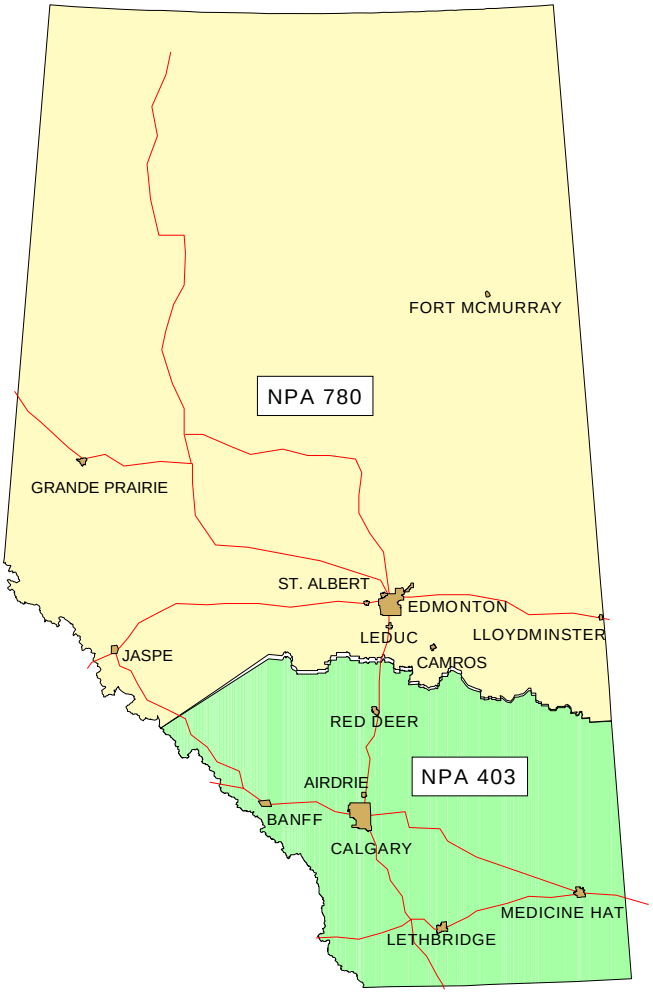
NPAs 403 & 780



NUMBERING RELIEF

C.N.A.

SAIC®
An Employee-Owned Company

Planning Document

NPAs 403 & 780 Numbering Relief

Version 2
Revised – December 7, 2006

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Planning Document NPAs 403 & 780 Numbering Relief

1. EXECUTIVE SUMMARY

In the province of Alberta, Canada, there are 337 Exchange Areas, and two Number Plan Areas, NPAs 403 and 780. NPA 403 consists of 142 Exchange Areas, including the rapidly growing Exchange Areas of Calgary, Red Deer, Lethbridge, Medicine Hat, Banff, and High River located in the southern part of Alberta. NPA 780 consists of 195 Exchange Areas, including the rapidly growing Exchange Areas of Edmonton, Bonnyville, Sherwood Park, Drayton Valley and St. Albert located in the northern part of Alberta.

The General Numbering Resource Utilization Forecast (G-NRUF) conducted in February 2004 indicated that NPA 403 would exhaust in September 2009, and NPA 780 would exhaust in November 2011. NPA 780 relief was beyond the relief planning window, but the Canadian Steering Committee on Numbering (CSCN) requested that relief planning for NPA 780 be advanced to enable consideration of co-ordinated relief plans and methods for NPAs 403 and 780. Subsequently the Canadian Numbering Administrator (CNA) conducted initial Relief Planning Numbering Resource Utilization Forecasts (R-NRUFs) for NPAs 403 and 780 with a due date of July 1, 2004, and continued conducting R-NRUFs at semi-annual intervals.

