = Medium; C = High)
- J. Reprogram Mobile Phones – requirement to reprogram wireless devices to accommodate the number changes (P = Low; N = Medium; C = High)
- K. Potential maximum quantity of NPAs in an Exchange Area in the next 20 years (P = 1 NPA; N = 2 NPAs; C = 3 or more NPAs)
- L. Does the option consider the potential direction for future reliefs in NPA 819? (P = Yes; C = No)
- M. The extent to which the Relief Option favours one Carrier or group of users over another (P = Low; N = Medium; C = High)

Relief Plan		Pro, Neutral or Con rating for each Attribute													Overall Rating
#	Description	A	B	C	D	E	F	G	H	I	J	K	L	M	
1a	Split - E-W Split, East retains NPA 819	C	C	C	C	C	P	C	C	C	C	N	C	C	-10
1b	Split - E-W Split, West retains NPA 819	C	C	C	C	C	P	C	C	C	C	N	C	C	-10
2a	Split - E-W River Split, East retains NPA 819	C	C	C	C	C	P	C	C	C	C	N	C	C	-10
2b	Split - E-W River Split, West retains NPA 819	C	C	C	C	C	P	C	C	C	C	N	C	C	-10
3	NPA 581 Boundary Extension Overlay	N	P	P	N	P	P	N	N	N	P	C	P	P	6
4	Distributed Overlay of New NPA on NPA 819	N	N	P	P	P	P	P	P	P	P	N	P	P	10

Note: None of the options require Exchange Area boundary changes.

If P, N and C are assigned a weighting of +1, 0 and -1, respectively, then analysis of the above table gives the highest rating of 10 points to Plan 4, and the next highest rating of 6 points to Plan 3; and -10 points to Plans 1a, 1b, 2a and 2b. Plan 4 is clearly superior when assessed using the above criteria.

## 8. DIALLING IMPACTS FOR LOCAL CALLS

Currently 10-digit dialling is required on local calls within NPA 819, and on local calls between Exchange Areas in NPA 819 and Exchange Areas in adjacent NPAs 418/581, 450, 613, and 705. The local calling between NPA 819 and its adjacent NPAs is listed in the table below.

<b>NPA 819 Exchange Area</b>	<b>Adjacent NPA</b>	<b>Exchange Areas in adjacent NPA within the Local Calling Area of the NPA 819 Exchange Area</b>
Aylmer	613	Ottawa-Hull
Bishopton	418/581	Stratford
Bromptonville	450	Valcourt
Buckingham	613	Ottawa-Hull
Champlain	418/581	Batiscan
Chapeau	613	Pembroke, Pembroke Independent
Chelsea	613	Ottawa-Hull
Deauville	450	Eastman, Mansonville
Deschailions	418/581	St-Éduard-de-Lotbinère
Drummondville	450	Baie-de-Febvre, St-Pie-de-Guire, St-Zéphirin
East Angus	418/581	Stratford
Fort-Coulonge	613	Pembroke, Pembroke Independent
Gatineau	613	Orleans, Ottawa-Hull
Grand'Mère	418/581	St-Tite
Grenville	450	Lachute, St-Jérôme
Grenville	613	Alfred, Hawkesbury, L'Orignal, St-Eugene, Vankleek Hill
Kazabazua	613	Ottawa-Hull
Lac Drolet	418/581	Courcelles, Lambton
Lac Mégantic	418/581	Courcelles, Lambton
Laurierville	418/581	Inverness
Low	613	Ottawa-Hull
Luskville	613	Ottawa-Hull
Lyster	418/581	Inverness
Magog	450	Eastman, Lawrenceville, Mansonville
Maskinongé	450	St-Barthélemy
Montebello	613	Ottawa-Hull
Nantes	418/581	Courcelles, Lambton
Nicolet	450	St-Pie-de-Guire, St-Zéphirin
Notre-Dame-de-la-Salette	613	Ottawa-Hull
Ottawa-Hull	613	Almonte, Arnprior, Bourget, Carleton Place, Carp, Casselman, Chesterville, Clarence Creek, Constance Bay, Crysler, Cumberland, Embrun, Gloucester, Jockvale, Kanata-Stittsville, Kemptville, Lanark, Manotick, Merrickville, Metcalfe, Moose Creek, Navan, North Gower, Orleans, Osgoode, Pakenham, Plantagnet, Richmond, Rockland, Russell, Smiths Falls, South Mountain, St-Isidore-de-Prescott, Williamsburg, Winchester
Papineauville	613	Ottawa-Hull
Perkins	613	Ottawa-Hull
Plessisville	418/581	Inverness, St-Ferdinand-de-Halifax
Quyón	613	Ottawa-Hull
Rock Island	802	Derby Line (Vermont USA)
Shawinigan	418/581	St-Tite
Shawville	613	Ottawa-Hull

NPA 819 Exchange Area	Adjacent NPA	Exchange Areas in adjacent NPA within the Local Calling Area of the NPA 819 Exchange Area
Sherbrooke	418/581	Stratford
Sherbrooke	450	Eastman, Lawrenceville, Mansonville, Valcourt
South Durham	450	Acton Vale
St-Adolphe-de-Dudswell	418/581	Stratford
St-Andre-Avellin	613	Ottawa-Hull
St-Guillaume	450	St-Pie-de-Guire
St-Ludger	418/581	St-Gédéon-de-Beauce, St-Georges-de-Beauce
St-Nazaire d'Acton	450	Acton Vale, Ste-Hélène-de-Bagot, St-Hyacinthe
St-Pierre-de-Wakefield	613	Ottawa-Hull
St-Roch-de-Mékinak	418/581	St-Tite
St-Sébastien (Frontenac CO)	418/581	Courcelles, Lambton
Temiscaming	705	North Bay, Redbridge, Thorne
Thurso	613	Ottawa-Hull
Trois-Rivières	418/581	Champlain, St-Tite, Ste-Adelphe, Ste-Anne-de-Pérade
Trois-Rivières	450	Baie-de-Febvre
Val-des-Bois	613	Ottawa-Hull
Wakefield	613	Ottawa-Hull
Weedon	418/581	Disraëli, Garthby, Stratford
Woburn	207	Coburn Gore (Maine USA)

All of the Relief Options described in this document will have no impact on the dialling plans for local calls originated in the NPA 819 area and in adjacent NPAs:

- *Calls within the NPA 819 area* – local dialling is already mandatory 10-digit and would not change.
- *Calls between the NPA 819 area and adjacent NPAs 418, 450, 613 and 705* - local dialling is already mandatory 10-digit and would not change.

**Note regarding Long-distance calling:** NPA relief will not affect the dialling plan for long-distance calls originating in NPA 819 or any other NPA. No local calling will become long-distance and no long-distance calling will become local as a result of NPA relief.

## **9. CO CODES FOR INITIAL CODE ASSIGNMENTS FOR CARRIERS ALREADY PROVIDING SERVICE IN THE 819 AREA, AND FOR NEW ENTRANTS ONLY**

In Telecom Notice of Consultation CRTC 2009-308, item 7, the CRTC issued the following direction: *In developing its recommendations, the 819 RPC is directed to set aside, at a minimum, 7 central office codes for initial code assignments for carriers already providing service in the 819 area and 10 central office codes for initial code assignments for new entrants only.*

Accordingly the CNA has set aside 7 CO Codes for initial code assignments for carriers already providing service in the 819 area, and 10 CO Codes for initial code assignments for new entrants only.

If the CRTC-approved Relief Method is an overlay, then these quantities of set aside CO Codes would become available for assignment as specified above during the two-year time period after implementation of the overlay. Any set-aside CO Codes remaining unassigned at the end of the two-year time period would be returned to the general pool of assignable CO Codes.

If the CRTC-approved Relief Method is a split, the set-aside CO Codes would become available for initial code assignments when the general pool of assignable CO Codes exhausts prior to relief. After implementation of the split, any remaining set-aside CO Codes would be returned to the general pool of assignable CO Codes.

If a Jeopardy Condition is declared, it is recommended that the 7 CO Codes for initial code assignments for Carriers already providing service should be made available for general assignment prior to relief, and the 10 CO Codes for initial code assignments for new entrants only would also become available prior to relief for initial code assignments for new entrants only.

## 10. PROPOSED SCHEDULE

The RPC submits the following schedule for NPA 819 relief based on the recommendations contained in this Planning Document and the current Projected Exhaust Date (PED) of August 2014. The RPC will monitor the PED, and if it changes significantly in the future (i.e., is advanced or delayed by greater than 6 months), the RPC will assess the situation and, if necessary, submit recommendations including a revised schedule to the CRTC for consideration and approval.

### RELIEF IMPLEMENTATION SCHEDULE for a Distributed Overlay of new NPA 873 over NPA 819

	ITEM	PRIME	START	END
1	CNA identifies NPA exhaust and notifies CRTC staff, CSCN, NANPA & CISC	CNA	23 Mar 2009	23 Mar 2009
2	CNA conducts first R-NRUF (June 2009 R-NRUF)	CNA	1 June 2009	12 June 2009
3	CRTC issues Notice of Consultation regarding RPC Ad Hoc CISC and Interested Parties list	CRTC		28 May 2009
4	CNA develops and distributes IPD to RPC	CNA	12 June 2009	14 Sept 2009
5	CNA holds initial RPC meeting to review NPA 819 situation, relief planning process, IPD, create CATF and NITF, and commence development of Planning Document (PD), Planning Letter (PL) and Relief Implementation Plan (RIP)	CNA	1 Oct 2009	2 Oct 2009
6	CNA chairs subsequent RPC meetings & conference calls to finalize PD, PL & RIP	CNA RPC	5 Oct 2009	17 Nov 2009
7	CNA submits PD, PL & RIP to the CISC and CRTC for approval	CNA		24 Nov 2009
8	Special Types of Telecommunications Service Users (911 PSAPs, N11 call center operators, alarm companies, ISPs, paging companies, etc.) to identify any concerns regarding relief to CRTC	Special Users	28 May 2009	17 Nov 2009
9	CRTC issues Telecom Decision approving Relief Method, Relief Date, PL and RIP	CRTC		31 Jan 2010
10	CNA requests relief NPA from NANPA		31 Jan 2010	8 Feb 2010
11	All Carriers to develop Consumer Awareness Plans to be filed with the CRTC (may be done collectively by the Telecommunications Alliance)		31 Jan 2010	3 15 Feb 2012
12	CNA prepares and issues media release (in coordination with Telecommunications Alliance)	CNA	31 Jan 2010	1 June 2012
13	CNA submits PL and RIP to NANPA	CNA		1 June 2012
14	NANPA Posts Planning Letter (usually at least 12 months prior to Relief Date)	NANPA	1 June 2012	8 June 2012
15	Task Forces, Carriers and users implement relief	Task Forces TSPs Users	31 Jan 2010	1 June 2013
16	All Carriers implement consumer awareness activities	Carriers	15 Feb 2012	1 June 2013
17	All Carriers to notify all customers (including residence, business & special customers) of the new NPA	Carriers	15 Feb 2012	1 June 2012
18	Telcordia TRA database updates to add exchanges to NPA 873 (starts on the issue date of the PL and must be completed by 6 months prior to the relief date for the distributed overlay)	Telcordia TRA	8 June 2012	1 Dec 2012
19	All Telecommunications Service Users (including Special Users 911 PSAPs, alarm companies, ISPs, paging companies, etc.) to implement changes to their telecom equipment & systems to accommodate the new NPA		31 Jan 2010	1 June 2013
20	Payphone Providers Reprogram Payphones	Payphone Providers	31 Jan 2010	1 June 2013
21	TSPs and database owners/operators to modify systems and industry databases	Database Owners	31 Jan 2010	1 June 2013

	ITEM	PRIME	START	END
22	Operator Services & Directory Assistance Readiness	Carriers	31 Jan 2010	1 June 2013
23	Directory Publisher Readiness for overlays (ability to identify the NPA in telephone numbers in the directory published after the Overlay NPA is activated)	Directory Publishers	31 Jan 2010	1 June 2013
24	9-1-1 PSAP Systems and Databases Readiness	PSAPS & TSPs	31 Jan 2010	1 June 2013
25	9-1-1 TSP Readiness	TSPs	31 Jan 2010	1 June 2013
26	ISCP & Service Order Systems Readiness	Carriers	31 Jan 2010	1 June 2013
27	Carriers to submit Progress Report #1 to NITF and CATF	Carriers	1 June 2012	15 June 2012
28	NITF and CATF develop & submit Progress Report #1 to RPC	NITF & CATF	15 June 2012	29 June 2012
29	RPC develops & submits Progress Report #1 to CISC/CRTC	RPC	29 June 2012	13 July 2012
30	Carriers apply for Test CO Codes in new NPA (no more than 6 months and no less than 66 days prior to the start date for testing (Section 7.16.4 Canadian RP GL)	TSPs	1 Sep 2012	1 Mar 2013
31	Develop Inter-Carrier Network Test Plans and prepare for testing (individual carriers to make arrangements in accordance with interconnection agreements)	NITF Carriers	31 Jan 2010	1 Mar 2013
32	All international and domestic Telecommunications Service Providers (TSPs) should ensure that the new NPA is activated throughout their networks by the start date for network testing	TSPs		1 Mar 2013
33	Carriers to submit Progress Report #2 to NITF and CATF	Carriers	1 Mar 2013	15 Mar 2013
34	NITF and CATF develop & submit Progress Report #2 to RPC	NITF & CATF	15 Mar 2013	29 Mar 2013
35	RPC develops & submits Progress Report #2 to CISC/CRTC	RPC	29 Mar 2013	12 Apr 2013
36	Inter-Carrier Testing Period (subject to Inter-Carrier Network Test Plans –continues up to introduction of new NPA)	NITF Carriers	1 Mar 2013	1 June 2013
37	Relief Date (earliest date when CO Codes in new NPA may be activated)			1 June 2013
38	Carriers submit Final Report to CATF and NITF	Carriers	1 June 2013	15 June 2013
39	Submission of NITF and CATF Final Report to RPC	NITF & CATF	15 June 2013	29 June 2013
40	RPC submits Final Report to CISC/CRTC	RPC	29 June 2013	13 July 2013
41	Carriers disconnect Test Codes & Numbers, and submit Part 1 form to return or request Test Codes		1 July 2013	1 Aug 2013

## 11. JEOPARDY CONTINGENCY PLAN (JCP)

The Relief Planning Committee (RPC) has developed the following JCP for inclusion in the Planning Document (PD) for NPA 819. This JCP is the same as the example contained in Appendix F to the Canadian NPA Relief Planning Guideline.

This JCP shall remain in effect until either the Jeopardy Condition is suspended or 66 days before the Relief Date. A CO Code Applicant needing to activate a CO Code in the minimum amount of time (i.e., 66 days) can obtain a CO Code from the post-relief inventory by applying 66 days prior to the Relief Date.

During a Jeopardy Condition, CO Code Applicants shall submit all CO Code applications and related correspondence for the Jeopardy NPA to CRTC staff in addition to the CNA.

During a Jeopardy Condition, the CNA shall only assign CO Codes from the exhausting NPA to a CO Code Applicant upon approval of CRTC staff.

The following measures shall be implemented by all CO Code Holders in NPA 819 when this JCP is approved by the CRTC and while a Jeopardy Condition is in effect.

- 1) Carriers and/or Telecommunications Service Providers (TSPs):
  - a) shall age disconnected residential telephone numbers for a maximum of two months;
  - b) shall age disconnected wireless telephone numbers for a maximum of three months;
  - c) shall age disconnected business telephone numbers for a maximum of six months. Under special circumstances, the six month aging limit for business telephone numbers may be extended to twelve months if required to accommodate local directory publishing dates for high volume call-in applications (e.g., heavily advertised local business numbers such as radio talk shows, food ordering services, ticket sales, chat lines), or for numbers associated with public service emergency applications or for numbers advertised in directories for which customers have requested reference of calls;
  - d) shall return all CO Codes that are not being used nor intended to be used to directly serve customers to the assignment pool within two months (e.g., plant test codes);
  - e) should work towards, and encourage existing customers, to either activate or return the reserved numbers in order to bring the reserved quantity down to a maximum of 10% of the quantity of numbers In-Service for that customer;
  - f) shall not allow the quantity of reserved numbers to be increased by new reservation requests by existing customers to more than 10% of the quantity of numbers in service for that customer. In the case of new customers, number reservations shall be limited to 10% of the total quantity of telephone numbers being placed into service for that customer;
  - g) shall, within 45 days from the date that the CNA declares a Jeopardy Condition submit a Part 1 Form for each remaining reserved CO Code either returning the reserved CO Code to the CNA or requesting assignment of the reserved CO Code. Once the 45-day period has elapsed, the CNA shall make available for general assignment all CO Codes that are still reserved and have not been

- applied for as assignments on a Part 1 Form received by the CNA. Within 60 days from the date that the CNA declares a Jeopardy Condition, the CNA shall report to CRTC staff and the RPC as to how many of these codes have been assigned or made available for general assignment;
- h) shall not be permitted to obtain a new CO Code reservation;
  - i) shall place all CO Codes assigned prior to the Jeopardy Condition being declared In-Service within three months of the effective date for CO Code activation in the network, or within three months of the date that the Jeopardy Condition was declared. If the CO Code is an Initial Code and the CO Code Holder can demonstrate that, due to circumstances beyond its control, the In-Service date has been delayed beyond the applicable timeframe, then the CNA may grant an extension of up to two months to the In-Service date. The CNA shall initiate reclamation procedures for all CO Codes that have not been placed In-Service within these timeframes unless CRTC staff approves a further extension.
- 2) For new applications for Initial Codes, each CO Code Holder shall certify that the CO Code will be activated in the network and placed In-Service within four months of the date of application for the Code. If the CNA does not receive a Part 4 Form within this timeframe, confirming that the CO Code has been placed In-Service, the CNA will initiate reclamation measures. If the CO Code Holder can demonstrate that, due to circumstances beyond its control, that the In-Service date has been delayed not more than six months from the original application date, then the CNA may grant an extension to the In-Service date, so long as the In-Service date is not more than six months beyond the original application date. If the In-Service date has been delayed more than six months from the original application date, then the CNA shall reclaim the Code unless CRTC staff approves a further extension.
- 3) When applying for an Additional Code for Growth, a CO Code Holder who is submitting a Part 1 Form and Appendix B worksheet shall also submit a completed Supplementary Form for a Growth CO Code Application (attached) which certifies and/or provides the following information for the specific switching entity/POI and Exchange Area when the Growth CO Code is being requested in a Jeopardy Condition:
- a) certification that all held telephone numbers have been released;
  - b) certification that reserved numbers do not exceed ten percent of the total quantity of numbers as defined in Appendix G of the Canadian CO Code (NXX) Assignment Guideline;
  - c) certification that each reseller/dealer had been advised of the Jeopardy Condition and the requirement that they would only be allocated additional numbers during the Jeopardy Condition on the provision to the CO Code Holder of written confirmation that their number inventory has been reduced to an amount less than two times the highest quantity of customer numbers assigned in any month during the previous 12 months. Additional numbering resources will only be provided by the CO Code Holder to the reseller/dealer to the extent that the reseller's/dealer's inventory can only increase up to a maximum of three months' inventory;
  - d) confirmation that the Part 1 form submitted with the application has the Jeopardy Condition box in section 1.6 checked to certify that the existing CO Codes are projected to exhaust within 4 months of the date of application, and that the months-to-exhaust is documented on an Appendix B submitted to the CNA;
  - e) a completed Telephone Number Utilization Report;
-

- f) confirmation that the requested Growth CO Code was forecasted in the most recent NRUF or an explanation as to why it was not is attached; and
  - g) confirmation that the requested Growth CO Code will be placed In-Service within four months of the date of assignment.
- 4) Any CO Codes for growth assigned after the implementation of this JCP must be activated in the network and placed In-Service within four months of assignment. In the event that a CO Code Holder is unable to place the CO Code In-Service within four months of the date of assignment, the CO Code Holder must submit a written request for extension to the CNA. Such written requests must include documentation explaining the reason(s) for the missed date and proposing the new In-Service date. If the explanation includes reasons beyond the control of the CO Code Holder, the CNA may extend the In-Service date a maximum of one month. If the CO Code Holder does not place the CO Code In-Service within the one-month extension, the CNA shall reclaim the CO Code immediately at the end of the one-month extension unless CRTC staff approves a further extension.
- 5) A Carrier that has multiple switching entities within an Exchange Area shall examine the possibility of, and implement where feasible, number sharing between those switches as a potential method to delay requirements for additional CO Codes.
- 6) The CNA will compare the initial J-NRUF input to the recent NRUF inputs, in order to assess forecasting trends. The CNA shall monitor all inputs and shall test them for reasonableness in consultation with the Carrier. If the CNA is dissatisfied with the reasonableness, or the rationale provided for the deviations, then the matter will be referred to the Commission.
- 7) The CNA will request subsequent J-NRUF input from all current and prospective CO Code Holders quarterly until 3 months before relief is provided. If one or more R-NRUFs have already been conducted, and depending on the severity of the Jeopardy Condition, the CNA may defer a J-NRUF by up to two months if such a deferral brings the timing of that J-NRUF and subsequent J-NRUFs into alignment with other NRUFs that are conducted at 12, 6 or 3 month intervals. Subsequent J-NRUF input will be compared with the initial J-NRUF input to evaluate the effectiveness of the JCP. The CNA shall monitor all J-NRUF inputs and shall test them for reasonableness in consultation with the Telecommunications Service Providers. If the CNA is dissatisfied with the reasonableness, or the rationale provided for the changed forecasts, then the matter will be referred to the Commission.
- 8) A CO Code Applicant must have submitted a completed J-NRUF to the CNA before the CNA may assign a CO Code to that CO Code Applicant.
- 9) When a CO Code Applicant requests more CO Codes than it identified in its most recent J-NRUF forecast, the CNA will discuss the matter with the CO Code Applicant and if the CO Code Applicant wishes to proceed with the request, the CNA will forward the request to CRTC staff for consideration.
- 10) The CO Codes identified in the NPA CO Code Inventory Chart as "Assignable CO Codes in a Jeopardy Condition" will be assigned in the order determined by the RPC after all CO Codes which are "Available for Assignment as of dd/mm/yyyy" have been assigned.

