

Initial Planning Document (IPD)

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**Acronym List**

|  |  |
| --- | --- |
| CATF | Consumer Awareness Task Force |
| CNA | Canadian Numbering Administrator |
| CISC | CRTC Interconnection Steering Committee |
| CLECs | Competitive Local Exchange Carriers |
| CLNPC | Canadian Local Number Portability Consortium |
| CO | Central Office |
| CRTC | Canadian Radio-television and Telecommunications Commission |
| G-NRUF | General Numbering Resource Utilization Forecast |
| ILECs | Incumbent Local Exchange Carriers |
| IPD | Initial Planning Document |
| ISP | Internet Service Provider |
| JCP | Jeopardy Contingency Plan |
| J‑NRUF | Jeopardy Numbering Resource Utilization Forecast |
| LCA | Local Calling Area |
| LEC | Local Exchange Carrier |
| LIRs | Local Interconnection Regions |
| MBIs | MIN Block Identifiers |
| MDNs | Mobile Directory Numbers |
| MIN | Mobile Identification Number |
| NANP | North American Numbering Plan |
| NANPA | North American Numbering Plan Administration |
| NITF | Network Implementation Task Force |
| NPA | Numbering Plan Area (Area Code) |
| NRUF | Number Resource Utilization Forecasts |
| OSSs | Operating Support Systems |
| PBX | Primary Branch Exchange |
| PD | Planning Document |
| PED | Projected Exhaust Date |
| PL | Planning Letter |
| POI | Point of Interconnection |
| PSAP | Public Safety Answering Point |
| RIP | Relief Implementation Plan |
| R-NRUF | Relief Planning Numbering Resource Utilization Forecast |
| RPC | Relief Planning Committee |
| TSPs | Telecommunications Service Providers |
| WNP | Wireless Number Portability |
| WSPs | Wireless Service Providers |

NPA 403/587/780 Initial Planning Document (IPD)

# Introduction

Numbering Plan Area (NPA, area code) 403/587/780 consists of 337 Exchange Areas including the rapidly growing exchanges of Calgary, Edmonton, Red Deer, Fort McMurray, Lethbridge, Grande Prairie, Medicine Hat and High River, located in the province of Alberta in Canada. The majority of the projected growth in NPA 403/587/780 is mainly limited to these eight (8) Exchange Areas. In the remaining 329 Exchange Areas there is very little projected growth.

The Canadian Numbering Administrator (CNA) initiated Relief Planning based on the results of the July 2012 NPA 403/587/780 Relief Planning Numbering Resource Utilization Forecast (R‑NRUF), which indicated NPA 403/587/780 would exhaust in June 2017.

On 5 October 2012, the CNA advised the Canadian Radio‑television and Telecommunications Commission (CRTC) and industry that NPA 403/587/780 had entered the Relief Planning window of 72 months according to the aggregate results from the July 2012 R-NRUF.

On 29 November 2012, the CRTC issued Telecom Notice of Consultation CRTC 2012‑656, *Establishment of a CISC ad hoc committee for area code relief planning for area codes 403, 587 and 780 in Alberta*, by which it established the CISC ad hoc Relief Planning Committee (RPC) for NPA 403/587/780. The Notice of Consultation directed the RPC to set aside 7 CO Codes for initial code assignments for Carriers already providing service in area codes 403, 587 and 780, and 10 CO Codes for initial code assignments exclusively for new entrants.

The January 2013 NPA 403/587/780 R‑NRUF results, when adjusted for the CO Codes set aside per Telecom Notice of Consultation CRTC 2012‑656, indicated that NPA 403/587/780 would exhaust in August 2017.

This Initial Planning Document (IPD) was developed by the CNA in accordance with the CRTC‑approved Canadian NPA Relief Planning Guideline (the Guideline) Version 4.0 dated 11 July 2012. A copy of the Guideline is available from the CRTC CISC guidelines web page at [*http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm*](http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm) or via a link from the CNA website at [*http://cnac.ca/npa\_codes/relief/overview.htm*](http://cnac.ca/npa_codes/relief/overview.htm).

The purpose of the IPD is to identify some NPA 403/587/780 Code Relief Options. 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.

# 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 11 July 2012. A copy of the Guideline is available from the CRTC CISC guidelines web page at [*http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm*](http://www.crtc.gc.ca/cisc/eng/cisf3fg.htm) or via a link from the CNA website at [*http://cnac.ca/npa\_codes/relief/overview.htm*](http://cnac.ca/npa_codes/relief/overview.htm).

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*](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 create and maintain a distribution list of parties who may be interested in participating in the RPC and to provide them with advance notice of the initial RPC meeting and the IPD.

Any person wishing to participate in the NPA Relief Planning process can contact the CNA and request to be added to the RPC 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).

# 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 local dialling is already in place in NPA 403/587/780. 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.