The results of the initial R-NRUFs projected the date for exhaust of Central Office (CO) Codes in NPA 403 would be in the 4th Quarter of 2009, and NPA 780 would be January 2012. The Projected Exhaust Dates changed in subsequent R-NRUFs, and, the most recent R-NRUF, conducted in July 2006 which captured most of the impact of the planned introduction of Wireless Number Portability; the results projected NPA 403 would exhaust in October 2009 and NPA 780 in November 2010.

In the Initial Planning Documents for NPAs 403 and 780, the Canadian Numbering Administrator (CNA) identified 5 different Relief methods (7 options) for each NPA. The Relief Planning Committee (RPC) used the Initial Planning Documents as the baseline for the development of this Planning Document. During 2005 the RPC increased the number of NPA 403 options from 7 to 8 and NPA 780 options from 7 to 11, for a total of 19 options. Some of the NPA 780 options were identical to or extensions of some NPA 403 options. The RPC subsequently agreed to combine the Planning Documents for NPAs 403 and 780 into one Planning Document, which eliminated duplication of options and reduced the total number of options to 14, i.e. 4 NPA 403-only options, 4 NPA 780-only options, and 8 joint NPA 403-780 options.

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.

The roles of the various participants (e.g., Canadian Radio-television and Telecommunications Commission (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 Guidelines, dated 13 August 2003 (the Guidelines). A copy of the Guidelines can be obtained from: http://www.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 Relief Planning Committees 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 Relief Planning Committees are all open to public participation.

NPA Relief Planning shall be conducted under the regulatory oversight of the CRTC. Notwithstanding the process detailed in the Guidelines, 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 and the Relief Implementation Plan (RIP) developed and submitted to the CRTC by the RPC via the CISC process.

This Planning Document is being issued in accordance with the Guidelines to facilitate the selection of Relief Options and Relief Dates for NPAs 403 and 780.

2. INTRODUCTION

Prior to 1999, the geographic area covered by Number Plan Area (NPA) 403 consisted of all the Exchange Areas in the province of Alberta. On 25 January 1999 NPA 403 was split into two geographic areas divided by an East-West boundary line drawn north of the Red Deer and Stettler Exchange Areas. All areas and communities south of the boundary line retained NPA 403 and the areas and communities north of the boundary line were changed to the new NPA 780.

In accordance with the Canadian NPA Relief Planning Guidelines (the Guidelines), the Canadian Numbering Administrator (CNA) is required to conduct an annual G-NRUF in February of each year, and R-NRUFs when relief planning is initiated and at 6 month intervals after that. The G-NRUF is used to estimate the Projected Exhaust Date for each Canadian NPA, and the R-NRUF provides additional details and updates the Projected Exhaust Dates for NPAs undergoing relief planning.

The charts and data contained in Annex A, Figures 3a and 3b provide a summary of the actual quantities of Central Office (CO) Code assignments and previous and current NRUF forecasts for NPAs 403 and 780. This information was used by the CNA to determine the Projected Exhaust Dates for NPAs 403 and 780. When an NPA is projected to exhaust within a 72-month time period, the CNA initiates relief planning for that NPA with the objective of implementing relief 12 to 18 months in advance of the then Projected Exhaust Date. Over time, the Projected Exhaust Date may change as the forecast requirement for CO Codes and telephone numbers changes in response to customer demand for existing and new telecommunications services and the requirements of existing and new Telecommunications Service Providers (TSPs). The objective is to ensure that users and TSPs always have access to telephone numbers and CO Codes so that their needs and requirements can be satisfied.

NPA relief should be in place at least 12 to 18 months in advance of the Projected Exhaust Date to allow for forecast volatility.

The July 2004 R-NRUF indicated that growth in the quantity of CO Codes due to wireless growth and expansion of local competition was concentrated in a few rapidly growing Exchange Areas. The majority of the projected growth in NPA 403 was limited to 8 Exchange Areas with virtually no growth projected in the remaining 134 Exchange Areas. The majority of the projected growth in NPA 780 was limited to 13 Exchange Areas and there was virtually no growth projected in the remaining 182 Exchange Areas. In July 2006 an R-NRUF was conducted which captured most of the impact of the planned introduction of Wireless Number Portability; the results of that NRUF showed additional CO Code growth spread over a larger number of Exchange Areas, and advanced the Projected Exhaust Dates for both NPAs.