- 11) After each J-NRUF, the CNA shall provide the Commission and the RPC participants with a report providing an updated NPA CO Code Inventory Chart for the NPA in jeopardy as well as the aggregate results of the most recent J-NRUF.
- 12) Exceptional issues or concerns may be referred by the CNA, or by individual entities (with a courtesy copy to the CNA), to the Commission for resolution.
- 13) In a situation where the Relief Date is on or after the PED, the quantity of CO Codes that may be assigned to a CO Code Applicant prior to the end of the Jeopardy Condition (i.e., 66 days prior to the Relief Date) shall be limited to the quantity forecasted by the CO Code Applicant in its most recent NRUF forecast submitted prior to the Jeopardy Condition being declared by the CNA (if no previous NRUF was submitted, then the previous forecast will be deemed to be zero codes). When making requests to obtain CO Codes prior to the end of the Jeopardy Condition (i.e., 66 days prior to the Relief Date), the CO Code Applicant may change the Exchange Area or the month when the CO Code assignment is required, provided a new J-NRUF and explanation accompanies the application. The control imposed by this option may be relaxed if subsequent J-NRUFs defer the PED to after the Relief Date. CO Codes that become available for assignment due to future reduced demand from other current and prospective CO Code Holders may be assigned at the discretion of CRTC staff.
- 14) If the CNA determines that the implementation of the JCP has not extended the Projected Exhaust Date of the NPA beyond the Relief Date, the CNA will consult with Commission staff and further CO Code conservation and assignment procedures may be ordered by the Commission (e.g., rationing, lottery, etc.).

**Supplementary form for a Growth CO Code Application – Page 1 of 2**

This form is required with each request for an Additional Code for Growth in an NPA where a Jeopardy Condition is in effect. It should be submitted to the CNA together with the Part 1 and Appendix B forms that are required for an application for an Additional Code for Growth. See the Part 1 form for information on how and where to submit the form.

I hereby certify that the following information is true and accurate to the best of my knowledge and has been prepared in accordance with Special Conservation Procedures for a Jeopardy Condition contained in the Canadian Relief Planning Guideline or the applicable approved Jeopardy Contingency Plan.

\_\_\_\_\_  
Signature of Authorized Representative of Code Holder                      Title                      Date

**Contact information:**    Entity Name: \_\_\_\_\_                      Contact Name: \_\_\_\_\_  
    Address: \_\_\_\_\_                                      City, Province, Postal Code: \_\_\_\_\_  
    Telephone: \_\_\_\_\_                                      Facsimile: \_\_\_\_\_  
    E-mail: \_\_\_\_\_

**Switch Identification (Switching Entity/POI) CLLI:** \_\_\_\_\_                      **Exchange Area:** \_\_\_\_\_

For the above Switch Identification and Exchange Area for which a Growth CO code is requested:

- I certify that all held telephone numbers have been released.
- I certify the total quantity of reserved numbers does not exceed 10% of the total quantity of telephone numbers as defined in Appendix G of the Canadian CO Code (NXX) Assignment Guideline.
- I certify that each reseller/dealer has been advised of the Jeopardy Condition and the requirement that they would only be allocated additional numbers during the Jeopardy Condition on the provision to the CO Code Holder of written confirmation that their number inventory has been reduced to an amount less than two times the highest quantity of customer numbers assigned in any month during the previous 12 months. Additional numbering resources will only be provided by the CO Code Holder to the reseller/dealer to the extent that the reseller's/dealer's inventory can only increase up to a maximum of three months' inventory.
- The Part 1 form submitted with the application has the Jeopardy Condition box in section 6 checked (this certifies that the existing CO Codes are projected to exhaust within 4 months of the date of the application or within the period specified in an approved Jeopardy Contingency Plan, and that the months-to-exhaust is documented on an Appendix B submitted to the CNA).
- The Telephone Number Utilization Report on the page 2 of this form has been completed.
- The requested Growth CO Code was forecasted in the most recent NRUF, or an explanation as to why it was not is attached.
- The requested Growth CO Code will be placed In-Service within four months of the date of assignment.



## NPA 819 CO Code Inventory Chart

The following chart and the instructions it contains will apply in NPA 819 in a Jeopardy Condition.

The chart shown below lists quantities of CO Codes unassignable prior to a Jeopardy Condition, CO Codes that become assignable in a Jeopardy Condition, and CO Codes in NPA 819 assigned and In-Service as of 17 November 2009. It identifies 54 CO Codes that are unassignable prior to a Jeopardy Condition, 19 of which become assignable in a Jeopardy Condition. The CO Codes that become assignable in a Jeopardy Condition shall be made available for assignment only when all other available CO Codes have been assigned, and should be made available in the same order as listed in the chart.

		<b>Quantity</b>
<b>A</b>	<b>Total CO Codes in an NPA (NXX format)</b>	<b>800</b>
<b>B</b>	<b>CO Codes unassignable prior to a Jeopardy Condition</b>	
	N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911)	8
	Special Use Codes (555 & 950)	2
	Protected Code(s)	0
	Home NPA Code(s) (819)	1
	Current Neighbouring NPA Codes (249, 343, 418, 579, 450, 613, 581, 705, 709)	9
	Current Neighbouring US NPA Codes (none listed per Section 3.7f of the Canadian Central Office Code (NXX) Assignment Guideline)	0
	Future Canadian Geographic NPA Codes (257, 273, 368, 387, 431, 468, 487, 584, 742, 851, 871, 873, 942 - see Note 1)	13
	Plant Test Codes (958 & 959)	2
	Special 7-digit Dialling Codes (610 & 810)	2
	CO Codes set aside for Initial Code assignments for Carriers already providing service in NPA 819 after relief via an overlay or before relief via a split	7
	CO Codes set aside for Initial Code assignments for new entrants only after relief via an overlay or before relief via a split	10
	B Subtotal	<b>54</b>
<b>C</b>	<b>CO Codes assignable prior to a Jeopardy Condition (C=A-B)</b>	<b>746</b>
<b>D</b>	<b>CO Codes unassignable prior to a Jeopardy Condition that became assignable in a Jeopardy Condition:</b>	
	Future Canadian Geographic NPA Codes (Note 2)	12
	Current Neighbouring NPA Codes (249, 343, 418, 450, 579, 613, 581, 705, 709 - Note 3)	0
	CO Codes set aside for Initial Code assignments for carriers already providing service in NPA 819 after relief via an overlay or before relief via a split (available subject to CRTC staff approval)	7
	D Subtotal	<b>19</b>
<b>E</b>	<b>Assignable CO Codes in a Jeopardy Condition (E=C+D)</b>	<b>765</b>
<b>F</b>	<b>Assigned CO Codes as of 17 November 2009</b>	<b>629</b>
<b>G</b>	<b>Net CO Codes available for assignment as of 17 November 2009 without a Jeopardy Condition (G=C-F)</b>	<b>118</b>
<b>H</b>	<b>Net CO Codes available for assignment as of 17 November 2009 in a Jeopardy Condition (H=E-F)</b>	<b>136</b>

**Notes:**

1. 19 of the CO Codes corresponding to the 32 Future Canadian Geographic NPA Codes are already assigned or available for assignment in NPA 819.
2. The following 13 CO Codes corresponding to the Future Canadian Geographic NPA Codes are currently unavailable for assignment in NPA 819: 257, 273, 368, 387, 431, 468, 487, 584, 742, 851, 871, 873, and 942. One of these CO Codes should not become assignable as it will correspond to the New NPA that will be needed immediately or in the future for NPA relief, therefore only 12 become assignable in a Jeopardy Condition.
3. In an extreme Jeopardy Condition (i.e., when the Projected Exhaust Date is earlier than the Relief Date), the 9 CO Codes corresponding to current Neighbouring NPA Codes may be made assignable in certain portions of NPA 819 with CRTC staff approval.

## 12. SELECTION OF RELIEF NPA

In the event that the recommended Relief Option requires a new NPA Code, the criteria for selection of an appropriate area code for relief is addressed in section 4.9 of the Canadian NPA Relief Planning Guideline. The criteria that should be taken into account when Future Canadian Geographic NPAs are being considered as candidates for relief of a specific current Canadian Geographic NPA include the following:

- a) The preferred Future Canadian Geographic NPA Code should not be an NPA Code that is assigned as a CO Code in the area that is being relieved (Home NPA(s)).
- b) The preferred Future Canadian Geographic NPA Code should not be an NPA Code that is assigned as a CO Code in another NPA within the same province where there is a possibility that a single new NPA Code could be overlaid on more than one NPA within the province, or where a boundary realignment could occur that affects another NPA.
- c) The preferred Future Canadian Geographic NPA Code should not be an NPA Code that is assigned as a CO Code in an Exchange Area in a neighbouring NPA, if the neighbouring NPA has 7-digit local calling within the NPA, and i) the Exchange Area in the neighbouring NPA where the CO Code is assigned has local calling to the NPA being relieved, or ii) the Exchange Area in the neighbouring NPA where the CO Code is assigned does not have local calling to the NPA being relieved, but other Exchange Areas within that neighbouring NPA have 7-digit local calling to the Exchange Area where the CO Code is assigned as well as local calling to the new NPA.

On the CNA web site there is an NPA Code Selection Tool that can assist in determining which of the NPA Codes that are currently available for assignment in Canada are most suitable for relief of an exhausting NPA. This NPA Code Selection Tool is located at:  
[http://www.cnac.ca/npa\\_codes/relief/overview.htm](http://www.cnac.ca/npa_codes/relief/overview.htm).

See Annex B, Table 2 for details of future Canadian Geographic NPA Codes suitable for use for NPA 819 relief (extracted from NPA Code Selection Tool). The results from the NPA Code Selection Tool applicable to NPA 819 relief are summarized in the following table.

<b>NXX corresponding to Future NPA →</b>	257	273	368	387	431	468	487	584	742	851	871	873	942
Split - E-W Split, East retains NPA 819	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Split - E-W Split, West retains NPA 819	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓✓
Split - E-W River Split, East retains NPA 819	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Split - E-W River Split, West retains NPA 819	✓	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓✓
NPA 581 Boundary Extension Overlay	x	✓	x	x	✓	✓	x	x	x	x	x	x	✓
Distributed Overlay of New NPA on NPA 819	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ indicates Not Available in Home NPA(s)  
 ✓✓ indicates Not Available in Home NPA(s) and all adjacent NPAs  
 x indicates code meets neither criteria

The future NPA Codes suitable for consideration as an NPA code to be assigned for immediate relief, or reserved for a future relief if the immediate relief does not require a new NPA assignment, are:

Splits 1a, 2a: All available codes meet “unassigned in Home NPA” criteria; no code meets “unassigned in Home and Neighbouring NPA” criteria

Splits 1b, 2b: All available codes meet “unassigned in Home NPA” criteria; code 273 meets “unassigned in Home and Neighbouring NPA”

NPA 581 Boundary Extension Overlay: Codes 273, 431, 468, & 942 meet “unassigned in Home NPA” criteria; no code meets “unassigned in Home and Neighbouring NPA” criteria

Distributed Overlay of New NPA on 819: Codes 257, 273, 368, 387, 431, 468, 487, 584, 742, 851, 871, 873 & 942 meet “unassigned in Home NPA” criteria; no code meets “unassigned in Home and Neighbouring NPA” criteria

Additional considerations relating to these NPA Codes are:

- 431 is the NPA Code recommended for NPA 204 relief by the NPA 204 RPC in the draft of the NPA 204 Planning Document dated 2 October 2009.
- 871 and 873 were identified by Bell Canada in the NPA 613 Planning Document dated 5 May, 2008 as the preferred options for relief of NPA 819 as they required the minimum quantity of software upgrades to support existing local dialling between NPA 819 and its neighbouring NPAs, and

- additional telecom service provider cost considerations that may apply in NPA 819 and adjacent NPAs may affect the relief code recommendation.

Bell Canada has considered the potential NPA Codes to be used to provide relief for NPA 819 and proposes that NPA Code 873 be implemented as it would require the minimum quantity of software upgrades to support existing local dialling between NPA 819 and its neighbouring NPAs.

The RPC considered the potential NPA Codes to be used to provide relief for NPA 819 via the recommended Relief Method i.e., distributed overlay of a new NPA on NPA 819, and recommends that NPA Code 873 be assigned for this purpose.

### 13. RECOMMENDATIONS

Based on the assessment of Relief Options and other issues contained in this document, the RPC submits the following recommendations to the CISC and CRTC:

- 1) The Relief Option should be a new distributed overlay on NPA 819;
- 2) NPA Code 873 should be used for relief of NPA 819;
- 3) The Relief Date should be 1 June 2013 in order to provide Carriers and customers with sufficient lead-time to implement relief;
- 4) The local dialling plan should remain as 10 digits for all local calls originating within the NPA 819 area;
- 5) Per section 9, if a Jeopardy Condition is declared, it is recommended that the 7 CO Codes for initial code assignments for Carriers already providing service should be made available for general assignment prior to relief, and the 10 CO Codes for initial code assignments for new entrants only would also become available prior to relief for initial code assignments for new entrants only.
- 6) The following 12 CO Codes corresponding to Future Canadian Geographic NPA Codes should become assignable in the event of a Jeopardy Condition: 257, 273, 368, 387, 431, 468, 487, 584, 742, 851, 871, and 942.
- 7) Per note 3 of the NPA 819 CO Code Inventory Chart, it is recommended that in an extreme Jeopardy Condition (i.e., when the Projected Exhaust Date is earlier than the Relief Date), the 9 CO Codes corresponding to current Neighbouring NPA Codes (249, 343, 418, 450, 579, 613, 581, 705, 709) may be made assignable in certain portions of NPA 819 with CRTC staff approval.

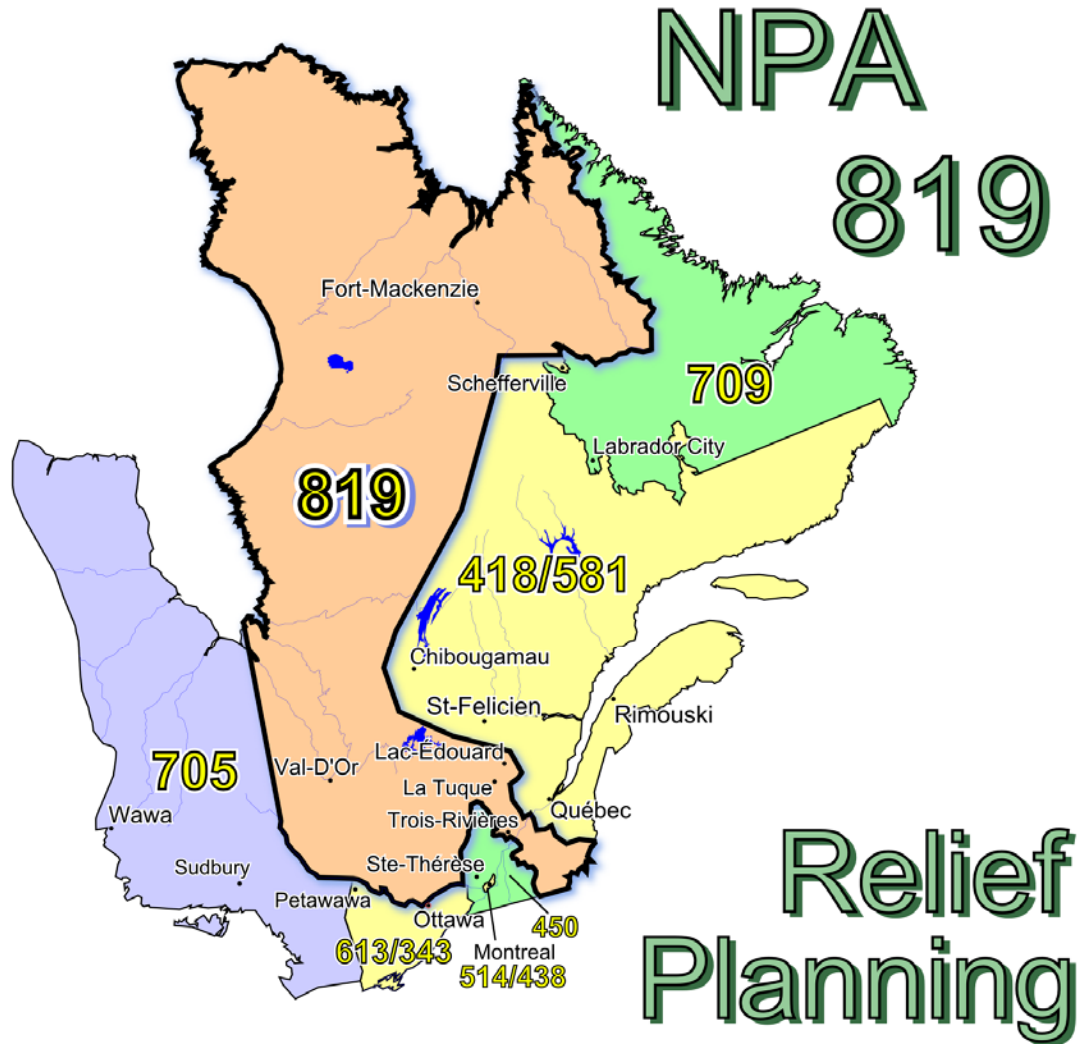
**NPA 819  
PLANNING DOCUMENT  
ANNEXES**