## Geographic Split

### 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).

### 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.
* It 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.

## Overlay

### 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:

1. 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.

1. 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).

1. 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 the multiple NPA overlay, a new NPA would be assigned to overlay multiple existing NPA or NPAs serving more than one specific geographic area.

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.

### General Attributes

* The primary method used since 1999 for relief projects in Canada.
* 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.

## Boundary Realignment

The boundary realignment described in this section is different than the boundary realignment that occurs with a Boundary Extension Overlay described above.

### 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

### 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.

# NPA EXHAUST INFORMATION

As indicated in the following table, NRUFs for NPA 403/587/780 were used to determine Projected Exhaust Dates, i.e. the dates when CO Codes in NPA 403/587/780 would be expected to exhaust.

|  |  |
| --- | --- |
| **403/587/780** **NRUF** | **Projected Exhaust Date** |
| G-NRUF January 2012 | June 2018 |
| R-NRUF July 2012 | June 2017 |
| R-NRUF January 2013, adjusted per Telecom Notice of Consultation CRTC 2012‑656 directive setting aside 7 CO Codes for initial code assignments for Carriers already providing service, and 10 CO Codes for new entrants | August 2017 |

Refer to Annex A, Figures 3, 4, 5, 6, 7 and 8 for graphs of forecasted CO Codes and charts of Miscellaneous and LEC + WSP CO Codes in area codes 403/587/780.

# RELIEF OPTIONS

The basic NPA relief methods described in section 3 of this IPD are the Geographic Split, the Overlay, and the Boundary Realignment.

Based on two of the above basic methods, the following Relief Options were identified and examined in detail:

* Geographic Split - 2 options (Options 1 and 2)
* Concentrated Overlay - 3 options (Options 3, 4 and 5)
* Distributed Overlay - 2 options (Options 6 and 7)

See Annex A, Figures 10 through 16 for diagrams of the Relief Options identified and examined by the CNA.

The Relief Methods that are not examined in detail in this IPD are:

* Boundary Realignment - not examined since this Relief Option would create an NPA boundary that crosses provincial borders.
* 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.

## Geographic Split

The geographic split method has never been used to provide relief to an area already served by overlay NPAs, however in order to ensure that this IPD considers a wide range of Relief Options, two different Relief Options were evaluated in detail to introduce a new area code in the NPA 403/587/780 area using the geographic split method of providing NPA relief.

In NPA 403/587/780, the existence of two NPAs and third overlay NPA serving one area means that a much larger number of geographic split options exist than would be the case in an area served by a single NPA Code. Approaches that could be considered include splitting NPA 587, splitting NPA 780, splitting NPA 403 or splitting all three NPAs 403, 578 and 780.

With all geographic split options described for NPA 403/587/780, number changes are required. In areas that retain one existing NPA but not the other, approximately half the numbers change to a new NPA. In areas that retain neither existing NPA all numbers change to a new NPA, and up to half of the numbers would also have to change to a new CO Code. Selecting a split option for NPA Relief would impact 50% 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 403/587/780 since 7-digit local dialling was eliminated in 2008 with the implementation of mandatory 10-digit local dialling and distributed overlay of NPA 587 on NPAs 403 and 780.

After the split, local calls in the NPA 403/587/780 and New NPA would continue to be dialled using 10‑digits.

**Split Options 1 and 2**

With these options, NPA 587 would be split into NPA 587 and a new NPA, while NPAs 403 and 780 would remain as an overlay covering NPA 587 and the new NPA Code, i.e. the same geographical coverage areas (the province of Alberta) for NPAs 403 and 780 as currently exists.

### Option 1: Split - North South Split of NPA 587, South retains NPA 587

Southern Region (142 Exchange Areas) retains NPA 587 and remains in 403, and Northern Region (195 Exchange Areas) remains in NPA 780 and telephone numbers in NPA 587 change to a new NPA Code. The area that would retain NPA 587 contains the rapidly growing Exchange Areas of Calgary, Red Deer, Lethbridge, Medicine Hat and High River, while the new NPA would contain the rapidly growing Exchange Areas of Edmonton, Fort McMurray and Grande Prairie. Using this option, customers in 323 CO Codes would be affected by a telephone number change to the new area code.

This Relief Option would increase the number of separate Relief Planning areas in Alberta from one to two.

After the split, NPA 403/587 and the 780/new NPA would be expected to exhaust in 2025 and 2033 respectively.

Assessment:

To be completed by RPC

### Option 2: Split - North South Split of NPA 587, North retains NPA 587

Northern Region (195 Exchange Areas) retains NPA 587 and remains in 780, and Southern Region (142 Exchange Areas) remains in NPA 403 and telephone numbers in NPA 587 change to a new NPA Code. The area that would retain NPA 587 contains the rapidly growing Exchange Areas of Edmonton, Fort McMurray and Grande Prairie while the new NPA would contain the rapidly growing Exchange Areas of Calgary, Red Deer, Lethbridge, Medicine Hat and High River. Using this option, customers in 324 CO Codes would be affected by a telephone number change to the new area code.