See Annex A, Figure 2, for a diagram showing major cities and roads in Alberta (NPAs 403 and 780).

It is very important to closely monitor the expansion plans of all existing and emerging TSPs to ensure that relief is provided in advance of exhaust so that CO Codes and telephone numbers are always available for TSPs and their customers, and to avoid the creation of a Jeopardy Condition and the associated need to implement Special Conservation Procedures in the area served by NPA 403. A Jeopardy Condition exists when the forecast and/or actual demand for CO Codes exceeds the quantity of CO Codes available for assignment within the NPA before it is expected that relief can be implemented.

Timely introduction of a new NPA into the affected geographic area will ensure that CO Codes and telephone numbers are always available for use by TSPs and their customers, respectively, in the geographic area requiring relief.

The Planning Document will be forwarded to the Canadian Radio-television and Telecommunications Commission (CRTC) via the CRTC Interconnection Steering Committee (CISC) process.

3. NPA RELIEF PLANNING PROCESS

The roles of the various participants (e.g., CRTC, CNA, CISC, RPC participants, Interested Parties) for NPA Relief Planning, are identified in section 6.0 of the CRTC-approved Canadian NPA Relief Planning Guidelines, dated 13 August 2003. A copy of the Guidelines can be obtained from:

http://www.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 Relief Planning Committees (RPC) 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:

http://www.crtc.gc.ca/cisc/eng/ciscmanu.htm

NPA Relief Planning shall be conducted under the regulatory oversight of the CRTC. Notwithstanding the process detailed in the Guidelines, 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 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/publicpar.htm.

4. NPA RELIEF METHODS

Once the necessity for NPA code relief was established, all NPA code relief methods were considered. The following paragraphs provide definitions and general attributes of the Geographic Split, Overlay method, Boundary Realignment and a brief description of the Technology-specific Overlay.

4.1. Geographic Split

4.1.1. Definition

By this method, the exhausting NPA is split into two or more geographic areas, with one area retaining the existing NPA code, and the other(s) being assigned a new NPA code(s). To minimize the quantity of number changes, the area with the largest number of customers usually retains the existing NPA.

4.1.2. General Attributes

- A known method of NPA relief, last implemented in Canada in 1999.
- 7-digit dialling is retained for local calls within NPAs.
- If CO Code protection is not retained, 10-digit dialling is required for local calls between different NPAs.
- Number changes required within new NPA boundaries.
- Reprogramming or replacement of equipment (switches, PBXs, cellular phones, etc.).
- Some existing customers inconvenienced.
- More economic burden (businesses, public costs, stationery, etc.).
- May not be as expensive to display in telephone directory.
- Requires a permissive dialling period.
- Possible boundary disputes.

4.2. Overlay

4.2.1. Definition

An NPA overlay occurs when more than one NPA code serves the same geographic area. Opening up a new NPA code provides code relief when the existing NPA is exhausted. Numbers from the new NPA are assigned for new growth on a carrier-neutral basis, i.e., first-come, first-served. This method normally requires mandatory 10-digit local dialling when the new NPA is overlaid. Usually 7-digit local calling from adjacent areas into the overlay area must be converted to 10-digit dialling at the time of relief.

With a Distributed Overlay, the new NPA is "overlaid" on top of the NPA requiring relief, and covers exactly the same geographic boundaries.

A Concentrated Overlay strategy 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 and a sparsely populated rural area could be covered by the same NPA. The new NPA would be assigned initially 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. In the area not covered by the new NPA, any future need for new CO Codes would be met by the assignment of CO Codes from the original NPA. In order to ensure

that sufficient CO Codes are available for assignment from the original NPA to that section not covered by the new Concentrated Overlay, it is important for the new Concentrated Overlay to be implemented sooner than with other solutions.