# Annexes

## Planning Document NPA 819 Numbering Relief



1	2	3
4	5	6
7	8	9
0	*	#



Planning Document (PD)  
Version 1.0 - November 24, 2009

Canadian Numbering Administrator (CNA)  
Suresh Khare  
613-563-7242-315  
60 Queen Street, Suite 1516  
Ottawa, Ontario K1P 5Y7  
khare@saiccanada.com

**SAIC**  
From Science to Solutions



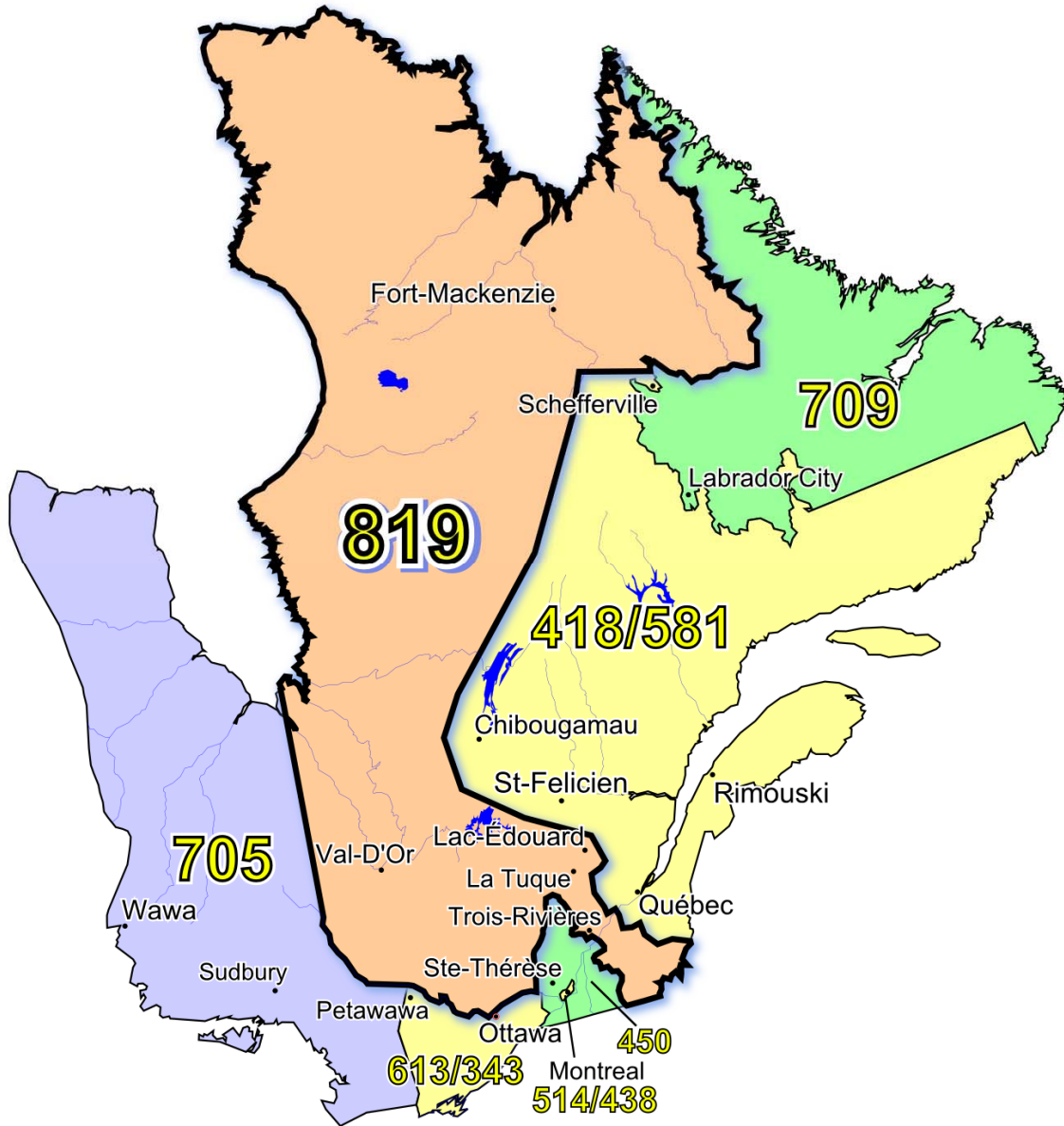
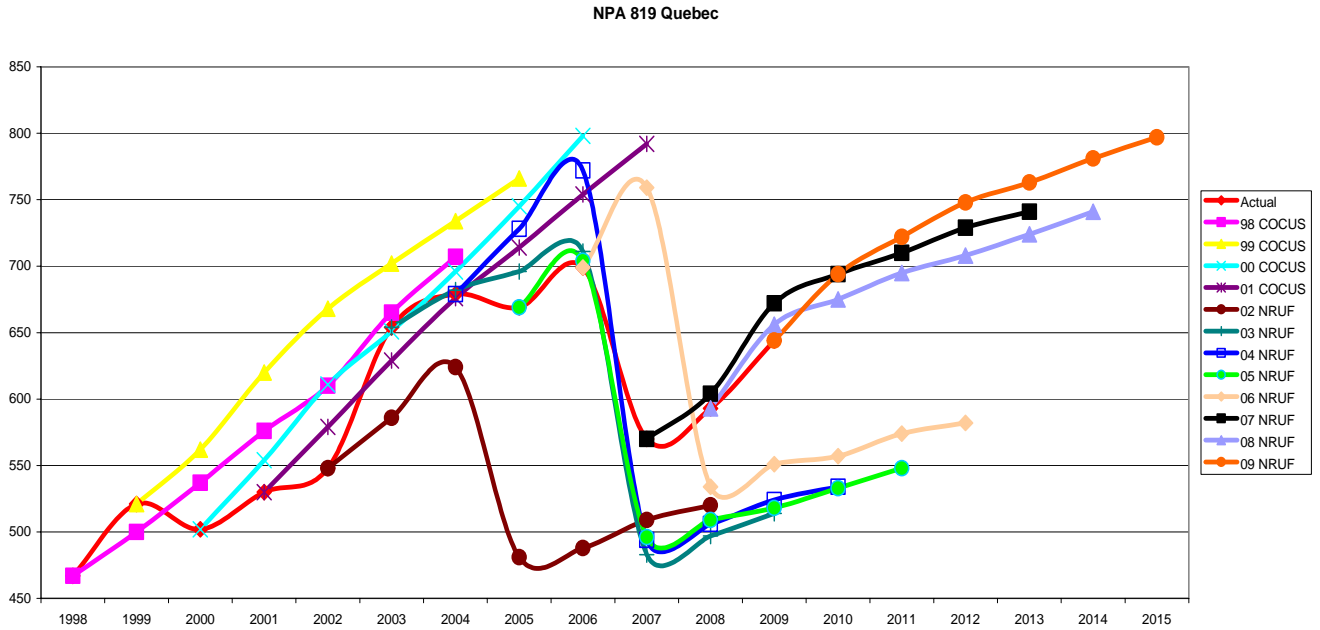


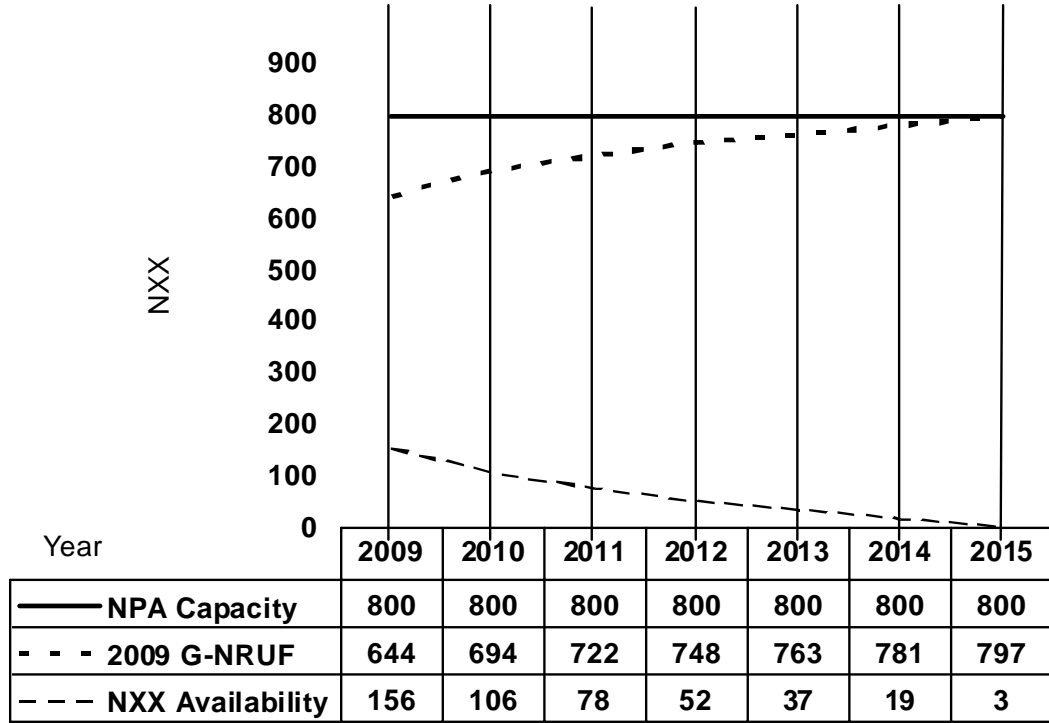
Figure 1 - Overview of NPA 819 and Adjacent NPAs



**Figure 2 - NPA 819 Actual and Forecast CO Code Assignments**

Note: The significant drop in the CO Code forecast is due to the removal of CO Code protection as a result of the introduction of 10-digit local dialling in 2006.

**NPA 819 CO Code Exhaust January 2009 G-NRUF**



**Figure 3 - NPA 819 CO Code Exhaust 2009 G-NRUF**

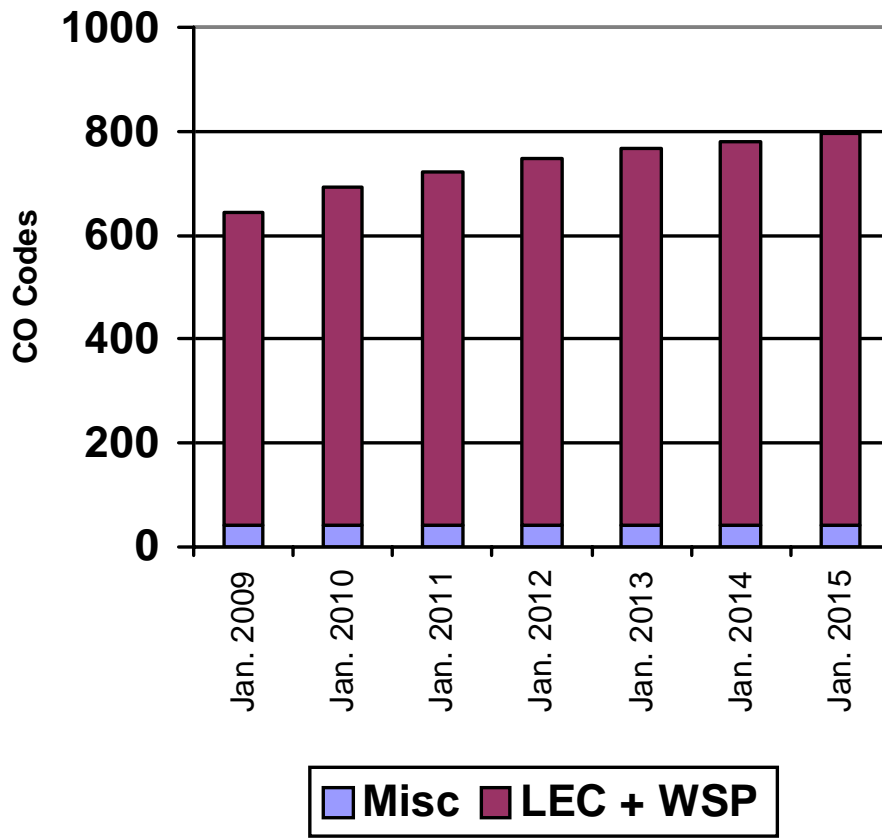


Figure 4 - NPA 819 Miscellaneous & LEC + WSP CO Codes 2009 G-NRUF

NPA 819 CO Code Exhaust based on TNC 2009 - 308 R-NRUF

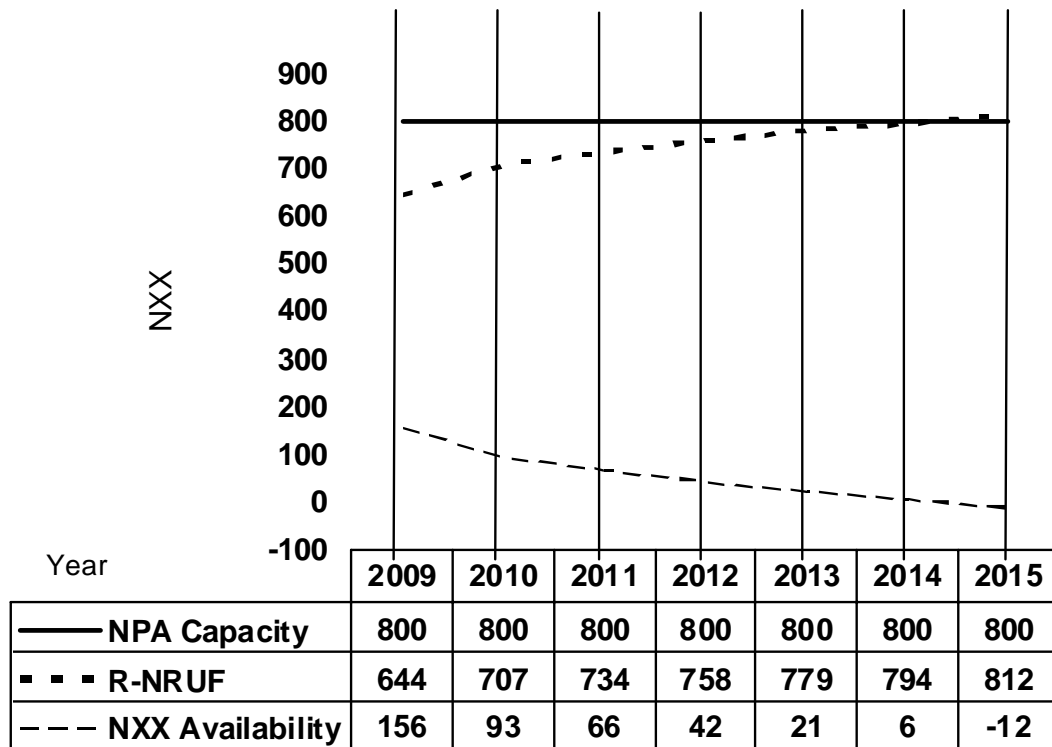


Figure 5 - NPA 819 CO Code Exhaust after release of Telecom Notice of Consultation  
CRTC 2009-308

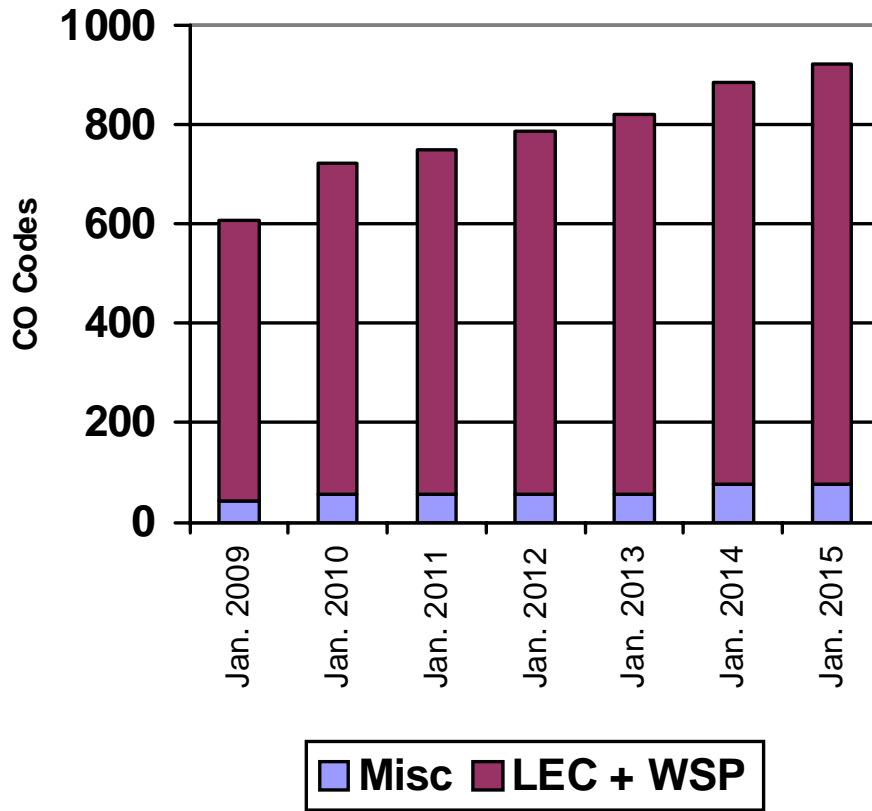


Figure 6 - NPA 819 Miscellaneous & LEC + WSP CO Codes after release of Telecom Notice of Consultation CRTC 2009-308