This Relief Option would increase the number of separate Relief Planning areas in Alberta from one to two.

After the split, NPA 587 and the new NPA would be expected to exhaust in 2033 and 2025 respectively.

Assessment:

To be completed by RPC

With these options, the NPA 587 assigned CO Codes would split as follows:

|  |  |
| --- | --- |
| ***Area*** | ***Forecasted CO Codes in NPA 587 (01-01-15)*** |
| ***% of Total NPA 587 CO Codes*** |
| Northern Region | 323 codes - 50% |
| Southern Region | 324 codes - 50% |

As 10-digit local dialling is mandatory throughout NPA 403/587/780, there would be no requirement to implement CO Code Protection to address local dialling between these regions.

## Concentrated Overlay

Three Relief Options were evaluated using the concentrated overlay method of providing NPA relief.

### Option 3: Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton LIRs

Description:

This Relief Option would overlay a new NPA Code over the 36 Exchange Areas of the Calgary and Edmonton LIRs and the remaining 301 Exchange Areas in the province of Alberta would continue to grow using CO Codes from NPA 587.

With this Relief Option, the number of separate Relief Planning areas in Alberta would increase from one to two.

After this concentrated overlay, NPA 587 and the new NPA would be expected to exhaust in 2022 and 2029 respectively.

Assessment:

To be completed by RPC

### Option 4: Concentrated Overlay - Concentrated Overlay Of New NPA on Calgary and Edmonton Exchange Areas

Description:

This Relief Option would overlay a new NPA Code over the Calgary and Edmonton Exchange Areas and the remaining 335 Exchange Areas in the province of Alberta would continue to grow using CO Codes from NPA 587.

With this Relief Option, the number of separate Relief Planning areas in Alberta would increase from one to two.

After this concentrated overlay, NPA 587 and the new NPA would be expected to exhaust in 2023 and 2031 respectively.

Assessment:

To be completed by RPC

### Option 5: Concentrated Overlay - Concentrated Overlay of two New NPAs ‑ first new NPA overlays NPA 587/780 and second new NPA overlays NPA 403/587

Description:

This Relief Option would overlay two new NPA Codes: the first new NPA Code would overlay the 195 Exchange Areas of NPA 587/780 in the Northern Region and the second new NPA Code would overlay the remaining 142 Exchange Areas of NPA 403/587 in the Southern Region.

With this Relief Option, the number of separate Relief Planning areas in Alberta would increase from one to two.

After this concentrated overlay, NPA 587/780/new NPA‑1 (North) and the 403/587/new NPA‑2 (South) would be expected to exhaust in 2038 and 2032 respectively.

Assessment:

To be completed by RPC

## Distributed Overlay

Two Relief Options were evaluated using the distributed overlay method of providing NPA relief.

### Option 6: Distributed Overlay - Distributed Overlay of a New NPA on 403/587/780

Description:

Currently NPA 403/587/780 is expected to exhaust in the year 2017. This Relief Option would introduce a new NPA Code as an overlay on the NPA 403/587/780 area.

With this Relief Option, the number of separate Relief Planning areas in Alberta would not change.

After this distributed overlay, NPA 403/587/780 and the new NPA would be expected to exhaust in 2028.

Assessment:

To be completed by RPC

### Option 7: Distributed Overlay - Distributed Overlay of two New NPAs on 403/587/780

Description:

Currently NPA 403/587/780 is expected to exhaust in the year 2017. This Relief Option would introduce two new NPA Codes as overlays on the NPA 403/587/780 area.

With this Relief Option, the number of separate Relief Planning areas in Alberta would not change.

After this distributed overlay, NPA 403/587/780 and the first new NPA would be expected to exhaust in 2028. NPA 403/587/780 and the second new NPA would be expected to exhaust in 2038.

Assessment:

To be completed by RPC

# SUMMARY OF RELIEF OPTIONS

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

| Option | | | | Projected Exhaust Dates | | | | Relief - Timing & Type | | Quantity of CO Codes affected by No. changes | Local Dial # of digits |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | Description | | | NPA 403/ 587/780 | NPA 587 | New NPA-1 | New NPA-2 | **Relief Date** | Type |  |  |
| 1 | Split - North South Split of NPA 587, South retains NPA 587 | | | 2017 | 2025 | 2033 |  | **2016** (587)  **2024** (587)  **2032** (New-1) | S  ?  ? | 323  ?  ? | 10  10  10 |
| 2 | Split - North South Split of NPA 587, North retains NPA 587 | | | 2017 | 2033 | 2025 |  | **2016** (587)  **2024** (New-1)  **2032** (587) | S  ?  ? | 324  ?  ? | 10  10  10 |
| 3 | Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton LIRs | | | 2017 | 2022 | 2029 |  | **2016** (403/587/780)  **2021 (**403/587/780)  **2028** (New-1) | C  ?  ? | Nil  ?  ? | 10  10  10 |
| 4 | Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton Exchange Areas | | | 2017 | 2023 | 2031 |  | **2016** (403/587/780)  **2022** (403/587/780)  **2030** (New-1) | C  ?  ? | Nil  ?  ? | 10  10  10 |
| 5 | Concentrated Overlay - Concentrated Overlay of two New NPAs - first new NPA overlays NPA 587/780 and second new NPA overlays NPA 403/587 | | | 2017 |  | 2038 | 2032 | **2016** (403/587/780)  **2031** (New-2)  **2037** (New-1) | C  ?  ? | Nil  ?  ? | 10  10  10 |
| 6 | Distributed Overlay - Distributed Overlay of a New NPA on NPA 403/587/780 | | | 2017 |  | 2028 |  | **2016** (403/587/780)  **2027** (403/587/780/New-1) | D | Nil.  ? | 10  10 |
| 7 | | Distributed Overlay - Distributed Overlay of two New NPAs on NPA 403/587/780 | | 2017 |  | 2028 | 2038 | **2016** (403/587/780)  **2037** (403/587/780/New-1&2) | D | Nil.  ? | 10  10 |
| Key | | | 10-D = mandatory 10-digit local dialling  O = Overlay, S= Split, ? = Unknown (subsequent relief type, Qty of CO Codes affected by No. Changes, and dial plan) | | | | | | | | |

# COMPARATIVE assessment of RELIEF OPTIONS

The CNA identified seven Relief Options in section 5 of this document. A Pro, Neutral or Con (P, N or C) rating was established for each Relief Option for each of the following attributes. The results are listed in the table below the list of attributes.

1. NPA Code Conservation - quantity of new NPAs required in NPA 403/587/780 within the next 20 years (P = 0 new NPAs; N = 1 new NPA; C = 2 or more new NPAs)
2. Number of separate Relief Planning areas in Alberta in the long term (P = decrease; N = stays same; C = increase)
3. Quantity of Number Changes for existing customers’ numbers (P = none; C = many)
4. Level of Carrier Costs - e.g., including implementation, customer awareness, rate of return (P = low; N = medium; C = high)
5. 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; C = longest)
6. Longevity - the length of time between this relief and subsequent relief activity in NPA 403/587/780 (e.g., a new area code) (P = 15 or more years; N = 9 through 14 years; C = within 8 years)
7. Established Geographic Identities - changes in boundaries of existing NPAs (P = none; N = 1 existing NPA affected, C = more than 1 existing NPA affected)
8. New Geographic Identities - boundaries of new NPA align with boundaries of known areas (e.g., existing NPA areas, provinces) or identifiable geographical features (e.g., rivers, islands) (P = aligns with existing NPA boundaries; N = aligns with geographical features but not with existing NPA boundaries; C = aligns with neither existing NPA boundaries, nor identifiable geographical features)
9. Reprogram Mobile Phones - requirement to reprogram wireless devices to accommodate the number changes (P = low; N = medium; C = high)
10. Potential maximum quantity of NPAs in an Exchange Area in the next 20 years (P = 1 NPA; N = 2 or 3 NPAs; C = 4 NPAs)
11. Does the option consider the potential direction for future reliefs in NPA 403/587/780? (P = yes; C = no)

| **Relief Options** | | **Pro, Neutral or Con for Each Attribute** | | | | | | | | | | | | **Rating** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | **Description** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** |  |  |
| 1 | Split - North South Split of NPA 587, South retains NPA 587 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Split - North South Split of NPA 587, North retains NPA 587 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton LIRs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton Exchange Areas |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Concentrated Overlay - Concentrated Overlay of two New NPAs - first new NPA overlays NPA 587/780 and second new NPA overlays NPA 403/587 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Distributed Overlay - Distributed Overlay of a New NPA on NPA 403/587/780 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Distributed Overlay - Distributed Overlay of two New NPAs on NPA 403/587/780 |  |  |  |  |  |  |  |  |  |  |  |  |  |

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 X points to Option X, and the next highest rating of X points to Options X, X points to Options X; and X points to Options X. Option X is clearly superior when assessed using the above criteria.

# Dialling impacts FOR LOCAL CALLS

Currently 10-digit dialling is mandatory for local calls originating within area codes 403/587/780, and for local calls to area codes 403/587/780 from adjacent area codes 306/639.

Local dialling plans will not change when NPA 403/587/780 relief is implemented. Mandatory 10‑digit dialling will continue to apply on local calls originating in the NPA 403/587/780 area and on local calls to the NPA 403/587/780 area from adjacent NPAs, with the exception of NPA 406. Mandatory 10-digit dialling will apply to local calls to and from the new or extended NPA that will be implemented in the NPA 403/587/780 area.