In some cases special CO Code assignment, monitoring and conservation measures may have to be implemented prior to the introduction of the new Concentrated Overlay in order to ensure that sufficient CO Codes in the original NPA are available. When relief is required in other sections of the original NPA, the geographic coverage area of the new NPA could be expanded. In some cases, more than one Concentrated Overlay could be implemented to cover different sections of a single existing NPA.

4.2.2. General Attributes

- A known method of NPA relief most recently implemented in Canada in parts of Ontario and Quebec in 2006.
- Requires universal mandatory 10-digit dialling within and from NPAs being relieved, and generally to NPAs being relieved, usually at the time of relief.
- No number changes are required for existing customers.
- Least disruptive to end-users.
- Less economic burden for existing business.
- Possible to have two or more NPAs in one residence/business.
- Increased directory costs.

4.3. Boundary Realignment

4.3.1. Definition

A Boundary Realignment is when the geographic boundaries of an existing neighbouring NPA or NPAs are expanded to merge with either all or part of the NPA requiring relief. This method may be used to defer adding a new NPA where excess capacity is available in the neighbouring NPA(s).

4.3.2. General Attributes

- Requires universal 10-digit dialling within and between NPAs.
- No number changes are required for existing customers.
- Less disruptive to end-users.
- Less economic burden for existing business.
- Possible to have two or more NPAs in one residence/business.
- Increased directory costs.
- Advances exhaust of neighbouring NPA(s).

4.4. Technology-specific Overlay

4.4.1. Definition

A Technology-specific Overlay is an overlay of a new NPA that is assigned specifically to one or more types of service or technology. An example of a Technology-specific Overlay is a new NPA dedicated only to wireless services.

4.4.2. General Attributes

For the following reasons, this type of overlay has generally not been accepted as a preferred method:

- Would be inconsistent with regulatory practice of seeking technology-neutral solutions.
- Favours certain types of service provider, i.e. not competitively neutral.
- Inconsistent with future implementation of Local Number Portability between types of service provider or technology.
- Inconsistent with service providers' changes of type of service provider, e.g. migration from Wireless Service Provider to Local Exchange Carrier.
- Numbers in the existing NPA currently used for the service or technology to be moved to the new Technology-specific NPA would need to be changed; otherwise the new NPA would only provide relief for growth in the service or technology to which the new NPA is assigned. When existing CO Codes in the old NPA are shared between services needing a number change and services that do not need a number change, then these number changes would require that initial CO Codes be assigned in the new NPA, without freeing up any CO Codes in the old NPA, resulting in less efficient use of numbering resources and a requirement for earlier subsequent NPA relief.
- Has not been implemented in Canada, and may cause confusion and additional costs for customers and service providers.

5. NPA EXHAUST INFORMATION

NPA 403 contains 142 Exchange Areas. NPA 780 contains 195 exchange areas. Lists of these Exchange Areas are provided in Annex B.

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

NRUF	Projected Exhaust Date	
	NPA 403	NPA 780
G-NRUF February 2004	September 2009	November 2011
R-NRUF July 2004	October 2009	January 2012
R-NRUF February 2005	September 2011	January 2015
R-NRUF July 2005	July 2011	January 2014
R-NRUF February 2006	March 2011	February 2013
R-NRUF July 2006	October 2009	November 2010

Refer to Annex A, Figures 4, 5, and 6 for graphs that represent the rate of CO Code utilization in NPAs 403 and 780.

Section 8 describes the dialling plans for local calls within and between NPAs 403 and 780. Currently both 7-digit and 10/11-digit local dialling is permitted within NPAs 403 and 780, as listed in section 8. Annex A Figure 7 shows exchanges with 7-digit local dialling across the boundaries of NPAs 403 and 780. Since 7-digit dialling is permitted, when a CO Code is assigned to one of these exchanges in one NPA, the same CO code cannot be assigned in the associated exchange area(s) in the other NPA, but can be assigned to any of the many other exchanges in the other NPA.