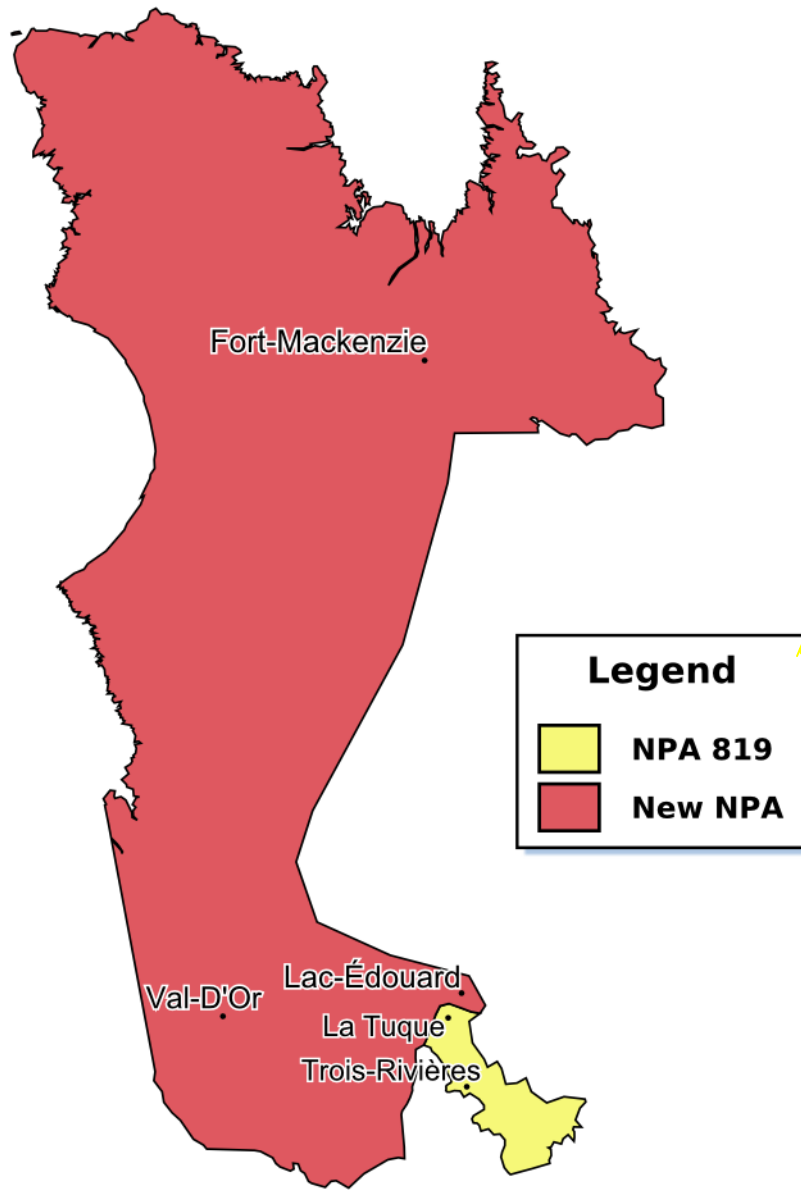


Figure 7 - Plan 1a: Split – East West Split - East retains NPA 819

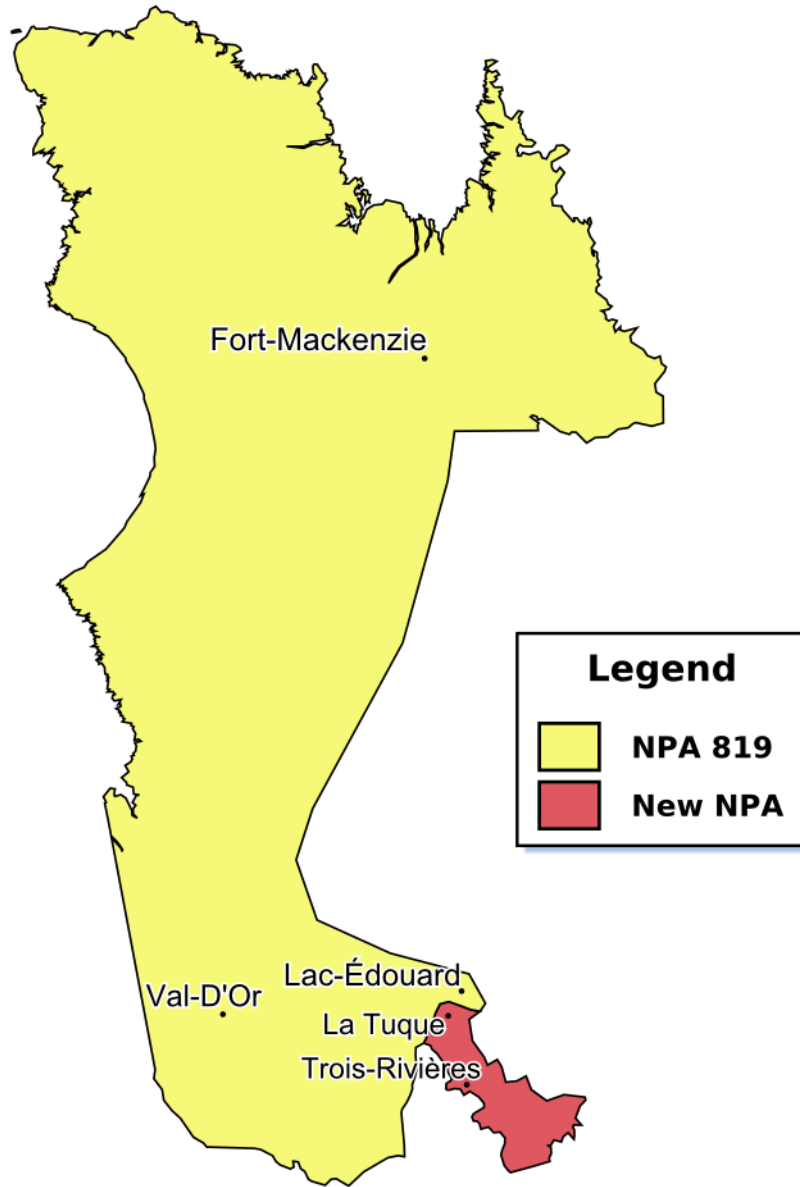


Figure 8 - Plan 1b: Split – East West Split - West retains NPA 819

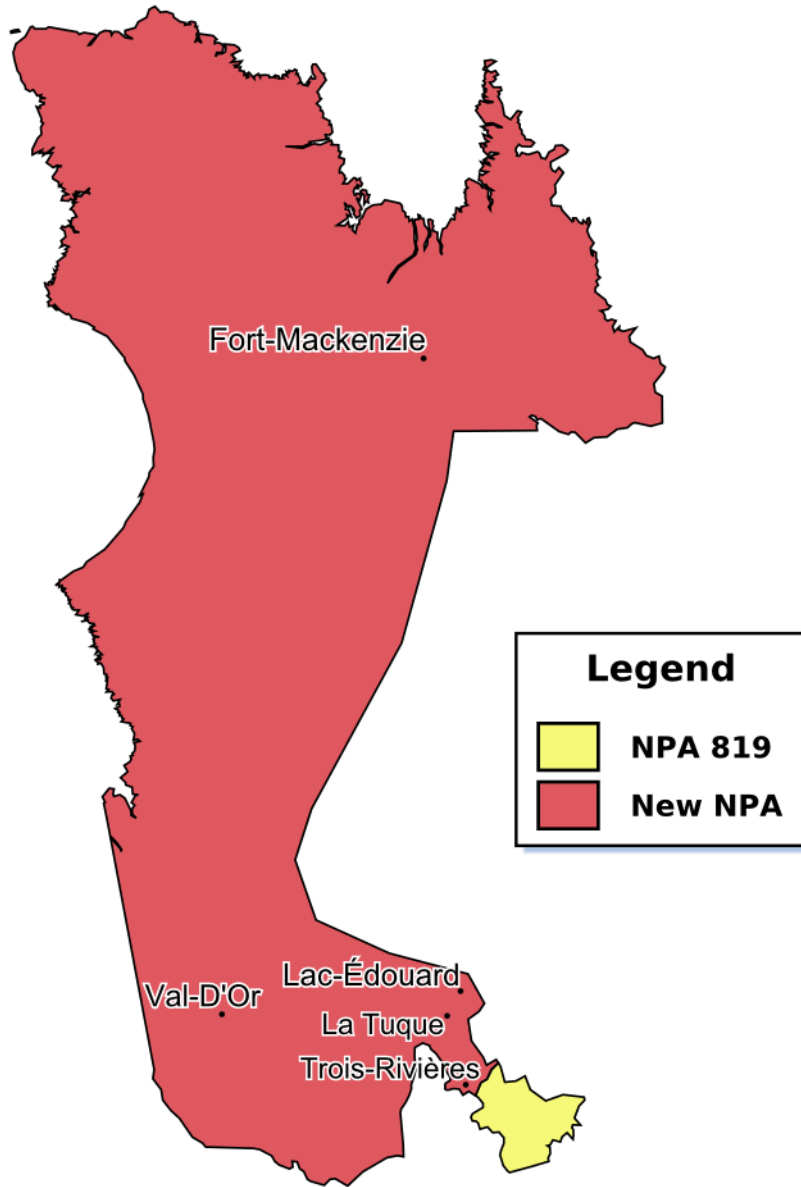


Figure 9 - Plan 2a: Split – East West River Split - East retains NPA 819

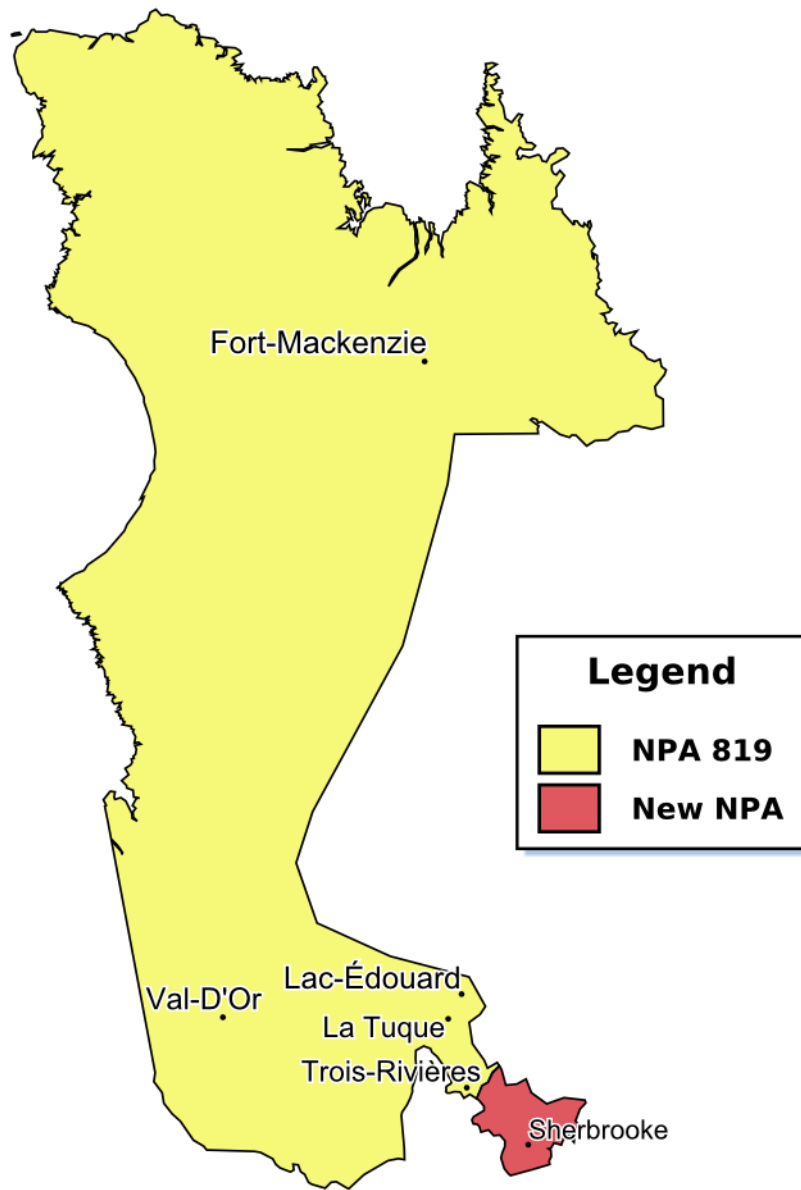


Figure 10 - Plan 2b: Split – East West River Split - West retains NPA 819

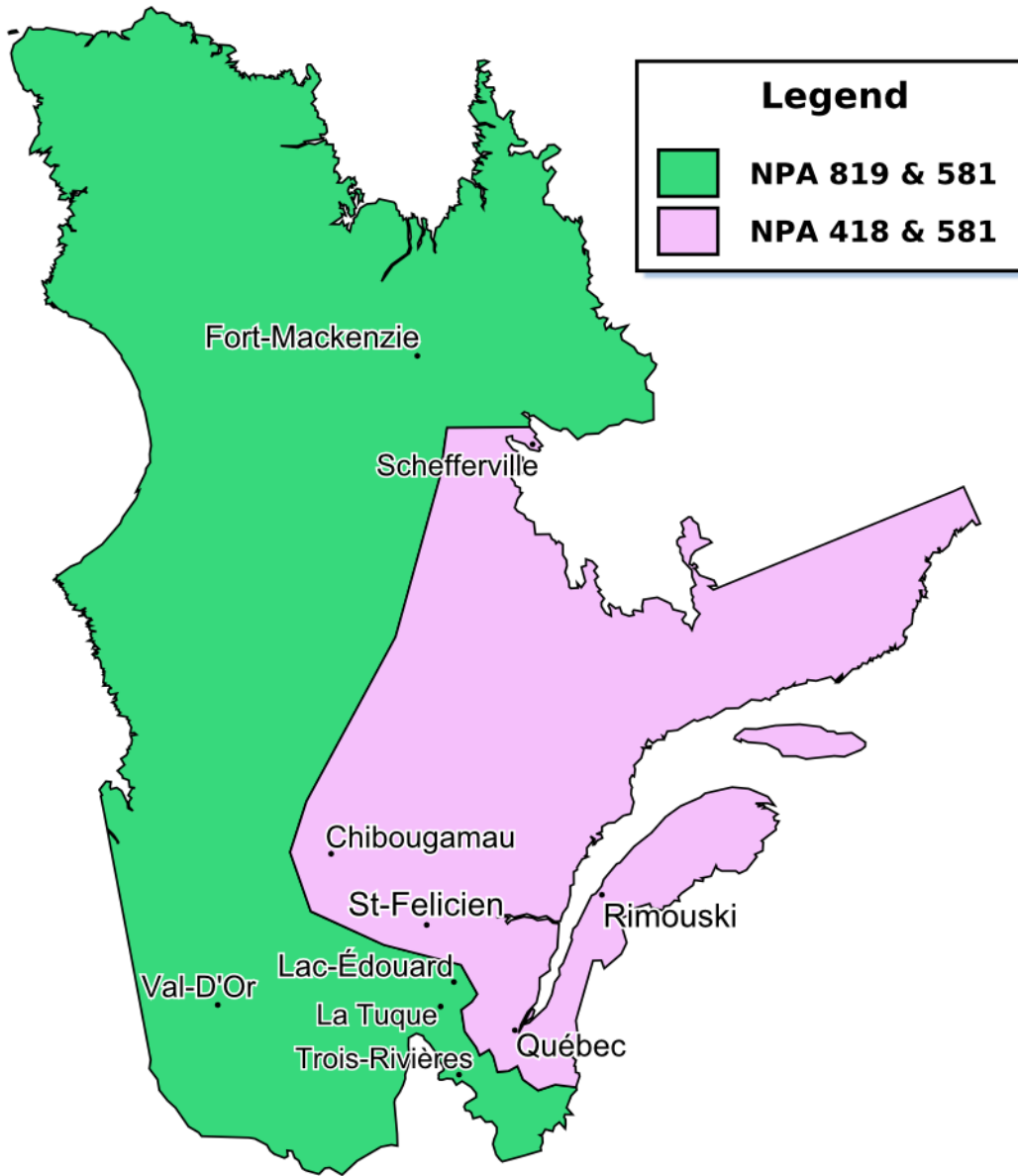


Figure 11 - Plan 3: NPA 581 Boundary Extension Overlay

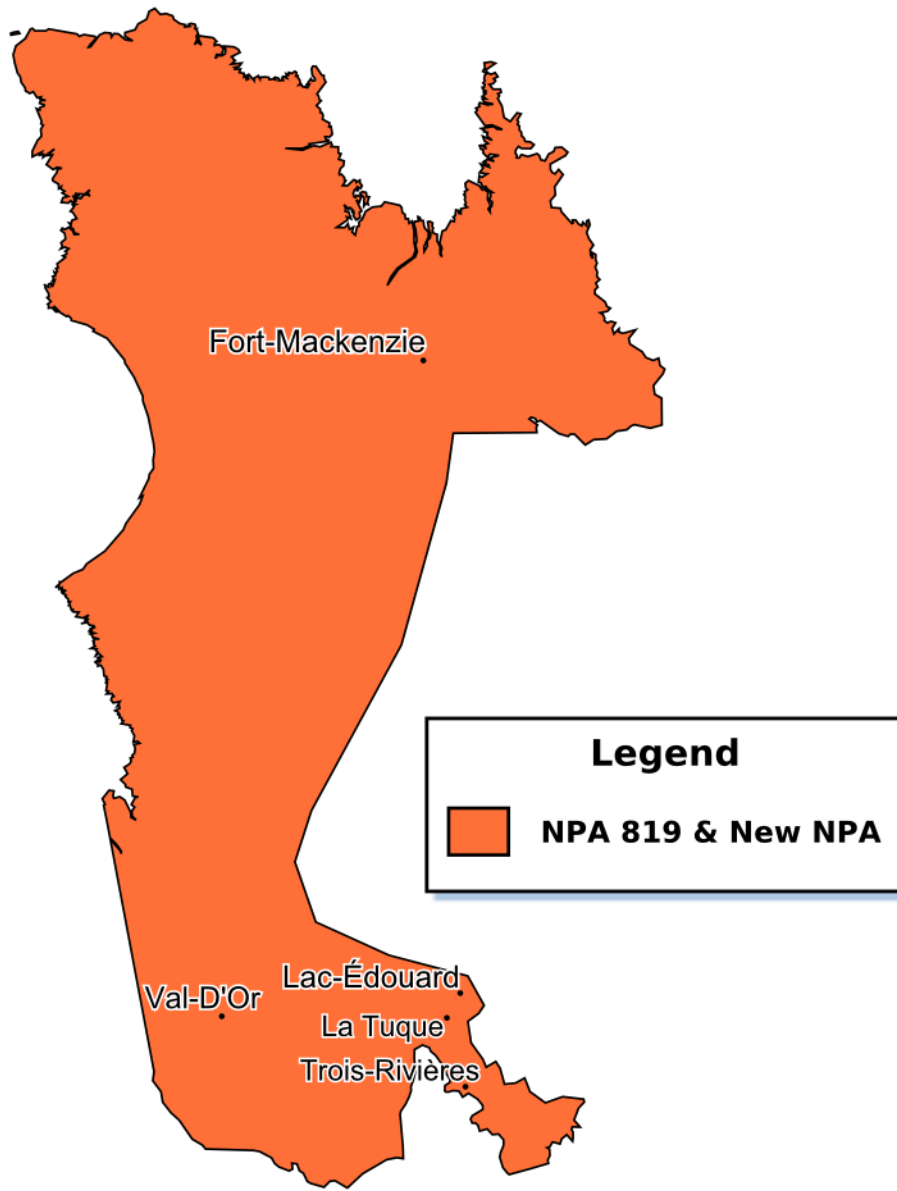


Figure 12 - Plan 4: Distributed Overlay of New NPA on NPA 819

**Table 1a – Exchange Areas currently in NPA 819, and NPAs for these Exchange Areas after each Relief Plan**

Exchange Area	1a		1b		2a		2b		3		4	
	New	819	New	819	New	819	New	819	581	819	New	819
Akulivik	✓			✓	✓			✓	✓	✓	✓	✓
Amos	✓			✓	✓			✓	✓	✓	✓	✓
Angliers	✓			✓	✓			✓	✓	✓	✓	✓
Arthabaska		✓	✓			✓	✓		✓	✓	✓	✓
Arundel	✓			✓	✓			✓	✓	✓	✓	✓
Asbestos		✓	✓			✓	✓		✓	✓	✓	✓
Aston-Jonction		✓	✓			✓	✓		✓	✓	✓	✓
Aupaluk	✓			✓	✓			✓	✓	✓	✓	✓
Ayer's Cliff		✓	✓			✓	✓		✓	✓	✓	✓
Aylmer	✓			✓	✓			✓	✓	✓	✓	✓
Barraute	✓			✓	✓			✓	✓	✓	✓	✓
Béarn	✓			✓	✓			✓	✓	✓	✓	✓
Beaucanton	✓			✓	✓			✓	✓	✓	✓	✓
Bécancour		✓	✓			✓	✓		✓	✓	✓	✓
Belleterre	✓			✓	✓			✓	✓	✓	✓	✓
Bishopton		✓	✓			✓	✓		✓	✓	✓	✓
Bouchette	✓			✓	✓			✓	✓	✓	✓	✓
Bromptonville		✓	✓			✓	✓		✓	✓	✓	✓
Buckingham	✓			✓	✓			✓	✓	✓	✓	✓
Bury		✓	✓			✓	✓		✓	✓	✓	✓
Cadillac	✓			✓	✓			✓	✓	✓	✓	✓
Campbell's Bay	✓			✓	✓			✓	✓	✓	✓	✓
Champlain		✓	✓			✓			✓	✓	✓	✓
Chapeau	✓			✓	✓			✓	✓	✓	✓	✓
Charette		✓	✓			✓			✓	✓	✓	✓
Chartierville		✓	✓			✓	✓		✓	✓	✓	✓
Chelsea	✓			✓	✓			✓	✓	✓	✓	✓
Chénéville	✓			✓	✓			✓	✓	✓	✓	✓
Chesterville		✓	✓			✓	✓		✓	✓	✓	✓
Chisasibi	✓			✓	✓			✓	✓	✓	✓	✓
Cléricy	✓			✓	✓			✓	✓	✓	✓	✓
Clova	✓			✓	✓			✓	✓	✓	✓	✓
Coaticook		✓	✓			✓	✓		✓	✓	✓	✓
Compton		✓	✓			✓	✓		✓	✓	✓	✓
Cookshire		✓	✓			✓	✓		✓	✓	✓	✓
Danville		✓	✓			✓	✓		✓	✓	✓	✓
Daveluyville		✓	✓			✓	✓		✓	✓	✓	✓
Deauville		✓	✓			✓	✓		✓	✓	✓	✓
Deschailions		✓	✓			✓	✓		✓	✓	✓	✓
Drummondville		✓	✓			✓	✓		✓	✓	✓	✓
Dubuisson	✓			✓	✓			✓	✓	✓	✓	✓
Duparquet	✓			✓	✓			✓	✓	✓	✓	✓
Dupuy	✓			✓	✓			✓	✓	✓	✓	✓
East Angus		✓	✓			✓	✓		✓	✓	✓	✓
East Hereford		✓	✓			✓	✓		✓	✓	✓	✓