Due to 7-digit local dialling from Sweetgrass, Montana to Coutts, Alberta, CO Codes 406 and 335 in the Relief NPA(s) (in the case of an overlay) should be made unassignable in Coutts and its EAS. This protection will have no impact on the life of the Relief NPA as the CO Codes will be available for assignment in other Exchange Areas.

**Note regarding long distance calling:** NPA relief will not affect the dialling plan for long distance calls originating in NPA 403/587/780 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**.**

# CO CODES for Initial Code Assignments AND CO CODES FOR INITIAL CODE ASSIGNMENTS FOR NEW ENTRANTS ONLY

In Telecom Notice of Consultation CRTC 2012‑656, the CRTC stated in item 7 that: "*In developing its recommendations, the 403/587/780 RPC is directed to set aside, at a minimum, seven central office (CO) codes for initial code assignments for carriers already providing service in area codes 403, 587 and 780 and ten CO codes for initial code assignments exclusively for new entrants*".

Accordingly the CNA has set aside 7 CO Codes for initial code assignments for carriers already providing service in the 403/587/780 area, and 10 CO Codes for initial code assignments exclusively for new entrants from NPA 587.

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, then for the purposes of calculating the CO Code Inventory quantities in the Jeopardy Contingency Plan, it is assumed that CRTC staff would approve that the 7 CO Codes for initial code assignments for Carriers already providing service should be made available for general assignment prior to relief.

# PROPOSED SCHEDULE

The CNA developed the following proposed schedule using the best available information at this time. A number of assumptions were made with respect to the timeframes for certain events. Depending upon the Relief Option that is approved by the CRTC, the following proposed schedule will be modified accordingly.

To be completed by RPC.