For example, due to 7-digit local dialling between Coutts, Alberta and Sweetgrass, Montana, the CO Code 335 assigned in NPA 406 to Sweetgrass was protected in NPA 403 against being assigned to Coutts, Warner or Milk River exchanges, but is a working CO Code assigned to the Didsbury Exchange Area in NPA 403. For jurisdictional reasons (i.e. to avoid requiring a dialling change from Sweetgrass, MT to Coutts), and to avoid customer confusion, CO Codes 406 and 335 in NPA 403 and in the Relief NPA should remain unassignable or 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.

To eliminate all other CO Code Protection in the NPA 403 area, mandatory 10-digit local dialling would be required on local calls from the NPA 403 area to the NPA 780 area.

To eliminate all CO Code protection in the NPA 780 area, mandatory 10-digit dialling would be required on local calls from the NPA 780 area to the NPA 306 and NPA 403 areas.

If a geographical split is used for relief, and if 7-digit dialling on local calls across NPA boundaries continues, CO Code protection would be needed in new NPAs. Given the split boundaries under consideration and, as explained in more detail in the options, this should not shorten the life of the Relief NPAs but would make CO Code administration difficult.

Because the Lloydminster, SK area within NPA 306 has 7-digit local dialling into some NPA 780 exchanges, approximately 10 CO Codes in NPA 306 that would otherwise be assignable anywhere in NPA 306 are unassignable in the Lloydminster SK and Marshall SK exchanges; these CO Codes have been assigned or are available for assignment elsewhere in NPA 306. Any 7-digit local dialling that currently exists from Lloydminster and Marshall in Saskatchewan into NPA 780 can be allowed to continue after an NPA 780 overlay or split without reducing the lives of NPA 306 and the Relief NPA.

According to the Canadian Central Office Code (NXX) Assignment Guidelines, CO Codes corresponding to current home NPAs are unassignable. When the relief method is an overlay, the new NPA and the existing NPA being overlaid become current home NPAs equally, so no CO Code should be assigned in either NPA that corresponds to that NPA or the other NPA. This restriction limits the selection of appropriate NPAs for relief purposes. To completely avoid conflicts with CO Codes in all the overlay options described in this plan, it is necessary that the new NPA or NPAs do not correspond to any assigned CO Code in Alberta.

NPAs 587 and 825 are the only NPAs on the current list of Projected Future Canadian NPAs that meet the above condition. The RPC has identified that these two specific NPAs should be set aside for future NPA assignments in Alberta.

One additional criterion that has been deemed desirable by some parties is that a new NPA be an NPA that is not assigned as a CO Code in any neighbouring NPAs, however that criterion cannot be met since none of the available Projected Future Canadian NPAs are unassigned as NXXs in all neighbouring NPAs.

6. OPTIONS IDENTIFIED BY THE CNA AND RPC IN THE PLANNING DOCUMENT

Relief Options that are included in this Planning Document and were examined in detail are listed in the Summary Table below. The Relief Options in the Summary Table are divided into 3 categories as follows:

- **NPA 403 Relief Options** - these Relief Options are independent of NPA 780 and could be selected and implemented without affecting NPA 780.
- **NPA 780 Relief Options** - these Relief Options are independent of NPA 403 and could be selected and implemented without affecting NPA 403.
- **Joint NPA 403/780 Relief Options** - these Relief Options provide either for the joint relief of NPAs 403 and 780 at the same time, or in two phases with a 2nd phase that modifies the first phase NPA 403 relief to include NPA 780.