Exchange Area	1a		1b		2a		2b		3		4	
	New	819	New	819	New	819	New	819	581	819	New	819
Eastmain	✓			✓	✓			✓	✓	✓	✓	✓
Eastmain 1	✓			✓	✓			✓	✓	✓	✓	✓
Fabre	✓			✓	✓			✓	✓	✓	✓	✓
Ferme-Neuve	✓			✓	✓			✓	✓	✓	✓	✓
Fort-Coulonge	✓			✓	✓			✓	✓	✓	✓	✓
Fortierville		✓	✓			✓	✓		✓	✓	✓	✓
Fugèreville	✓			✓	✓			✓	✓	✓	✓	✓
Gatineau	✓			✓	✓			✓	✓	✓	✓	✓
Gentilly		✓	✓			✓	✓		✓	✓	✓	✓
Gracefield	✓			✓	✓			✓	✓	✓	✓	✓
Grand'Mère		✓	✓		✓			✓	✓	✓	✓	✓
Grand-Remous	✓			✓	✓			✓	✓	✓	✓	✓
Grenville	✓			✓	✓			✓	✓	✓	✓	✓
Ham-Nord		✓	✓			✓	✓		✓	✓	✓	✓
Inukjuak	✓			✓	✓			✓	✓	✓	✓	✓
Ivujivik	✓			✓	✓			✓	✓	✓	✓	✓
Joutel	✓			✓	✓			✓	✓	✓	✓	✓
Kangiqsualujuaq	✓			✓	✓			✓	✓	✓	✓	✓
Kangiqsujaq	✓			✓	✓			✓	✓	✓	✓	✓
Kangirsuk	✓			✓	✓			✓	✓	✓	✓	✓
Kazabazua	✓			✓	✓			✓	✓	✓	✓	✓
Kingsey Falls		✓	✓			✓	✓		✓	✓	✓	✓
Kuujuuaq	✓			✓	✓			✓	✓	✓	✓	✓
Kuujuaraapik	✓			✓	✓			✓	✓	✓	✓	✓
L'Annonciation	✓			✓	✓			✓	✓	✓	✓	✓
L'Avenir		✓	✓			✓	✓		✓	✓	✓	✓
La Corne	✓			✓	✓			✓	✓	✓	✓	✓
La Minerve	✓			✓	✓			✓	✓	✓	✓	✓
La Patrie		✓	✓			✓	✓		✓	✓	✓	✓
La Reine	✓			✓	✓			✓	✓	✓	✓	✓
La Sarre	✓			✓	✓			✓	✓	✓	✓	✓
La Tuque		✓	✓		✓			✓	✓	✓	✓	✓
Labelle	✓			✓	✓			✓	✓	✓	✓	✓
Lac-des-Écorces	✓			✓	✓			✓	✓	✓	✓	✓
Lac-Drolet		✓	✓			✓	✓		✓	✓	✓	✓
Lac-du-Cerf	✓			✓	✓			✓	✓	✓	✓	✓
Lac-Édouard	✓			✓	✓			✓	✓	✓	✓	✓
Lac-Mégantic		✓	✓			✓	✓		✓	✓	✓	✓
Laforge	✓			✓	✓			✓	✓	✓	✓	✓
Latulipe	✓			✓	✓			✓	✓	✓	✓	✓
Laurierville		✓	✓			✓	✓		✓	✓	✓	✓
Laverlochère	✓			✓	✓			✓	✓	✓	✓	✓
Lebel-sur-Quévillon	✓			✓	✓			✓	✓	✓	✓	✓
Lorrainville	✓			✓	✓			✓	✓	✓	✓	✓
Louiseville		✓	✓		✓			✓	✓	✓	✓	✓
Louvicourt	✓			✓	✓			✓	✓	✓	✓	✓
Low	✓			✓	✓			✓	✓	✓	✓	✓
Luskville	✓			✓	✓			✓	✓	✓	✓	✓

Exchange Area	1a		1b		2a		2b		3		4	
	New	819	New	819	New	819	New	819	581	819	New	819
Lyster		✓	✓			✓	✓		✓	✓	✓	✓
Macamic	✓			✓	✓			✓	✓	✓	✓	✓
Magog		✓	✓			✓	✓		✓	✓	✓	✓
Malartic	✓			✓	✓			✓	✓	✓	✓	✓
Maniwaki	✓			✓	✓			✓	✓	✓	✓	✓
Manouane	✓			✓	✓			✓	✓	✓	✓	✓
Manseau		✓	✓			✓	✓		✓	✓	✓	✓
Maskinongé		✓	✓		✓			✓	✓	✓	✓	✓
Matagami	✓			✓	✓			✓	✓	✓	✓	✓
Mont-Laurier	✓			✓	✓			✓	✓	✓	✓	✓
Montebello	✓			✓	✓			✓	✓	✓	✓	✓
Nantes		✓	✓			✓	✓		✓	✓	✓	✓
Nédelec	✓			✓	✓			✓	✓	✓	✓	✓
Némaska	✓			✓	✓			✓	✓	✓	✓	✓
Nicolet		✓	✓			✓	✓		✓	✓	✓	✓
Nominingue	✓			✓	✓			✓	✓	✓	✓	✓
Norbertville		✓	✓			✓	✓		✓	✓	✓	✓
Normétal	✓			✓	✓			✓	✓	✓	✓	✓
North Hatley		✓	✓			✓	✓		✓	✓	✓	✓
Notre Dame Du Bon Conseil		✓	✓			✓	✓		✓	✓	✓	✓
Notre-Dame-de-la-Paix	✓			✓	✓			✓	✓	✓	✓	✓
Notre-Dame-de-la-Salette	✓			✓	✓			✓	✓	✓	✓	✓
Notre-Dame-de-Lourdes		✓	✓			✓	✓		✓	✓	✓	✓
Notre-Dame-du-Laus	✓			✓	✓			✓	✓	✓	✓	✓
Notre-Dame-du-Nord	✓			✓	✓			✓	✓	✓	✓	✓
Obedjiwan	✓			✓	✓			✓	✓	✓	✓	✓
Ottawa-Hull	✓			✓	✓			✓	✓	✓	✓	✓
Palmarolle	✓			✓	✓			✓	✓	✓	✓	✓
Papineauville	✓			✓	✓			✓	✓	✓	✓	✓
Parc de la Vérendrye	✓			✓	✓			✓	✓	✓	✓	✓
Parent	✓			✓	✓			✓	✓	✓	✓	✓
Perkins	✓			✓	✓			✓	✓	✓	✓	✓
Plessisville		✓	✓			✓	✓		✓	✓	✓	✓
Princeville		✓	✓			✓	✓		✓	✓	✓	✓
Puvirnituk	✓			✓	✓			✓	✓	✓	✓	✓
Quaqtaq	✓			✓	✓			✓	✓	✓	✓	✓
Quyón	✓			✓	✓			✓	✓	✓	✓	✓
Radisson	✓			✓	✓			✓	✓	✓	✓	✓
Rémigny	✓			✓	✓			✓	✓	✓	✓	✓
Richmond		✓	✓			✓	✓		✓	✓	✓	✓
Rivière-Héva	✓			✓	✓			✓	✓	✓	✓	✓
Rochebaucourt	✓			✓	✓			✓	✓	✓	✓	✓
Rock Island		✓	✓			✓	✓		✓	✓	✓	✓
Rouyn-Noranda	✓			✓	✓			✓	✓	✓	✓	✓
Saint-Ludger		✓	✓			✓	✓		✓	✓	✓	✓
Salluit	✓			✓	✓			✓	✓	✓	✓	✓
Sanmaur	✓			✓	✓			✓	✓	✓	✓	✓

Exchange Area	1a		1b		2a		2b		3		4	
	New	819	New	819	New	819	New	819	581	819	New	819
Sawyerville		✓	✓			✓	✓		✓	✓	✓	✓
Scotstown		✓	✓			✓	✓		✓	✓	✓	✓
Senneterre	✓			✓	✓			✓	✓	✓	✓	✓
Shawinigan		✓	✓		✓			✓	✓	✓	✓	✓
Shawville	✓			✓	✓			✓	✓	✓	✓	✓
Sherbrooke		✓	✓			✓	✓		✓	✓	✓	✓
South Durham		✓	✓			✓	✓		✓	✓	✓	✓
St-Adolphe-D'Howard	✓			✓	✓			✓	✓	✓	✓	✓
St-Adolphe-de-Dudswell		✓	✓			✓	✓		✓	✓	✓	✓
St-Albert		✓	✓			✓	✓		✓	✓	✓	✓
St-Alexis-de-Monts		✓	✓		✓			✓	✓	✓	✓	✓
St-Andre-Avellin	✓			✓	✓			✓	✓	✓	✓	✓
St-Barnabe		✓	✓		✓			✓	✓	✓	✓	✓
St-Boniface-de-Shawinigan		✓	✓		✓			✓	✓	✓	✓	✓
St-Bruno-de-Guigues	✓			✓	✓			✓	✓	✓	✓	✓
St-Célestin		✓	✓			✓	✓		✓	✓	✓	✓
St-Cyrille		✓	✓			✓	✓		✓	✓	✓	✓
St-Donat-de-Montcalm	✓			✓	✓			✓	✓	✓	✓	✓
St-Émile-de-Suffolk	✓			✓	✓			✓	✓	✓	✓	✓
St-Eugène-de-Guigues	✓			✓	✓			✓	✓	✓	✓	✓
St-Faustin	✓			✓	✓			✓	✓	✓	✓	✓
St-Felix-de-Kingsey		✓	✓			✓	✓		✓	✓	✓	✓
St-Germain-de-Grantham		✓	✓			✓	✓		✓	✓	✓	✓
St-Grégoire		✓	✓			✓	✓		✓	✓	✓	✓
St-Guillaume		✓	✓			✓	✓		✓	✓	✓	✓
St-Jovite	✓			✓	✓			✓	✓	✓	✓	✓
St-Léonard-d'Aston		✓	✓			✓	✓		✓	✓	✓	✓
St-Malo		✓	✓			✓	✓		✓	✓	✓	✓
St-Mathieu		✓	✓		✓			✓	✓	✓	✓	✓
St-Nazaire		✓	✓			✓	✓		✓	✓	✓	✓
St-Paulin		✓	✓		✓			✓	✓	✓	✓	✓
St-Pierre-de-Wakefield	✓			✓	✓			✓	✓	✓	✓	✓
St-Pierre-Les-Becquets		✓	✓			✓	✓		✓	✓	✓	✓
St-Roch-de-Mekinac		✓	✓		✓			✓	✓	✓	✓	✓
St-Sébastien (Frontenac Co.)		✓	✓			✓	✓		✓	✓	✓	✓
St-Sylvère		✓	✓			✓	✓		✓	✓	✓	✓
St-Wenceslas		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Agathe	✓			✓	✓			✓	✓	✓	✓	✓
Ste-Angèle		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Anne-du-Lac	✓			✓	✓			✓	✓	✓	✓	✓
Ste-Eulalie		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Gertrude		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Marie-de-Blandford		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Monique-de-Nicolet		✓	✓			✓	✓		✓	✓	✓	✓
Ste-Sophie-de-Lévrard		✓	✓			✓	✓		✓	✓	✓	✓
Stoke		✓	✓			✓	✓		✓	✓	✓	✓
Taschereau	✓			✓	✓			✓	✓	✓	✓	✓

Exchange Area	1a		1b		2a		2b		3		4	
	New	819	New	819	New	819	New	819	581	819	New	819
Tasiujaq	✓			✓	✓			✓	✓	✓	✓	✓
Temiscaming	✓			✓	✓			✓	✓	✓	✓	✓
Thurso	✓			✓	✓			✓	✓	✓	✓	✓
Tingwick		✓	✓			✓	✓		✓	✓	✓	✓
Trois-Rivières		✓	✓		✓			✓	✓	✓	✓	✓
Umiujaq	✓			✓	✓			✓	✓	✓	✓	✓
Val David	✓			✓	✓			✓	✓	✓	✓	✓
Val-D'Or	✓			✓	✓			✓	✓	✓	✓	✓
Val-des-Bois	✓			✓	✓			✓	✓	✓	✓	✓
Victoriaville		✓	✓			✓	✓		✓	✓	✓	✓
Ville-Marie	✓			✓	✓			✓	✓	✓	✓	✓
Villeroy		✓	✓			✓	✓		✓	✓	✓	✓
Wakefield	✓			✓	✓			✓	✓	✓	✓	✓
Warwick		✓	✓			✓	✓		✓	✓	✓	✓
Waskaganish	✓			✓	✓			✓	✓	✓	✓	✓
Waswanipi	✓			✓	✓			✓	✓	✓	✓	✓
Waterville		✓	✓			✓	✓		✓	✓	✓	✓
Weedon		✓	✓			✓	✓		✓	✓	✓	✓
Wemindji	✓			✓	✓			✓	✓	✓	✓	✓
Wickham		✓	✓			✓	✓		✓	✓	✓	✓
Windsor		✓	✓			✓	✓		✓	✓	✓	✓
Woburn		✓	✓			✓	✓		✓	✓	✓	✓
Wotton		✓	✓			✓	✓		✓	✓	✓	✓
Yamachiche		✓	✓		✓			✓	✓	✓	✓	✓

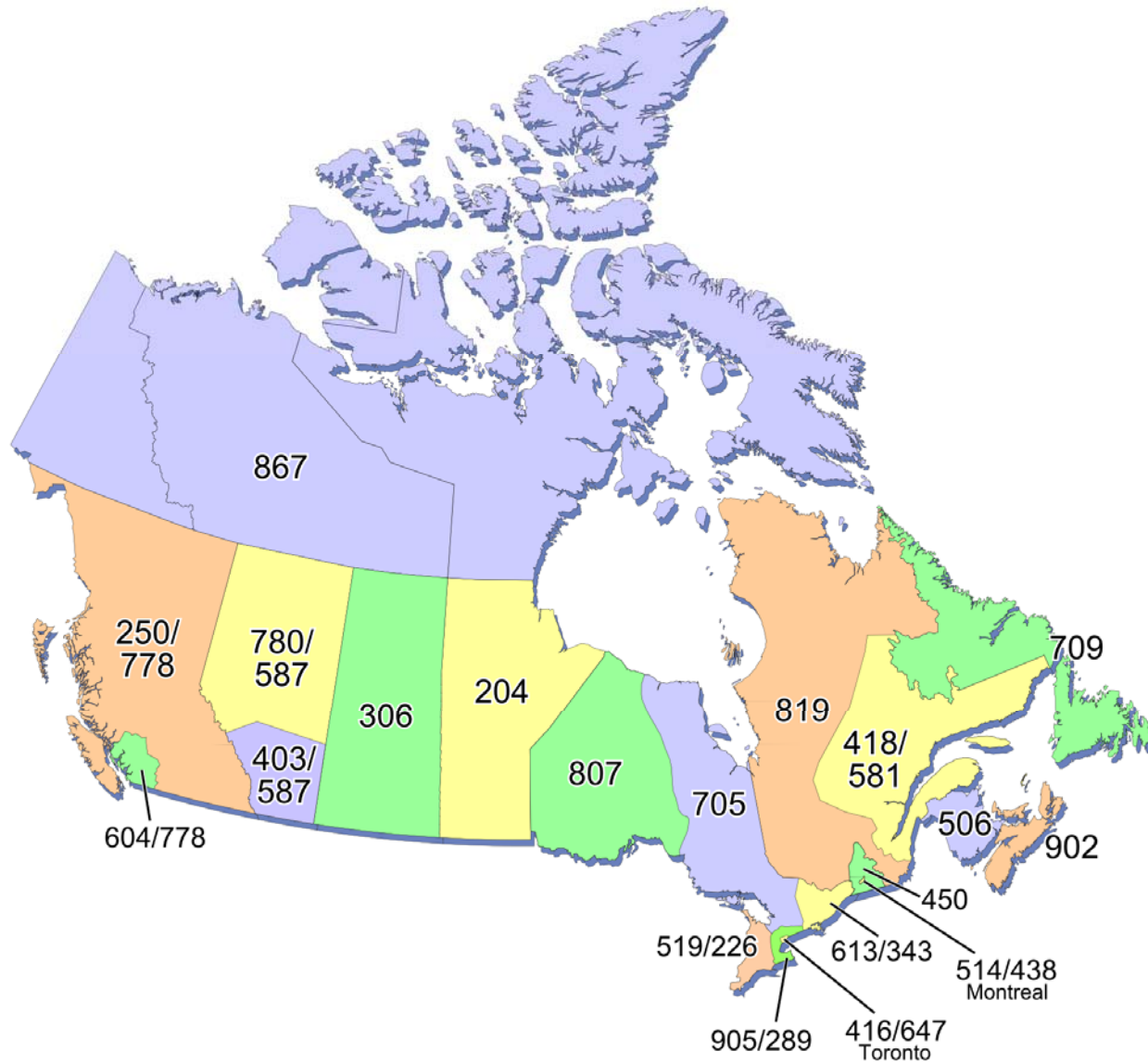
**Table 1b – Exchange Areas currently in NPA 418/581**

The following Exchange Areas currently in NPA 418/581 remain in NPA 418/581 in all relief plans. With option 3, NPA 581 would also include all the NPA 819 Exchange Areas in Table 1a above.