| **Item** | **Task or Event** | **PRIME** | **START** | **END** |
| --- | --- | --- | --- | --- |
| 1 | CNA identifies NPA exhaust and notifies by e-mail CRTC staff, CSCN, North American Numbering Plan Administration (NANPA) & CISC that the NPA will exhaust within 72 months | CNA |  | 10-Apr-12 |
| 2 | CNA conducts R-NRUF & releases results | CNA | 8-Aug-11 | 5-Oct-12 |
| 3 | CRTC issues Telecom Notice of Consultation regarding establishment of an ad hoc Relief Planning Committee (RPC) | CRTC | 5-Oct-12 | 29-Nov-12 |
| 4 | CNA announces the date for the initial NPA Relief Planning face-to-face meeting & requests contributions | CNA |  |  |
| 5 | CNA develops and distributes the IPD to the RPC | CNA |  |  |
| 6 | RPC participants review the IPD & submit contributions to the RPC | RPC |  |  |
| 7 | CNA chairs initial RPC meeting to start development of the Planning Document (PD), Relief Implementation Plan (RIP) & Planning Letter (PL), & schedules future meetings/conference calls | CNA, RPC |  |  |
| 8 | CNA chairs subsequent RPC meetings/conference calls to finalize the PD | CNA, RPC |  |  |
| 9 | CNA forwards the PD to the CISC and CRTC for approval | CNA |  |  |
| 10 | Special Types of Telecommunications Service Users (9-1-1 Public Safety Answering Points (PSAPs), alarm companies, Internet Service Providers (ISPs), paging companies, etc.) to identify any concerns to the RPC & CRTC | Special Users |  |  |
| 11 | CRTC issues Telecom Decision approving the Relief Method, Relief Date, New NPA & directs the RPC to develop the Relief Implementation Plan (RIP) | CRTC |  |  |
| 12 | CNA obtains relief NPA from NANPA | CNA |  |  |
| 13 | CNA holds RPC meetings to create Consumer Awareness and Network Implementation Task Forces (NITF) and the RPC develops and finalizes the RIP | CNA, RPC |  |  |
| 14 | CNA forwards the RIP to the CISC and CRTC for approval | CNA |  |  |
| 15 | CRTC issues Telecom Decision approving the RIP | CRTC |  |  |
| 16 | Task Forces, Telecommunications Service Providers (TSPs) and users implement relief (starts at CRTC approval of Relief Method & Date and ends on Relief Date) | TSPs |  |  |
| 17 | All TSPs to develop and file individual consumer awareness programs with the CRTC (may be done collectively by the Telecommunications Alliance) (starts at CRTC approval of RIP and should be completed about 24 months prior to the Relief Date) | TSPs |  |  |
| 18 | CNA issues media release (in coordination with the Telecommunications Alliance) (may start upon CRTC approval of the RIP and should be issued at least 18 months prior to the Relief Date) | CNA |  |  |
| 19 | CNA submits the PL and RIP to NANPA (should be submitted at least 18 months prior to the Relief Date) | CNA |  |  |
| 20 | NANPA receives and posts the PL to the NANPA website (within 2 weeks of receipt from the CNA) | NANPA |  |  |
| 21 | All TSPs implement consumer awareness activities (starts upon filing of Consumer Awareness Programs with the CRTC and is completed on the Relief Date) | TSPs |  |  |
| 22 | All TSPs to notify all customers (residence, business & special customers) of the new overlay NPA (may start with the filing of Consumer Awareness Programs with the CRTC and all customers should be notified at least 18 months prior to the Relief Date) | TSPs |  |  |
| 23 | TSPs to submit Progress Report #1 to NITF and Consumer Awareness Task Force (CATF) (starts after completion date for all TSPs to notify their customers and requires 2 weeks) | TSPs |  |  |
| 24 | NITF and CATF develop & submit Progress Report #1 to the RPC (linked to TSP reports to NITF and CATF) | NITF & CATF |  |  |
| 25 | The RPC submits Progress Report #1 to CISC/CRTC (linked to NITF and CATF reports) | RPC |  |  |
| 26 | Telcordia TRA database updates to add Exchanges to new overlay NPA (starts on the date that the PL is posted to the NANPA web site and must be completed by 6 months prior to the Relief Date) | Telcordia TRA |  |  |
| 27 | All Telecommunications Service Providers and Telecommunications Service Users (including Special Users 9-1-1 PSAPs, alarm companies, ISPs, paging companies, payphone providers, etc.) to implement changes to their telecom equipment & systems to accommodate the new NPA (starts upon CRTC approval of RIP and ends on the Relief Date) | Telecom Service Users |  |  |
| 28 | Payphone Providers Reprogram Payphones (starts upon CRTC approval of the RIP and ends on the Relief Date) | Payphone Providers |  |  |
| 29 | TSPs and database owners/operators to modify systems and industry databases (starts on CRTC approval of the RIP and ends on the Relief Date) | TSPs & Database Owners |  |  |
| 30 | Operator Services & Directory Assistance Readiness (starts on CRTC approval of the RIP and ends on the Relief Date) | TSPs |  |  |
| 31 | Directory Publisher Readiness for relief (ability to identify the NPA in telephone numbers in the directory published after the new NPA is activated) (starts upon CRTC approval of the RIP and ends on the Relief Date) | Directory Publishers |  |  |
| 32 | 9-1-1 Systems and Databases Readiness (starts on CRTC approval of the RIP and ends on the Relief Date) | PSAPS, 9‑1‑1 Service Providers & TSPs |  |  |
| 33 | Network Systems & Equipment Readiness (starts on CRTC approval of the RIP and ends on the Relief Date) | TSPs |  |  |
| 34 | Service Order & Business System Readiness (starts on CRTC approval of the RIP and ends on the Relief Date) | TSPs |  |  |
| 35 | International Gateway Switch Translations Readiness for new NPA (starts on CRTC approval of the RIP and ends on the Relief Date) | Int’l TSPs |  |  |
| 36 | Canadian Local Number Portability Consortium (CLNPC) Database Readiness for new NPA (starts on CRTC approval of the RIP and ends on the Relief Date) | CLNPC & NPAC |  |  |
| 37 | Toll Free SMS Database Readiness for new NPA (starts on CRTC approval of the RIP and ends on the Relief Date) | Toll TSPs |  |  |
| 38 | TSPs apply for Test CO Codes in new NPA (applications may be submitted no more than 6 months and no less than 66 days prior to the start date for the Inter-Carrier Testing Period) (Section 7.16.4 Canadian NPA Relief Planning Guideline) | TSPs |  |  |
| 39 | Develop Inter-Carrier Network Test Plans and prepare for testing (individual TSPs to make arrangements in accordance with interconnection agreements) (may start upon CRTC approval of the RIP and must be completed by start date for the Inter-Carrier Testing Period) | NITF & TSPs |  |  |
| 40 | All international and domestic TSPs must activate the new NPA in their networks by the start date for the Inter-Carrier Testing Period | TSPs |  |  |
| 41 | Activation date for new NPA Test CO Codes and Test Numbers in the network must be completed by the start date for the Inter-Carrier Testing Period | TSPs |  |  |
| 42 | Inter-Carrier Testing Period (subject to Inter-Carrier Network Test Plans) | NITF & TSPs |  |  |
| 43 | TSPs to submit Progress Report #2 to NITF and CATF (starts on commencement of Inter-Carrier Testing Period) | TSPs |  |  |
| 44 | NITF and CATF develop & submit Progress Report #2 to the RPC (linked to TSP reports to NITF and CATF) | NITF & CATF |  |  |
| 45 | The RPC submits Progress Report #2 to CISC/CRTC (linked to NITF and CATF reports) | RPC |  |  |
| 46 | Relief Date (earliest date when CO Codes in new NPA may be activated) |  |  |  |
| 47 | TSPs submit Final Report to CATF and NITF (starts on the Relief Date and provides 2 weeks for preparation & submission) | TSPs |  |  |
| 48 | NITF and CATF develop & submit Final Progress Report to the RPC (linked to TSP reports to NITF and CATF) | NITF & CATF |  |  |
| 49 | The RPC submits Final Progress Report to CISC/CRTC (linked to NITF and CATF reports) | RPC |  |  |
| 50 | TSPs disconnect Test Codes & Numbers, and submit Part 1 form to return Test Codes (starts 1 month after Relief Date and allows 1 month for completion) | TSPs |  |  |

# Jeopardy Contingency Plan (JCP)

This Jeopardy Contingency Plan (JCP) takes effect when the CNA declares a Jeopardy Condition. See section 8.0 (Jeopardy Condition) of the Canadian NPA Relief Planning Guideline.