Category	**Method**	**Plan**	Phases & new NPAs
NPA 403 Relief Options	Geographic Split, Calgary EAS retains NPA 403	403-1a	1 phase 1 NPA (for 403)
	Geographic Split, Outside Calgary EAS retains NPA 403	403-1b	
	Concentrated Overlay on Calgary EAS	403-2	
	Distributed Overlay on NPA 403	403-3	
NPA 780 Relief Options	Geographic Split, Edmonton EAS retains NPA 780	780-1a	1 phase 1 NPA (for 780)
	Geographic Split, Outside Edmonton EAS retains NPA 780	780-1b	
	Concentrated Overlay on Edmonton EAS	780-2	
	Distributed Overlay on NPA 780	780-3	
Joint NPA 403/780 Relief Options	Geographic Split, Calgary & Edmonton EASs retain NPA 403 and 780, and the rest of Alberta changes to a single new NPA	Joint-1a	1 phase 1 NPA (for AB)
	Geographic Splits, Calgary EAS retains NPA 403, and the rest of NPA 403 changes to a new NPA in phase 1; Edmonton EAS retains NPA 780, and rest of NPA 780 changes to the new NPA with a realigned boundary in phase 2	Joint-1b	2 phases 1 NPA (for AB)
	Concentrated Overlay on NPAs 403 and 780 outside Calgary & Edmonton EASs	Joint-2a	1 phase 1 NPA (for AB)
	Concentrated Overlay on NPA 403 Outside Calgary EAS in phase 1; new NPA' s boundary realigned to overlay NPA 780 Outside Edmonton EAS in phase 2	Joint-2b	2 phases 1 NPA (for AB)
	Distributed Overlay of a single new NPA on both NPAs 403 & 780	Joint-3a	1 phase 1 NPA (for AB)
	Distributed Overlay of separate new NPAs on NPAs 403 & 780 at the same time	Joint-3b	1 phase 2 NPAs (for AB)
	Distributed Overlay on NPA 403 in phase 1; new NPA's boundary realigned to overlay NPA 780 in phase 2	Joint-3c	2 phases 1 NPA (for AB)
	Distributed Overlay on NPA 403 in phase 1; 7-digit dialling kept until new NPA's boundary realigned to overlay NPA 780 in phase 2	Joint-3d	2 phases 1 NPA (for AB)

Based on the Projected Exhaust Dates as identified in section 5, Relief Dates were developed as shown below:

a) Geographic Split and Distributed Overlay Options

July 2008 is an appropriate date for NPA 403 Relief, for joint NPA 403/780 Relief that is implemented in a single phase, or for the first phase of a 2-phase joint NPA 403/780 Relief. This date is 15 months prior to the NPA 403 Projected Exhaust Date of October 2009.

August 2009 is an appropriate date for NPA 780 Relief, or for the second phase of a 2-phase joint NPA 403/780 Relief. This date is 15 months prior to the NPA 780 Projected Exhaust Date of November 2010.

b) Concentrated Overlay Options

April 2006 would have been an appropriate date for NPA 403 Relief, for joint NPA 403/780 Relief that is implemented in a single phase, or for the first phase of a 2-phase joint NPA 403/780 Relief. This date is 30 months prior to the NPA 403 Projected Exhaust Date of October 2009. This length of time would be required to ensure that a sufficient number of CO Codes remain available to provide for the future growth of NPA 403.

January 2007 would be an appropriate date for NPA 780 Relief, or for the second phase of a 2-phase joint NPA 403/780 Relief. This date is 34 months prior to the NPA 780 Projected Exhaust Date of November 2010. This length of time would be required to ensure that a sufficient number of CO Codes remain available to provide for the future growth of NPA 780.

In developing the above dates, it was assumed that the existence of any protected CO Codes will have no impact on the Projected Exhaust Dates.

See Annex A, Figures 9 through 23 for maps that show the areas that will be covered by existing and new NPAs for each of the Relief Options identified by the CNA and RPC.

6.1. Geographic Split

Existing physical features do not easily lend themselves for use as boundaries to split NPA 403 or 780. Consequently, existing Incumbent Local Exchange Carrier (ILEC) Calgary and Edmonton EAS boundaries were chosen for the splits of NPAs 403 and 780.