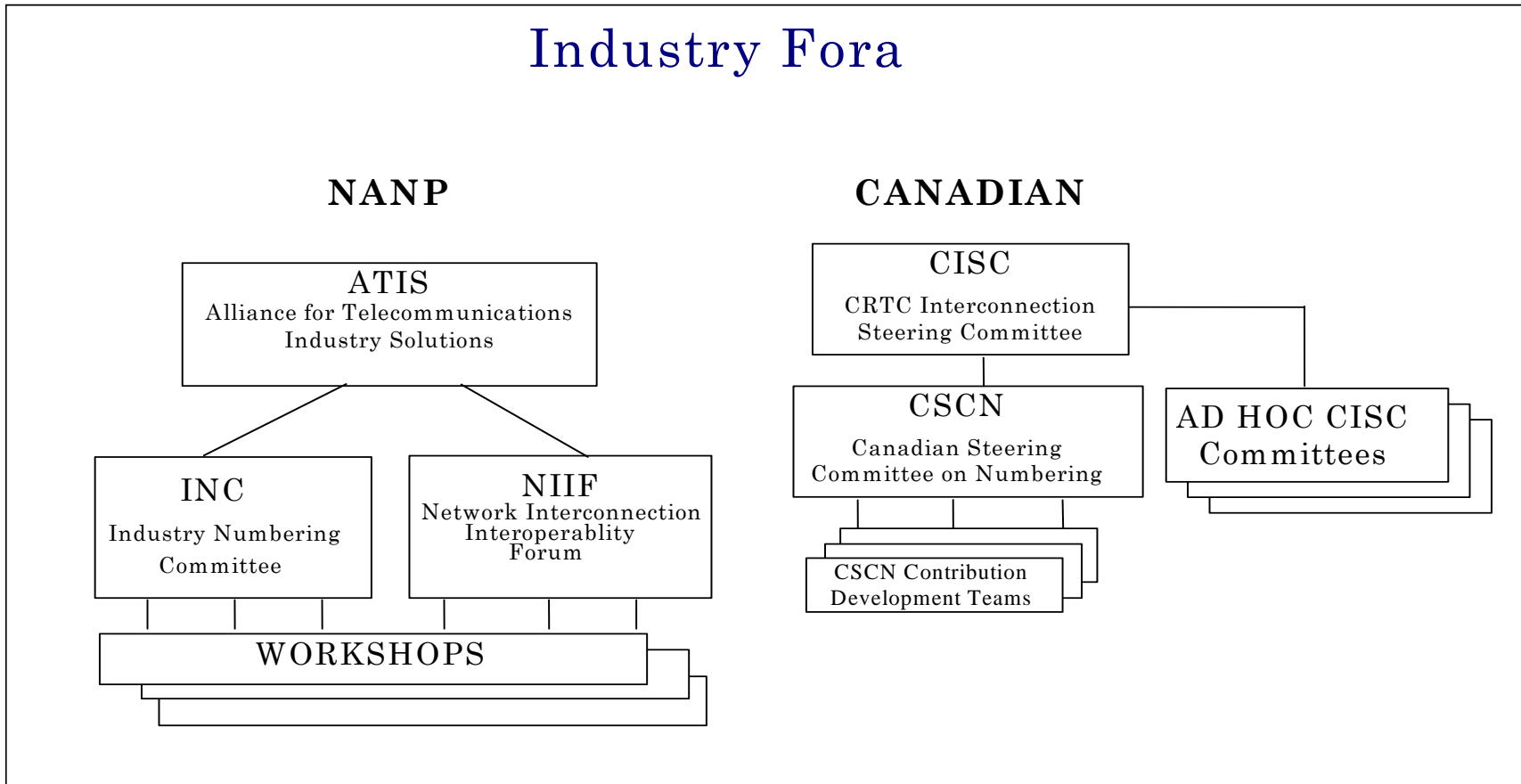
Aguanish	Disraeli	Manicouagan 5
Albanel	Dolbeau	Maria
Alma	Donnacona	Matane
Amqui	East Broughton	Matapédia
Anse-St-Jean	Esprit-Saint	Metabétchouan
Armagh	Ferland	Milot
Baie-Comeau	Fermont	Mistissini
Baie-Comeau (Hauterive)	Forestville	Moisie
Baie-des-Sables	Frampton	Mont-Joli
Baie-Johan-Beetz	Garthby	Mont-Louis
Baie-Ste-Catherine	Gaspé	Montmagny
Baie-St-Paul	Girardville	Murdochville
Baie-Trinité	Godbout	Mutton Bay
Barachois	Grande-Entrée	Natashquan
Batiscan	Grande-Rivière	Neuveville
Beauceville	Grande-Vallée	New Carlisle
Bergeronnes	Harrington Harbour	New Richmond
Bic	Havre-Aubert	Newport
Biencourt	Havre-aux-Maisons	Normandin
Black Lake	Havre-St-Pierre	Notre-Dame-des-
Blanc-Sablon	Hébertville	Laurentides
Boischatel	Hébertville-Station	Notre-Dame-du-Lac
Bonaventure	Inverness	Nouvelle
Bonne Espérance	Île-aux-Coudres	Parc-Des-Laurentides
Cabano	Jonquière	Pentecôte
Cap-St-Ignace	L'Île-Verte	Percé
Cap-aux-Meules	L'Islet	Péribonka
Cap-Chat	La Baie (Chicoutimi Co.)	Petite-Rivière-St-François
Cap-des-Rosiers	La Doré	Pointe-à-la-Croix
Caplan	La Guadeloupe	Pont-Rouge
Carleton	La Malbaie	Port Cartier
Causapscal	La Martre	Port-Daniel
Chambord	La Pocatière	Port-Menier
Chandler	La Romaine	Portneuf
Chapais	Lac Bouchette	Québec
Charny	Lac-au-Saumon	Rimouski
Château-Richer	Lac-aux-Sables	Rivière-à-Pierre
Chevery	Lac-Etchemin	Rivière-au-Renard
Chibougamau	Lac-Frontière	Rivière-au-Tonnerre
Chicoutimi	Lambton	Rivière-Bleue
Chute-aux-Outardes	Laterrière	Rivière-du-Loup
Chute-des-Passes	Leeds	Rivière-St-Jean
Clarke City	Les Boules	Roberval
Clermont	Les Éboulements	Sacré-Coeur
Cloridorme	Les Escoumins	Saint-Camille
Colombier	Les Méchins	Saint-Fabien-de-Panet
Courcelles	Lévis	Saint-Luc
Delisle	Loretteville	Saint-Magloire
Desbiens	Luceville	Saint-Odilon

Saint-Zacharie	St-Gédéon	St-Stanislas
Sainte-Justine	St-Gédéon-de-Beauce	St-Théophile
Sainte-Lucie	St-Georges-de-Beauce	St-Tite
Sainte-Rose	St-Henri-de-Lévis	St-Tite-des-Caps
Sault-au-Mouton	St-Hilarion	St-Ubalde
Sayabec	St-Honoré	St-Ulric
Schefferville	St-Honoré (Chicoutimi Co.)	St-Urbain
Sept-Îles	St-Honoré (Témiscouata Co.)	St-Victor-de-Beauce
Squatec	St-Irénée	Ste-Agathe
St-Adelphe	St-Jean-de-Dieu	Ste-Anne-de-Beaupré
St-Agapit	St-Jean-Île-d'Orléans	Ste-Anne-de-la-Pérade
St-Alexandre	St-Jean-Port-Joli	Ste-Anne-de-Portneuf
St-Alexis-de-Matapédia	St-Joseph	Ste-Anne-des-Monts
St-Ambroise-de-Chicoutimi	St-Just-de-Bretonnières	Ste-Blandine
St-André	St-Lambert-de-Lauzon	Ste-Brigitte-de-Laval
St-Anselme	St-Léon-le-Grand	Ste-Catherine
St-Antoine-de-Tilly	St-Malachie	Ste-Claire-de-Dorchester
St-Apollinaire	St-Marc-des-Carières	Ste-Croix
St-Augustin (Duplessis)	St-Martin-de-Beauce	Ste-Félicité
St-Augustin-de-Desmaures	St-Méthode-de-Frontenac	Ste-Hénédine
St-Basile	St-Michel	Ste-Marie-de-Beauce
St-Bernard-de-Dorchester	St-Moïse	Ste-Perpétue
St-Casimir	St-Nicolas	Ste-Pétronille
St-Charles	St-Pacôme	Ste-Rose-du-Nord
St-Côme	St-Pamphile	Ste-Thècle
St-Damien-de-Buckland	St-Pascal	Stoneham
St-Éduoard-de-Lotbinière	St-Patrice-de-Beaurivage	Stratford
St-Éleuthère	St-Paul-de-Montminy	Tadoussac
St-Éphrem-de-Beauce	St-Philippe-de-Néri	Tête-à-la-Baleine
St-Fabien	St-Prime	Thetford Mines
St-Félicien	St-Prosper-de-Dorchester	Tring Jonction
St-Ferdinand-d'Halifax	Saint-Raphaël	Trois-Pistoles
St-Féréol	St-Raymond	Val-Alain
St-Fidèle	St-René-de-Matane	Val-Brillant
St-Flavien	St-Roch-des-Aulnaies	Valcartier
St-François	St-Siméon	Vallée Jonction
St-Fulgence	St-Simon-de-Rimouski	Ville Dégelis
St-Gabriel		

### Canadian Geographic NPAs



Canadian geographic area code relief history and plans can be found at: <http://www.cnac.ca>

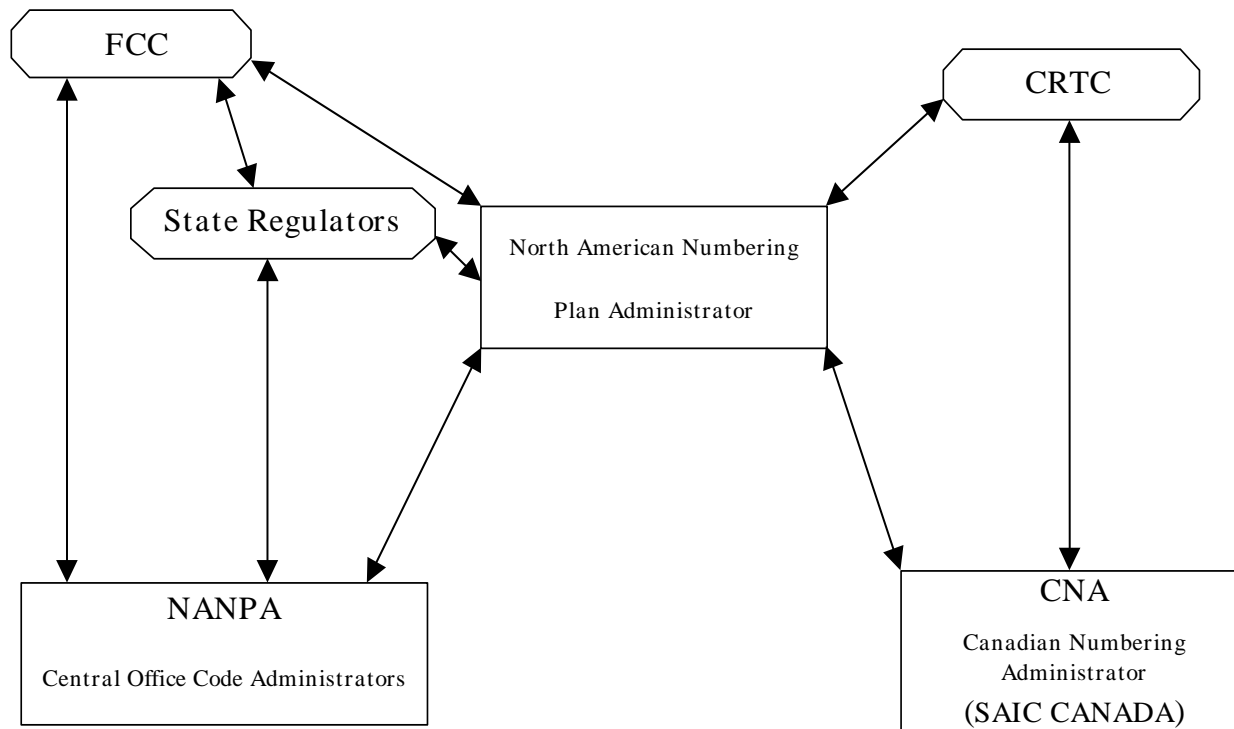


Industry Fora

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## United States

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Numbering Administration

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**NPA 819 RELIEF IMPLEMENTATION PLAN (RIP)**

**24 November 2009**

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**DATE of RPC Consensus: 17 November 2009**

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**TITLE: NPA 819 Relief Implementation Plan (RIP)**

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**DISTRIBUTION: CRTC**

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**ISSUED BY: NPA 819 Relief Planning Committee (RPC)**

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# NPA 819 Relief Implementation Plan (RIP)

## 1. INTRODUCTION

This Relief Implementation Plan (RIP) was developed in accordance with the Canadian NPA Relief Planning Guidelines. This RIP is a set of activities and deliverables established by the Relief Planning Committee (RPC) that are required to provide relief to the exhausting NPA. The objective of the NPA Relief Planning Process is to ensure an adequate supply of CO Codes and telephone numbers is always available to the Canadian telecommunications industry and users.

### **Purpose of RIP**

The purpose of this RIP is to establish a framework and timeframe for implementing relief for NPA 819. This RIP addresses the implementation of new NPA Code 873 as a distributed overlay to the NPA 819 region.

This RIP contains a Relief Implementation Schedule (see Section 4), Consumer Awareness Program (CAP) (see Attachment 1) and Network Implementation Plan (NIP) (see Attachment 2).

This RIP addresses the activities, deliverables, and events impacting more than one individual TSP. It does not cover activities internal to each TSP. Attachment 3, Individual Telecommunications Service Provider Responsibilities, provides a list of activities that each TSP will need to address in its own network, systems and business operations.

In addition, this RIP does not cover issues for which there is already an established process for coordination between TSPs to establish service (e.g., interconnection agreements between carriers).

In the event that circumstances change after the date when the Commission approves this RIP, the RPC may propose modifications to this RIP as necessary.

### **Telecom Notice of Public Consultation CRTC 2009-308**

On 23 March 2009, the Canadian Numbering Administrator (CNA) advised the CRTC and the industry that NPA 819 had entered the relief planning window of 72 months according to the aggregate results from the 2009 General Numbering Resource Utilization Forecast (G-NRUF).

On 28 May 2009, the CRTC issued Telecom Notice of Consultation CRTC 2009-308 *Establishment of a CISC ad hoc committee for area code relief planning for area code 819 in western Quebec*, in which it established the CISC ad hoc Relief Planning Committee (RPC) for NPA 819.

### **Planning Document (PD)**

The RPC developed this RIP to implement relief for NPA 819 in accordance with the recommendations contained in the PD.

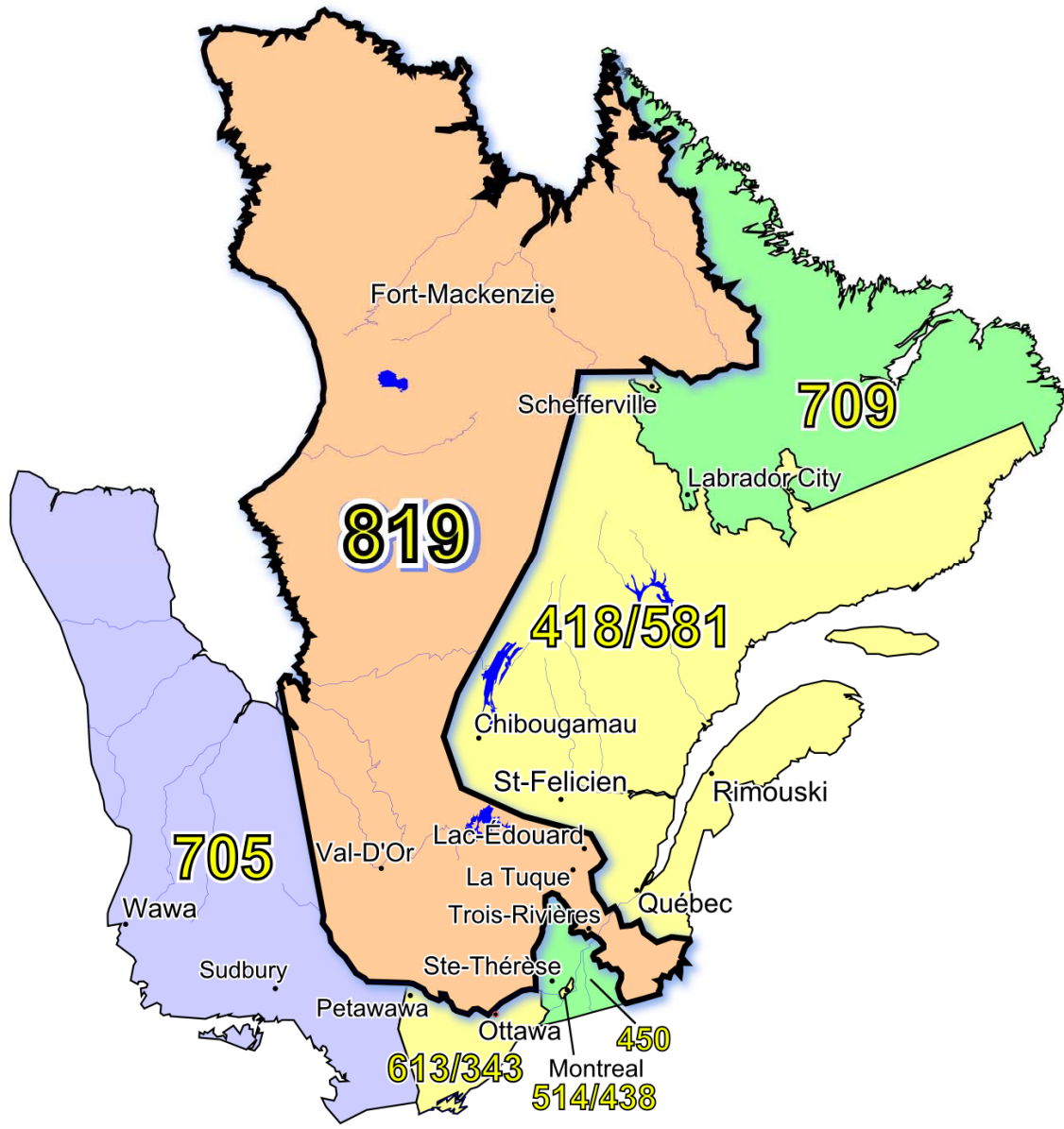
The Planning Document recommended relief as follows:

- 1) The Relief Option should be a new distributed overlay on NPA 819;

- 2) NPA Code 873 should be used for relief of NPA 819;
- 3) The Relief Date should be 1 June 2013 in order to provide Carriers and customers with sufficient lead-time to implement relief;
- 4) The local dialling plan should remain as 10 digits for all local calls originating within the NPA 819 area;
- 5) Per section 9 of the Planning Document, if a Jeopardy Condition is declared, it is recommended that the 7 CO Codes for initial code assignments for Carriers already providing service should be made available for general assignment prior to relief, and the 10 CO Codes for initial code assignments for new entrants only would also become available prior to relief for initial code assignments for new entrants only.
- 6) The following 12 CO Codes corresponding to Future Canadian Geographic NPA Codes should become assignable in the event of a Jeopardy Condition: 257, 273, 368, 387, 431, 468, 487, 584, 742, 851, 871, and 942.
- 7) Per note 3 of the NPA 819 CO Code Inventory Chart contained in section 11 of the Planning Document, it is recommended that in an extreme Jeopardy Condition (i.e., when the Projected Exhaust Date is earlier than the Relief Date), the 9 CO Codes corresponding to current Neighbouring NPA Codes (249, 343, 418, 450, 579, 613, 581, 705, 709) may be made assignable in certain portions of NPA 819 with CRTC staff approval.