This JCP shall remain in effect until superceded by a CRTC-approved JCP, the Jeopardy Condition is suspended, or 66 days prior to the Relief Date.

The following measures shall be implemented in NPA 403/587/778 while a Jeopardy Condition is in effect.

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. The CNA shall only assign CO Codes from the exhausting NPA to a CO Code Applicant upon instruction from CRTC staff.

1. Carriers and/or Telecommunications Service Providers (TSPs):
   1. shall age disconnected residential wireline telephone numbers for a maximum of two months;
   2. shall age disconnected wireless telephone numbers for a maximum of three months;
   3. shall age disconnected business wireline 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;
   4. 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);
   5. 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;
   6. 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;
   7. 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;
   8. shall not be permitted to obtain a new CO Code reservation;
   9. 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 provides 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 provides 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:
   1. certification that all held telephone numbers have been released;
   2. 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;
   3. 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;
   4. 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 or within the period specified within an approved JCP, and that the months-to-exhaust is documented on an Appendix B submitted to the CNA;
   5. a completed Telephone Number Utilization Report;
   6. 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
   7. 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 provides 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 request two versions of the Jeopardy Numbering Resource Utilization Forecast (J‑NRUF) input from all current and prospective CO Code Holders quarterly until three (3) months before relief is provided.
   1. The forecasted quantities in Version 1 should be the same as or lower than the XXXX 201X J‑NRUF input submitted by CO Code Holders for the period up to 66 days prior to the Relief Date. CO Code Holder forecasts may reflect an increase in demand in the period subsequent to the Relief Date.
   2. Version 2 will reflect the actual demand required by the CO Code Holder's current business plan and will be provided for information purposes only.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. In a situation where the Relief Date is on or after the Projected Exhaust Date (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.
15. 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.).
16. In circumstances where the CRTC has directed the CNA to set aside a quantity of CO Codes for Initial Code assignments for Carriers already providing service in the exhausting NPA, and a quantity of CO Codes for Initial Code assignments exclusively for New Entrants, the following actions will be taken.[[1]](#footnote-1)

The CO Codes set aside for Initial Code assignments exclusively for New Entrants shall be made available, subject to any CRTC staff instruction, for Initial Code assignment to New Entrants prior to the relief if all other available CO Codes in the exhausting NPA have been assigned. Any CO Codes from this previously set‑aside pool that remain when the Jeopardy Condition ends shall be returned to the pool for Initial Code assignments for New Entrants for assignment following relief.

The CO Codes set aside for Initial Code assignments for Carriers already providing service in the exhausting NPA shall be made available, subject to any CRTC staff instruction, for Initial Code assignment prior to relief. Any CO Codes from this previously set-aside pool that remain when the Jeopardy Condition ends shall be returned to the pool for Initial Code assignments for applicants in general for assignment following relief.

If all other available CO Codes in the exhausting NPA have been assigned, CRTC staff may make some or all of the CO Codes in the two set‑aside pools available for assignment to any entity for any purpose.

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 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 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 procedures for a Jeopardy Condition specified by the Canadian NPA Relief Planning Guidelines, or an approved NPA-specific 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 Guidelines

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 assignment

Supplementary Form for a Growth CO Code Application - Page 2 of 2 - Telephone Number Utilization Report

Use Arial 9 to complete this form. (Note: If the spreadsheet below does not show on your display, please change the Work view to "Print Layout" or "Reading Layout")



Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NPA 403/587/780 CO Code Inventory Chart

The following chart and the instructions it contains will apply in NPA 403/587/780 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 403/587/780 assigned and In‑service as of 1 April 2013. It identifies 75 CO Codes that are unassignable prior to a Jeopardy Condition, 7 of which become assignable in a Jeopardy Condition. The CO Codes that become assignable in a Jeopardy Condition shall only be made available for assignment when all other available CO Codes have been assigned. The types of CO Codes that become assignable in a Jeopardy Condition should be made available in the same order as listed in the chart.