### **Map of NPA 819**

A map showing NPA 819 is on the following page. The 819 Numbering Plan Area (NPA) consists of 211 Exchange Areas serving western Québec, which includes the major communities of Hull, Drummondville, Gatineau, Shawinigan, Sherbrooke, Trois Rivières, Val D'Or and Victoriaville.



## **Dial Plan Impacts**

As mandatory 10-digit local dialling was implemented throughout NPA 819 during 2006, and is in place in neighbouring NPAs, relief of NPA 819 will have no impacts on the local dial plans in NPA 819 and neighbouring NPAs.

Currently 10-digit dialling is required on local calls within NPA 819, and on local calls between Exchange Areas in NPA 819 and Exchange Areas in adjacent NPAs 207, 418/581, 450, 613, 705 and 802. The local calling between NPA 819 and its adjacent NPAs is listed in the table below.

<b>NPA 819 Exchange Area</b>	<b>Adjacent NPA</b>	<b>Exchange Areas in adjacent NPA within the Local Calling Area of the NPA 819 Exchange Area</b>
Aylmer	613	Ottawa-Hull
Bishopton	418/581	Stratford
Bromptonville	450	Valcourt
Buckingham	613	Ottawa-Hull
Champlain	418/581	Batiscan
Chapeau	613	Pembroke, Pembroke Independent
Chelsea	613	Ottawa-Hull
Deauville	450	Eastman, Mansonville
Deschaillons	418/581	St-Éduard-de-Lotbinère
Drummondville	450	Baie-de-Febvre, St-Pie-de-Guire, St-Zéphirin
East Angus	418/581	Stratford
Fort-Coulonge	613	Pembroke, Pembroke Independent
Gatineau	613	Orleans, Ottawa-Hull
Grand'Mère	418/581	St-Tite
Grenville	450	Lachute, St-Jérôme
Grenville	613	Alfred, Hawkesbury, L'Orignal, St-Eugene, Vankleek Hill
Kazabazua	613	Ottawa-Hull
Lac Drolet	418/581	Courcelles, Lambton
Lac Mégantic	418/581	Courcelles, Lambton
Laurierville	418/581	Inverness
Low	613	Ottawa-Hull
Luskville	613	Ottawa-Hull
Lyster	418/581	Inverness
Magog	450	Eastman, Lawrenceville, Mansonville
Maskinongé	450	St-Barthélémy
Montebello	613	Ottawa-Hull
Nantes	418/581	Courcelles, Lambton
Nicolet	450	St-Pie-de-Guire, St-Zéphirin
Notre-Dame-de-la-Salette	613	Ottawa-Hull
Ottawa-Hull	613	Almonte, Arnprior, Bourget, Carleton Place, Carp, Casselman, Chesterville, Clarence Creek, Constance Bay, Crysler, Cumberland, Embrun, Gloucester, Jockvale, Kanata-Stittsville, Kemptville, Lanark, Manotick, Merrickville, Metcalfe, Moose Creek, Navan, North Gower, Orleans, Osgoode, Pakenham, Plantagnet, Richmond, Rockland, Russell, Smiths Falls, South Mountain, St-Isidore-de-Prescott, Williamsburg, Winchester

<b>NPA 819 Exchange Area</b>	<b>Adjacent NPA</b>	<b>Exchange Areas in adjacent NPA within the Local Calling Area of the NPA 819 Exchange Area</b>
Papineauville	613	Ottawa-Hull
Perkins	613	Ottawa-Hull
Plessisville	418/581	Inverness, St-Ferdinand-de-Halifax
Quyón	613	Ottawa-Hull
Rock Island	802	Derby Line (Vermont USA)
Shawinigan	418/581	St-Tite
Shawville	613	Ottawa-Hull
Sherbrooke	418/581	Stratford
Sherbrooke	450	Eastman, Lawrenceville, Mansonville, Valcourt
South Durham	450	Acton Vale
St-Adolphe-de-Dudswell	418/581	Stratford
St-Andre-Avellin	613	Ottawa-Hull
St-Guillaume	450	St-Pie-de-Guire
St-Ludger	418/581	St-Gédéon-de-Beauce, St-Georges-de-Beauce
St-Nazaire d'Acton	450	Acton Vale, Ste-Hélène-de-Bagot, St-Hyacinthe
St-Pierre-de-Wakefield	613	Ottawa-Hull
St-Roch-de Mékinak	418/581	St-Tite
St-Sébastien (Frontenac CO)	418/581	Courcelles, Lambton
Temiscaming	705	North Bay, Redbridge, Thorne
Thurso	613	Ottawa-Hull
Trois-Rivières	418/581	Champlain, St-Tite, Ste-Adelpe, Ste-Anne-de-Pérade
Trois-Rivières	450	Baie-de-Febvre
Val-des-Bois	613	Ottawa-Hull
Wakefield	613	Ottawa-Hull
Weedon	418/581	Disraëli, Garthby, Stratford
Woburn	207	Coburn Gore (Maine USA)

The dial plans for calls originating in NPA 819 and the new overlay NPA will remain as follows:

<b>NPA</b>	<b>Local Dial Plan</b>		<b>Toll Dial Plan</b>	
	<b>Current</b>	<b>Future</b>	<b>Current</b>	<b>Future</b>
819/873	10 digits	10 digits	1 + 10 digits	1 + 10 digits

Currently 10-digit dialling is mandatory for local calls originating in adjacent area codes and terminating in the area served by area code 819. Mandatory 10-digit local dialling will continue to apply for all local calls originating in adjacent area codes and terminating in the area served by area code 819 when a new overlay area code is added to the area served by area code 819.

## **2. NPA RELIEF PLANNING PROCESS**

NPA Relief Planning is conducted under the regulatory oversight of the Commission in accordance with the Canadian NPA Relief Planning Guidelines. Those Guidelines were developed by the Canadian Steering Committee on Numbering (CSCN), accepted by the CISC and approved by the Commission.

The Canadian NPA Relief Planning Guidelines and related information on relief planning may be obtained from the [www.cnac.ca](http://www.cnac.ca) web site. The CISC operates under the CISC Administrative Guidelines that may be obtained from the Commission web site (see [www.crtc.gc.ca](http://www.crtc.gc.ca)).

For each NPA projected to exhaust within a 72 month time period, the Commission informs the public that an RPC, chaired by the CNA, will be formed as an Ad Hoc Working Group of the CISC to do relief planning for the exhausting NPA. Any interested party may participate in the relief planning process. All RPCs operate as open public forums. Any party wanting to participate in this process is encouraged to visit the above web sites to obtain information on the process and schedule of events and activities. Any questions regarding the relief planning process may be directed to the CNA as follows:

Contact: Glenn Pilley  
Telephone: 613-683-3289  
Facsimile: 613-563-9293  
E-mail: [pilleyg@saiccanada.com](mailto:pilleyg@saiccanada.com)  
Address: CNA – SAIC Canada  
Suite 1516 - 60 Queen Street  
Ottawa, Ontario, Canada K1P 5Y7

Individual TSPs are responsible for their own activities to implement relief (see Attachment 3). Each TSP employs a variety of information and operation support systems for the operation, maintenance, control, and administration of its network and to serve its customers. Each TSP is responsible to make the necessary changes in its systems in order to operate in the new environment and specifically to process the full 10-digit telephone number of each subscriber. Each TSP is responsible to ensure its customers are informed and implement the changes necessary to support the relief activity. Also, each TSP is responsible to ensure its own suppliers of products and services (e.g., Operator Services) implement the changes necessary to support the relief activity. Accordingly, no activities have been identified for the coordination of these functions between different TSPs, except as otherwise provided for in this RIP (e.g., Consumer Awareness Program (CAP) and Network Implementation Plan (NIP)).

Individual TSPs and industry database owners/operators shall advise Commission staff of any concerns or problems as they arise with respect to modifying their systems and databases in time to implement relief in accordance with this RIP.

### **3. PROPOSED NPA RELIEF IMPLEMENTATION TASK FORCE(S)**

The RPC developed this RIP with the assistance and input of two Task Forces created by the RPC:

- 1) Consumer Awareness Task Force (CATF), and
- 2) Network Implementation Task Force (NITF).

The CNA will send an e-mail to all current and prospective Code Holders in the affected NPA requesting those entities to provide a contact name to the Co-chairs of the two Task Forces (with a courtesy copy to Commission staff). Independent telephone companies may choose to represent themselves or to be represented by their associations.

Each Task Force has at least one voluntary Co-chair. The Co-chairs of the CATF and NITF act as the single point of contact and spokespersons for their respective Task Forces. The Co-chairs maintain the list of participants on their Task Forces as confidential. All TSPs operating in the affected NPAs have a participant on each of the Task Forces.

The two Task Forces have developed and submitted separate but coordinated plans for their respective activities:

- 1) Consumer Awareness Program (CAP), and
- 2) Network Implementation Plan (NIP).

Individual TSPs are expected to develop individual consumer awareness programs and network implementation plans within the parameters of the CAP and NIP contained in this RIP. The CATF and NITF will meet periodically to perform their industry level functions identified in this RIP. The RPC will provide oversight and coordination of the CATF and NITF in accordance with the RIP.

### **Consumer Awareness Task Force (CATF)**

The purpose of the CATF is to develop a comprehensive and consistent consumer awareness program for relief activities in this NPA, and to forward it to the CISC by the due date in the Relief Implementation Schedule.

To develop a CAP, the RPC created a CATF. Each TSP operating in this NPA is requested to provide the name of a representative to serve on the CATF. The CATF is Co-chaired by volunteer participants of the CATF. The Co-chairs of the CATF compile, maintain and distribute the list of all representatives on the CATF to the CATF distribution list (i.e., contact name, title, telephone number, fax number, street address, e-mail address), including the CNA.

#### Purpose and Mandate

The responsibilities of the CATF include, but are not limited to:

- 1) Develop and agree on a CAP and schedule;
- 2) Develop and submit progress reports;
- 3) Identify and address CAP issues;
- 4) Act as single point of contact on CAP issues; and,
- 5) Identify any consumer concerns or issues regarding the implementation of relief and advise the RPC, the Commission or Commission staff as appropriate.

The role of the individual CATF representative of each TSP is to ensure that its TSP organization develops, submits and implements its individual consumer awareness program in accordance with the CAP and associated schedule. Each representative acts as the single point of contact with respect to implementation of the CAP and activities for its organization. Each TSP is responsible for developing, submitting and implementing its individual consumer awareness program in accordance with the industry level CAP.

All TSPs shall provide progress reports to the CATF for submission to the RPC in accordance with the Relief Implementation Schedule.

Individual TSPs should notify the CATF, or Commission staff, or the Commission, as appropriate, if there are any problems or concerns with respect to their individual consumer awareness program activities to implement relief in accordance with this RIP.

The recommended CAP is attached to this RIP (see Attachment 1).

### **Network Implementation Task Force (NITF)**

The purpose of the NITF is to develop a Network Implementation Plan (NIP) to be submitted to the CISC. This complies with the Canadian NPA Relief Planning Guidelines.

Each TSP operating in this NPA is requested to provide the name of a representative to serve on the NITF. The NITF is Co-chaired by volunteer participants of the NITF. The Co-chairs of the NITF compile, maintain and distribute the list of all representatives on the NITF to the NITF distribution list (i.e., contact name, title, telephone number, fax number, street address, e-mail address), including the CNA.

#### Purpose and Mandate

The role of the NITF is to identify and address network implementation issues that affect all carriers. The responsibilities of the NITF include, but are not limited to:

- 1) Develop and agree on a NIP and schedule;
- 2) Develop and submit progress reports;
- 3) Identify and address NIP issues;
- 4) Act as single point of contact on NIP issues;
- 5) Identify any network concerns or issues regarding the implementation of relief and advise the RPC, the Commission or Commission staff as appropriate; and,
- 6) Develop inter-network test plans, as necessary.

The role of the individual NITF representative of each TSP is to ensure that its TSP organization develops, submits and implements its individual network implementation plan in accordance with the NIP and associated schedule. Each representative acts as the single point of contact for implementation of the NIP and activities for its organization. Each TSP is responsible to develop, submit and implement its individual network implementation plan in accordance with the industry level NIP.

All TSPs shall provide progress reports to the NITF for submission to the RPC in accordance with the Relief Implementation Schedule.

Test Plans and Tests shall be arranged on a bilateral basis between interconnecting TSPs in accordance with bilateral agreements and the Relief Implementation Schedule.

Individual TSPs and industry database owners/operators (e.g., Canadian Local Number Portability Consortium) should notify the NITF, or Commission staff, or the Commission, as appropriate, if there are any problems or concerns with modifying their systems and databases in time to implement relief in accordance with this RIP.

The recommended NIP is attached to this RIP (see Attachment 2).

#### **4. PROPOSED NPA RELIEF IMPLEMENTATION SCHEDULE**

The following table identifies the major implementation activities, deliverables and associated dates based upon the tasks identified in the Canadian NPA Relief Planning Timeline as well as major events in both the CAP and NIP. All TSPs and telecommunications service users should plan their internal relief activities in accordance with the following Relief Implementation Schedule.

**RELIEF IMPLEMENTATION SCHEDULE**  
**NPA 819 Relief**  
**(Implementation of Overlay NPA 873)**

	<b>ITEM</b>	<b>PRIME</b>	<b>START</b>	<b>END</b>
1	CNA identifies NPA exhaust and notifies CRTC staff, CSCN, NANPA & CISC	CNA	23 Mar 2009	23 Mar 2009
2	CNA conducts first R-NRUF (June 2009 R-NRUF)	CNA	1 June 2009	12 June 2009
3	CRTC issues Notice of Consultation regarding RPC Ad Hoc CISC and Interested Parties list	CRTC		28 May 2009
4	CNA develops and distributes IPD to RPC	CNA	12 June 2009	14 Sept 2009
5	CNA holds initial RPC meeting to review NPA 819 situation, relief planning process, IPD, create CATF and NITF, and commence development of Planning Document (PD), Planning Letter (PL) and Relief Implementation Plan (RIP)	CNA	1 Oct 2009	2 Oct 2009
6	CNA chairs subsequent RPC meetings & conference calls to finalize PD, PL & RIP	CNA RPC	5 Oct 2009	17 Nov 2009
7	CNA submits PD, PL & RIP to the CISC and CRTC for approval	CNA		24 Nov 2009
8	Special Types of Telecommunications Service Users (911 PSAPs, N11 call center operators, alarm companies, ISPs, paging companies, etc.) to identify any concerns regarding relief to CRTC	Special Users	28 May 2009	17 Nov 2009
9	CRTC issues Telecom Decision approving Relief Method, Relief Date, PL and RIP	CRTC		31 Jan 2010
10	CNA requests relief NPA from NANPA		31 Jan 2010	8 Feb 2010
11	All Carriers to develop Consumer Awareness Plans to be filed with the CRTC (may be done collectively by the Telecommunications Alliance)		31 Jan 2010	3 15 Feb 2012
12	CNA prepares and issues media release (in coordination with Telecommunications Alliance)	CNA	31 Jan 2010	1 June 2012
13	CNA submits PL and RIP to NANPA	CNA		1 June 2012
14	NANPA Posts Planning Letter (usually at least 12 months prior to Relief Date)	NANPA	1 June 2012	8 June 2012
15	Task Forces, Carriers and users implement relief	Task Forces TSPs Users	31 Jan 2010	1 June 2013
16	All Carriers implement consumer awareness activities	Carriers	15 Feb 2012	1 June 2013
17	All Carriers to notify all customers (including residence, business & special customers) of the new NPA	Carriers	15 Feb 2012	1 June 2012
18	Telcordia TRA database updates to add exchanges to NPA 873 (starts on the issue date of the PL and must be completed by 6 months prior to the relief date for the distributed overlay)	Telcordia TRA	8 June 2012	1 Dec 2012

	ITEM	PRIME	START	END
19	All Telecommunications Service Users (including Special Users 911 PSAPs, alarm companies, ISPs, paging companies, etc.) to implement changes to their telecom equipment & systems to accommodate the new NPA		31 Jan 2010	1 June 2013
20	Payphone Providers Reprogram Payphones	Payphone Providers	31 Jan 2010	1 June 2013
21	TSPs and database owners/operators to modify systems and industry databases	Database Owners	31 Jan 2010	1 June 2013
22	Operator Services & Directory Assistance Readiness	Carriers	31 Jan 2010	1 June 2013
23	Directory Publisher Readiness for overlays (ability to identify the NPA in telephone numbers in the directory published after the Overlay NPA is activated)	Directory Publishers	31 Jan 2010	1 June 2013
24	9-1-1 PSAP Systems and Databases Readiness	PSAPS & TSPs	31 Jan 2010	1 June 2013
25	9-1-1 TSP Readiness	TSPs	31 Jan 2010	1 June 2013
26	ISCP & Service Order Systems Readiness	Carriers	31 Jan 2010	1 June 2013
27	Carriers to submit Progress Report #1 to NITF and CATF	Carriers	1 June 2012	15 June 2012
28	NITF and CATF develop & submit Progress Report #1 to RPC	NITF & CATF	15 June 2012	29 June 2012
29	RPC develops & submits Progress Report #1 to CISC/CRTC	RPC	29 June 2012	13 July 2012
30	Carriers apply for Test CO Codes in new NPA (no more than 6 months and no less than 66 days prior to the start date for testing (Section 7.16.4 Canadian RP GL))	TSPs	1 Sep 2012	1 Mar 2013
31	Develop Inter-Carrier Network Test Plans and prepare for testing (individual carriers to make arrangements in accordance with interconnection agreements)	NITF Carriers	31 Jan 2010	1 Mar 2013
32	All international and domestic Telecommunications Service Providers (TSPs) should ensure that the new NPA is activated throughout their networks by the start date for network testing	TSPs		1 Mar 2013
33	Carriers to submit Progress Report #2 to NITF and CATF	Carriers	1 Mar 2013	15 Mar 2013
34	NITF and CATF develop & submit Progress Report #2 to RPC	NITF & CATF	15 Mar 2013	29 Mar 2013
35	RPC develops & submits Progress Report #2 to CISC/CRTC	RPC	29 Mar 2013	12 Apr 2013
36	Inter-Carrier Testing Period (subject to Inter-Carrier Network Test Plans –continues up to introduction of new NPA)	NITF Carriers	1 Mar 2013	1 June 2013
37	Relief Date (earliest date when CO Codes in new NPA may be activated)			1 June 2013
38	Carriers submit Final Report to CATF and NITF	Carriers	1 June 2013	15 June 2013
39	Submission of NITF and CATF Final Report to RPC	NITF & CATF	15 June 2013	29 June 2013
40	RPC submits Final Report to CISC/CRTC	RPC	29 June 2013	13 July 2013
41	Carriers disconnect Test Codes & Numbers, and submit Part 1 form to return or request Test Codes		1 July 2013	1 Aug 2013

## **5. OTHER ISSUES**

### **Payphone Service Providers**

All Payphone Service Providers are required to comply with the requirements contained in this RIP and Commission Decisions.

It is the responsibility of each Payphone Service Provider to update any system associated with the operation of their payphones in order to accommodate relief. It is recommended that Commission staff notify Payphone Service Providers of the implementation of relief for this NPA and the new overlay NPA Code.