|  |  | **Overlay** |
| --- | --- | --- |
| **A** | **Total CO Codes in NPAs 403/587/780 (NXX format)** | **2400** |
|  |  |  |
| **B** | **CO Codes unassignable prior to a Jeopardy Condition** |  |
| N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911) | 24 |
| Special Use Codes (555, 950 & 976) | 9 |
| Protected Code(s) | 0 |
| Home NPA Code(s) (403, 587, 780) | 9 |
| Current Neighbouring NPA Codes (867 in 780 only) | 1 |
| Future Canadian Geographic NPA Codes (825 - see Note 1) | 3 |
| Plant Test Codes (958 & 959) | 6 |
| Special 7-digit Dialling Codes (310, 610 & 810) | 7 |
| CO Codes set aside for Initial Codes exclusively for New Entrants (for assignment after relief via an overlay or before, if a split) | 10 |
| CO Codes set aside for Initial Codes for carriers already providing service for assignment after relief via an overlay, or before, if a split | 7 |
| **Total B** | **76** |
|  |  |  |
| **C** | **CO Codes assignable prior to a Jeopardy Condition (C=A-B)** | **2324** |
|  |  |  |
| **D** | CO Codes unassignable prior to a Jeopardy Condition that become assignable in a Jeopardy Condition: |  |
| Future Canadian Geographic NPA Codes (Note 2) | 0 |
| Current Neighbouring NPA Codes | 0 |
| CO Codes set aside for Initial Code assignments after relief via an overlay or before, if a split (available subject to CRTC staff approval) | 7 |
| **Total D** | **7** |
|  |  |  |
| **E** | **Assignable CO Codes in a Jeopardy Condition (E=C+D)** | **2331** |
| **F** | **Assigned CO Codes as of 1 April** **2013** | **1875** |
| **G** | **Net CO Codes available for assignment as of 1 April** **2013 without a Jeopardy Condition (G=C-F)** | 449 |
| **H** | **Net CO Codes available for assignment as of 1 April** **2013 in a Jeopardy Condition (H=E-F)** | 456 |

**Notes:**

1. 25 of the 26 CO Codes corresponding to Future Canadian Geographic NPA Codes are already assigned, in-service, or available for assignment in NPA 403/587/780.

2. The CO Code 825 corresponding to the Future Canadian Geographic NPA Codes is currently unavailable for assignment in NPA 403, 587 and 780. Future Canadian Geographic Code 825 should remain unavailable for assignment as a CO Code in NPA 403/587/780 since it is set aside as the relief NPA for NPA 403/587/780 per CRTC Decision 2007-42.

# SELECTION OF RELIEF NPA

When an immediate or subsequent NPA relief requires a new NPA Code, some of the criteria for selecting the new NPA Code from the list of available Future Canadian Geographic NPAs are described in section 4.9 of the Canadian NPA Relief Planning Guideline as follows.

1. The preferred Future Canadian Geographic NPA Code should not be assigned as a CO Code in the area that is being relieved (Home NPA(s)).
2. The preferred Future Canadian Geographic NPA Code should not be 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.
3. The preferred Future Canadian Geographic NPA Code should not be 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.

The NPA Code Selection Tool located on the CNA web site at <http://www.cnac.ca/npa_codes/relief/overview.htm> can assist in selecting a relief NPA Code from the pool of NPA Codes reserved for relief of geographic Canadian NPAs. The following table, extracted from the NPA Code Selection Tool, shows all codes corresponding to Future Canadian Geographic NPA Codes that are designated as unassignable CO Codes in Home or Home and Neighbouring NPAs, therefore are preferred candidates when selecting a relief NPA Code for NPA 403/587/780.

| **NXX corresponding to Future NPA 🡪** | **825** |
| --- | --- |
| Split - North South Split of NPA 587, South retains NPA 587 | ✓ |
| Split - North South Split of NPA 587, North retains NPA 587 | ✓ |
| Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton LIRs | ✓ |
| Concentrated Overlay - Concentrated Overlay of New NPA on Calgary and Edmonton Exchange Areas | ✓ |
| Concentrated Overlay - Concentrated Overlay of two New NPAs - first new NPA overlays NPA 587/780 and second new NPA overlays 403/587 | ✓ |
| Distributed Overlay of a New NPA on NPA 403/587/780 | ✓ |
| Distributed Overlay - Distributed Overlay of two New NPAs on NPA 403/587/780 | ✓ |

✓ indicates that corresponding CO Code is designated as unassignable in Home NPA(s)

An additional factor to consider when recommending a relief NPA Code is that in Telecom Decision CRTC 2007-24, *Code relief for area codes 403 and 780 - Alberta*, the Commission directed the CNA to reserve area code 825 for future NPA relief in Alberta.

# RECOMMENDATIONS

To be completed by RPC

**NPA 403/587/780**

**INITIAL PLANNING DOCUMENT**

**ANNEXES**

1. A New Entrant is an entity who, at the time of their first request for assignment of CO Code(s) in an NPA, does not provide any telecommunications services and does not hold any CO Codes within the boundaries of the NPA. [↑](#footnote-ref-1)