Individual Payphone Service Providers should notify the Commission or Commission staff, as appropriate, if they have any problems or concerns.

### **Telecommunication Service Users**

All users are required to comply with the requirements contained in this RIP and Commission Decisions.

Users of telecommunications services are required to make the necessary changes to their telecommunications systems and equipment to accommodate the new overlay NPA Code. Users include, but are not limited to, 9-1-1 Public Safety Answering Points (PSAPs), alarm companies, internet service providers, paging companies, owners of Customer Premises Equipment, unified messaging service companies, governments, apartment building owners, hydro meter readers and the general public.

Special types of Telecommunication Service Users (e.g., 911 PSAPS, N11 Service Providers (i.e., the entities that provides the services that are accessed via dialling the N11 Codes), alarm companies, internet service providers, paging companies, owners of Customer Premises Equipment requiring modification, unified messaging service companies, governments, apartment building owners, hydro meter readers) must take special measures to ensure that their services continue to function properly. All special types of Telecommunication Service Users are requested to co-ordinate their equipment and system modifications with their Carriers to implement the new overlay NPA. This is necessary to ensure a smooth and timely transition.

Users of telecommunications services should notify their TSP and the Commission or Commission staff, as appropriate, if they have any problems or concerns with modifying their systems and databases in time to implement relief in accordance with this RIP. It is important that service users, in particular alarm service providers, make the required or necessary modifications to their systems, databases and terminal equipment.

9-1-1 PSAPS must make any required changes to their systems and databases to accommodate the new overlay NPA. Individual 9-1-1 PSAP system operators shall identify specific problems or concerns to the Commission or Commission staff, as appropriate. It is critically important that 9-1-1 PSAPs make the required or necessary modifications to their systems, databases and terminal equipment prior to the relief date.

## **Directories**

All Directory Service Providers are required to comply with the requirements contained in this RIP and Commission Decisions.

It is the responsibility of Directory Service Providers to make the necessary changes to their systems and directories to facilitate the introduction of the new overlay NPA Code. All directory publishers should modify their systems to accept telephone numbers in the 10-digit format.

To facilitate the implementation of the new overlay NPA code, directories must contain appropriate dialling instructions and information.

After the implementation of the new overlay NPA, all future directories in the NPA 819 area should identify the NPA associated with the telephone number so that customers can obtain the appropriate 10-digit number.

## **6. RECOMMENDATIONS**

The RPC submits this RIP to the CISC and the CRTC for approval and recommends that relief be implemented in accordance with the enclosed Relief Implementation Schedule, Consumer Awareness Program (CAP) and Network Implementation Plan (NIP).

### **Attachments:**

- 1) Consumer Awareness Program (CAP)
- 2) Network Implementation Plan (NIP)
- 3) Individual Telecommunications Service Provider Responsibilities

## **ATTACHMENT 1**

### **Consumer Awareness Program (CAP)**

#### **Introduction**

The RPC has established a Consumer Awareness Task Force (CATF) to develop and implement this CAP.

This CAP identifies key milestones and establishes completion dates as agreed to by the RPC. It is the responsibility of all Telecommunications Service Providers (TSPs) operating or intending to operate in NPA 819 to file their individual consumer awareness plans with the Commission in accordance with the Relief Implementation Schedule. TSPs must implement those programs in accordance with this industry CAP and submit progress reports to the CATF and RPC for inclusion in the Progress and Final Reports to be filed with the Commission. The Relief Implementation Schedule contains start and end dates for industry consumer awareness activities (see the Relief Implementation Schedule included in this Relief Implementation Plan).

In order to implement the CAP, TSPs may act individually or collectively to accomplish their objectives. However, where TSPs act collectively (e.g., Telecommunications Alliance), such TSPs are individually responsible to report their progress to the CATF and RPC.

All TSPs are required to report any major relief plan concerns as they are identified, along with proposed solutions, and to address consumer concerns reported directly to the Commission.

As there are both French and English speaking communities within NPA 819, there is a need to provide communications in both official languages. Communications may also be provided in additional languages at the option of TSPs.

The RPC requested that the CATF develop a CAP that incorporates the following:

- 1) Develop and agree on a CAP schedule
- 2) Co-ordinate and schedule progress reports with the NITF
- 3) Identify and address CAP issues
- 4) Communications objectives
- 5) Target audiences (e.g., government, media and various business and residence market segments)
- 6) Special types of telecommunications users (e.g., alarm, apartment owners, hydro readers)
- 7) NPA-specific communications messages (i.e., in the exhausting NPA as well as affected Exchange Areas in neighbouring NPAs, if any)
- 8) Communications tactics
- 9) Communications theme
- 10) Key messages

### **Communications Objectives**

The Communications Objectives of this CAP are as follows:

- 1) Increase consumer and user awareness of the introduction of the new NPA in the NPA 819 area.
- 2) Advise callers that the prefix 1 is not required for local 10-digit dialling to, from, within the new overlay NPA Code.
- 3) Provide open communication channels to address questions and concerns from residents and businesses regarding the implementation of the new NPA Code.
- 4) Continue to lay the foundation for seamless addition of new NPAs in the future.

### **Communications Tactics**

TSPs should consider using the following tactics to accomplish their individual consumer awareness program activities. TSPs may opt to implement some or all of these tactics on their own or as part of an association with other TSPs. In the event that an association of TSPs is formed to coordinate consumer awareness activities, all TSPs operating in the affected NPAs are strongly encouraged to participate in the association activities.

#### **Government Relations**

TSPs should ensure that governmental authorities in the affected NPAs are informed of the relief plan (federal, provincial and municipal governments, government offices, and elected representatives).

#### **Media Relations**

To introduce and raise awareness of the new NPA Code, TSPs should conduct an ongoing media relations campaign targeting key media (including local newspapers, broadcast media, and community publications) in the exhausting NPA. TSPs should offer spokespersons for interviews that focus on how residents and businesses can prepare for the transition and to encourage them to start getting ready now.

TSPs should determine newsworthy announcements and issue press releases accordingly. The press release program will serve to update local media on the introduction of the new NPA Code.

When required, TSPs should issue a series of media alerts and public service announcements to local radio and broadcast stations to provide updated information on 10-digit local dialling.

Each TSP shall provide the news media and general public with basic information about the new NPA Code and Commission decisions and regulations. Each TSP should identify its own spokesperson to speak on its behalf to the media. Individual TSPs may form alliances with other TSPs for media relations purposes and such an alliance may also have its own spokesperson.

The Canadian Numbering Administration (CNA), in its role as the Chair of the RPC, shall act as a spokesperson for the RPC.

### Telecommunications Service Providers' Web Sites

TSPs should provide up-to-date information about the implementation of the new NPA Code on their Internet web sites.

### Customer Bill Inserts & Messages

TSPs should print information on customer bills and/or distribute bill inserts to their customers advising them of the key dates for the implementation of the new NPA Code and associated changes required to customer equipment and systems.

### Advertising Campaign

TSPs should implement their own individual media advertising as necessary and voluntarily participate in a media advertising campaign coordinated with other TSPs' activities to increase awareness amongst consumers in the affected NPAs. All media advertising campaigns, whether conducted individually or collectively, should meet the objective of providing clear and consistent messages to consumers and users as established in this CAP.

### Targeted Customer Communications

TSPs should identify and communicate directly with their customers who will be required to make major changes to their telecommunications equipment and systems to accommodate the new NPA Code. Targeted communications identifying the changes required should be sent to those customers well in advance of the relief date in order to provide those customers with sufficient time to make the necessary changes. Such targeted customers may include 9-1-1 Public Safety Answering Points (PSAPs), alarm companies, Internet service providers, paging companies, unified messaging service companies, apartment building owners, and hydro meter readers.

### Other Means of Customer Communications

TSPs should use other means (e.g., customer messaging, direct customer contacts, Interactive Voice Response, etc.), as required, to reach their customers and provide appropriate information about the implementation of the new NPA Code.

### Communications Themes and Key Messages:

The proposed theme for the CAP should be:

“New area code 873 is being added to the 819 area.”

This theme should be reinforced with more detailed key messages in customer awareness activities:

- 1) To meet the growing demand for telecommunications services and numbers, new area code 873 will be introduced in the 819 geographic area in **June 2013**. The new area code will co-exist within the same geographic region as area code 819. There will be no change to customers' existing 819 telephone numbers.

Telephone numbers beginning with the new area code may be assigned for use starting **1 June 2013**.

- 2) 10-digit dialing will continue to be used for local calls within the area served by area codes 819 and 873. Prefix 1+ will not be required for local calls between area codes 819 and 873; however long distance calls will continue to be dialed using 1+ 10-digits.
- 3) Local and long distance calling areas and prices will not change with the adoption of the new overlay NPA Code. Customers with telephone numbers in the new area code 873 will get the same calling areas and prices as customers in the same exchange areas with telephone numbers in area code 819.
- 4) Emergency calls (911 and other N11 services will continue to be dialled using 3-digits.

#### **Consumer Awareness Program Timeline**

All TSPs who have or plan to have customers in the affected NPAs must implement their own consumer awareness program activities in accordance with this CAP and associated dates contained in the Relief Implementation Schedule.

It is the responsibility of each TSP to submit its individual consumer awareness program to the Commission and to provide progress reports to the CATF on its own consumer awareness program activities so that the CATF can submit its required Progress Reports. In the event that a TSP does not submit its individual progress report to the CATF, the CATF will note this discrepancy in its progress report.

## **ATTACHMENT 2**

### **Network Implementation Plan (NIP)**

#### **Introduction**

The Canadian NPA Relief Planning Guidelines require the RPC to create a Network Implementation Task Force (NITF) with a mandate to develop a Network Implementation Plan (NIP) for implementing relief and to submit such NIP to the CISC.

Accordingly, the RPC has established a Network Implementation Task Force (NITF) to develop and implement this NIP.

This NIP addresses the introduction of new NPA code 873 in the NPA 819 area.

The NIP identifies key milestones and establishes completion dates as agreed to by the RPC. It is the responsibility of all Telecommunications Service Providers (TSPs) operating or intending to operate in the area served by NPA 819 to file their individual network implementation plans with the Commission in accordance with the Relief Implementation Schedule. TSPs must implement those programs in accordance with this industry NIP and submit progress reports to the NITF and RPC for inclusion in the Progress and Final Reports to be filed by the RPC with the Commission.

All TSPs are required to report any major relief plan concerns as they are identified, along with proposed solutions, and to address consumer concerns reported directly to the Commission.

The RPC requested that the NITF develop a NIP in accordance the Canadian NPA Relief Planning Guidelines that incorporates the following:

- 1) Develop and agree on a NIP schedule
- 2) Co-ordinate and schedule progress reports with the CATF
- 3) Identify and address NIP issues
- 4) Network implementation objectives
- 5) Co-ordinate equipment modifications with special types of telecommunications users (e.g., alarm companies, apartment building owners, hydro meter readers)
- 6) NPA-specific Network changes
- 7) Intercarrier network and technical interfaces (e.g., test plan and test numbers, 9-1-1 impacts if any)

#### **Network Implementation Objectives**

The objective of this NIP is to ensure that all necessary network and interconnections are modified to implement the overlay NPA Code 873 in the NPA 819 area.

All Carriers are required to implement the necessary network changes to implement relief.

### **TSP Coordination with Special Types of Telecommunications Users**

All TSPs are requested to co-ordinate their network and service modifications with special types of telecommunications users (e.g., 9-1-1 Public Safety Answering Points (PSAPs), alarm companies, internet service providers, paging companies, owners of Customer Premises Equipment, unified messaging service companies, governments, apartment building owners, hydro meter readers). This is necessary in order to ensure a smooth and timely introduction of the new overlay NPA Code.

### **Test Codes, Numbers & Plans**

All TSPs are required to modify their networks, systems, databases, and operator services and directory assistance databases, to accommodate the new NPA Code as per the Relief Implementation Schedule.

Test plans, if required, should be arranged on a bilateral basis between interconnecting TSPs in accordance with bilateral agreements.

In preparation for the start of inter-carrier testing, all TSPs are expected to complete modifications to their networks, systems, databases, and Operator Services and Directory Assistance databases, as necessary and per the Relief Implementation Schedule to facilitate intercarrier testing.

Test numbers in the new NPA Code will permit all carriers and other entities to test their equipment and ensure that the proper network changes have been made to route calls to each carrier operating in the new NPA Code. The test numbers shall permit TSPs and users to test their equipment both with and without having to incur toll charges.

Each Carrier may establish two test numbers in a test CO Code (NXX) for the new NPA to facilitate testing of network and billing system functionality. Routing of calls to the new NPA can be verified by dialling the new NPA-NXX-8378 (TEST) numbers which shall not provide answer supervision and therefore shall not result in a billed call to the "calling" party. Billing of calls to the new NPA can be verified by dialling the new NPA-NXX-2455 (BILL) numbers which shall provide answer supervision and therefore shall result in a billed call to the "originating" network.

The following Carriers have agreed to provide test numbers in the new NPA:

- Bell Canada
- Rogers Wireless Communications
- TELUS Quebec
- Additional Carriers may volunteer to provide test numbers in the future (e.g., Telebec and MTS Allstream)

Other carriers may request and receive test CO Codes and numbers for publication in the Test Plan, in accordance with the timeframe contained in the Relief Implementation Schedule.

The test numbers must be activated in all networks by the date in the Relief Implementation Schedule and remain active until at least one month after the Relief Date.

The test CO Codes used for the test numbers must be returned to the CNA in accordance with the Relief Implementation Schedule. The CNA shall initiate CO Code reclamation in accordance with the Canadian Central Office (NXX) Code Assignment Guideline for all CO Codes allocated for testing purposes in the event that such CO Codes are not returned by the above carriers to the CNA in accordance with the Relief Implementation Schedule.

The standard network announcement for the test number must be as follows:

“La communication a été établie avec succès au numéro de vérification de l'indicatif régional 873, à [NOM DU TÉLÉCOMMUNICATEUR], Québec, Canada. You have successfully completed a call to the 873 Area Code Test Number at [CARRIER NAME] in Québec, Canada.”

In accordance with the Canadian Central Office Code (NXX) Assignment Guideline, TSPs may request other test CO Codes in the new NPA for test purposes within their own networks during the relief implementation timeframe.

#### **Date for CO Code Activation in the New NPA (Relief Date)**

The Effective Date for the introduction of the new NPA is 1 June 2013, which is the earliest date that a CO Code from the new NPA can be activated in the PSTN. This date is the Relief Date.

#### **9-1-1 Service**

The introduction of the new Overlay NPA Code will not have any impact on the dialling of the 9-1-1 abbreviated dialling number nor the routing of emergency calls to the appropriate Public Service Answering Point (PSAP).

However, the introduction of the new NPA may have an impact on 9-1-1 service, trunking and systems.

TSPs who intend to provide service using CO Codes in the new NPA or to port numbers into their switch from the new NPA, shall establish 9-1-1 trunking and associated interconnection arrangements as per existing interconnection agreements. TSPs that provide 9-1-1 networking services to any PSAP shall establish 9-1-1 trunking and associated interconnection arrangements as per existing interconnection agreements. These arrangements shall be made prior to the Relief Date upon request of TSPs, and provided that these arrangements are in accordance with the timelines, terms and conditions set out in existing interconnection agreements.

The existing procedure for implementing new TSP trunk groups for 9-1-1 traffic should be used, such as testing with other TSPs' 9-1-1 Control Centers. All TSP related changes that impact 9-1-1 must be completed in accordance with the Relief Implementation Schedule.

### **Other N-1-1 Services**

Carriers should review routing to other N-1-1 numbers including 211, 311, 411, 511, 611, 711 and 811 as necessary to ensure that calls will be properly routed.

### **Payphone Service Providers**

It is the responsibility of each Payphone Service Provider to update any system associated with the operation of their payphones in order to accommodate the new NPA Code.

The RPC recommended that Commission staff notify Payphone Service Providers of the implementation of relief for this NPA, and the new overlay NPA Code.

### **International Gateway Service Providers**

International Gateway Service Providers are responsible to implement changes to their network in order to accommodate the new NPA.

The RPC recommended that Commission staff notify Canadian International Gateway Service Providers of the implementation of the new NPA.

### **Intra Carrier Network and Customer Interface**

All TSPs must make and test the necessary internal system, network and customer interface changes as per the Relief Implementation Schedule in order to accommodate the new NPA.

All TSPs are required to implement the necessary network changes to route traffic to/from the new NPA. Switch translations must be updated and modified in all TSPs' networks in order to process calls to/from the new NPA.

By the start of the inter-carrier testing period, Carriers must use 10-digit signalling for all local traffic they send to other Carriers, and must be able to receive 10-digit signalling on local traffic they receive from other carriers. In the event that Carriers have network equipment limitations that cannot accommodate 10-digit signalling, alternative arrangements may be negotiated with interconnecting carriers to route calls using only 7-digit signalling, where feasible.

Each TSP is responsible for determining the impact of the new NPA Code on its network, systems and operations including the products and services it provides to its own customers. Each TSP is responsible for making all necessary modifications to ensure service will be maintained during and after the relief implementation period for its own customers. Furthermore, TSPs shall notify all of their customers of the introduction of the new NPA Code in accordance with the Consumer Awareness Program (CAP) (see Attachment 1 to the Relief Implementation Plan).

### **Network Implementation Plan Timeline & Progress Reports**

All TSPs who have or plan to have customers in the affected NPAs must implement their own network implementation plan activities in accordance with this NIP and associated dates contained in the Relief Implementation Schedule.

It is the responsibility of each TSP to provide progress reports to the NITF on its own network implementation plan activities so that the NITF can submit its required Progress Reports to the RPC. In the event that a TSP does not submit its individual progress report to the NITF, the NITF will note this discrepancy in its Progress Report. If a TSP does not submit its Progress Report to the NITF, it must submit it directly to the CRTC.

### **Dial Plan Changes**

As mandatory 10-digit local dialling was implemented throughout NPA 819 during 2006, and is in place in neighbouring NPAs, relief of NPA 819 will have no impacts on the local dial plans in NPA 819 and neighbouring NPAs.

The dial plans for calls originating in NPA 819 and the new overlay NPA will remain as follows:

<b>NPA</b>	<b>Local Dial Plan</b>		<b>Toll Dial Plan</b>	
	<b>Current</b>	<b>Future</b>	<b>Current</b>	<b>Future</b>
819/873	10 digits	10 digits	1 + 10 digits	1 + 10 digits

Currently 10-digit dialling is mandatory for local calls originating in adjacent area codes and terminating in the area served by area code 819. Mandatory 10-digit local dialling will continue to apply for all local calls originating in adjacent area codes and terminating in the area served by area code 819 when a new overlay area code is added to the area served by area code 819.

### **ATTACHMENT 3**

#### **Individual Telecommunications Service Provider Responsibilities**

Each Telecommunications Service Provider (TSP) is responsible to make the necessary changes in their information and operation support systems as well as for the operation, maintenance, control, and administration of its network and to serve its customers. Accordingly, no activities have been identified in the Relief Implementation Plan (RIP) for the coordination of these functions between different TSPs. Such "internal" systems include, but are not limited to, the following functions:

- Operations Support
- Products & Services
- Marketing & Sales
- Carrier Services
- Network Planning & Provisioning
- Network Operations
- Service Assurance
- Billing
- Financial Systems
- Customer Care & Customer Services (e.g., Business Offices)
- Operator Services
- Directories
- Direct Marketing Centers
- Quality Control
- Service Provisioning & Activation
- Repair Services
- Human Resources/Logistics
- Corporate Information Databases
- Customer Provided Equipment Reprogramming, Upgrades and Testing