With these EAS boundaries as the split boundaries, Alberta's population by numbering area, derived from Alberta Government statistics, would become:

Alberta 2003 Population – by NPA and major EAS areas

NPA	Area	Population	% of NPA	% of Alberta
403	Calgary & its Local Calling Area (EAS)	1,050,384	65.2	34.0
	Outside Calgary's Local Calling Area (EAS)	561,491	34.8	18.2
	NPA 403 Total	1,611,875	100.0	52.1
780	Edmonton & its Local Calling Area (EAS)	968,727	65.5	31.3
	Outside Edmonton's Local Calling Area (EAS)	511,229	34.5	16.5
	NPA 780 Total	1,479,956	100.0	47.9
Alberta Total		3,091,831	-	100.0

Using the Calgary and Edmonton EAS boundaries as split boundaries, six Geographic Split options were evaluated, two each for NPA 403 (plans 403-1a & 1b), two for NPA 780 (plans 780-1a & 1b), and two for joint NPA 403/780 relief (plans Joint-1a & 1b).

With plan 403-1a and 780-1a, number changes would be required inside the Calgary and Edmonton EAS areas respectively. With plans 403-1b and 780-1b, number changes would be required outside the Calgary and Edmonton EAS areas respectively (i.e., the remainder of the NPA 403 and 780 areas). These changes would be to the 3-digit NPA portion of telephone numbers in the affected area.

With plans Joint-1a & 1b, a 3-digit NPA change would be required for numbers outside the Calgary and Edmonton EAS areas, and telephone numbers in certain CO Codes would be also subject to a change of CO Code resulting in 6-digit NPA-NXX change.

With all plans 1a and 1b, the existing 7-digit local dialling plan could be retained for all local calls, or it could be replaced by a mixed 7- and 10-digit plan, with 7-digits applying to local calls within an NPA and 10-digits applying to calls between NPAs. If 7-digit dialling is retained for all local calls, the CO Codes in some Exchange Areas in one part of the split NPA will need to be protected in some Exchange Areas in the other part of the split NPA. This would be analogous to the situation created when NPA 403 was split into 403 and 780, which increased the quantity of Exchange Areas in Alberta with 7-digit local calling across NPA boundaries from 6 to 17, and increased the total quantity of Exchange Areas in Alberta affected by protection from 7 to 27. Since NPA 403 was split, the protected CO Codes in NPAs 403 and 780 have been assigned to Exchange Areas other than the Exchange Areas where the CO Codes were protected (i.e. per Section 3.8 of the Canadian Central Office Code (NXX) Assignment Guidelines), hence the retention of 7-digit local calling has not reduced the life of NPAs 403 and 780. With plans 1a or 1b, the assignment of CO Codes could be managed in a similar manner to avoid any reduction in the life of the NPAs following relief. The quantities of Protected CO Codes in Exchange Areas with growth are relatively low, e.g. around 9 CO Codes not assignable in the Calgary Exchange Area, and 16 in the Edmonton Exchange Area, but the administration of CO Codes with protection is undoubtedly more demanding than administration where very little or no protection is necessary. See Annex A Figures 8a & 8b, and Annex B Tables 4b & 4c for details of the local calling and protection associated with Plans 1a and 1b if the 7-digit local dial plan is not changed.

6.1.1. 403 plan 1a: Geographic Split of NPA 403 – Outside Calgary EAS changes to a new NPA, and Calgary EAS retains NPA 403

The Calgary EAS portion of NPA 403, with 18 Exchange Areas, would retain NPA 403, and the remainder of NPA 403, comprising 124 Exchange Areas, would be re-assigned to a new NPA. The area that would retain NPA 403 contains the rapidly growing Exchange Area of Calgary, while the new NPA would contain

the rapidly growing Exchange Areas of Red Deer, Lethbridge and Medicine Hat. Using this Relief Option, approximately 0.562 million people outside the Calgary EAS would be affected by a telephone number change.

After the split, NPA 403 and the new NPA would be expected to exhaust in 2023 and 2039 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20 year period, not including the impacts of NPA 780 relief.

6.1.2. 403 plan 1b: Geographic Split of NPA 403 – Calgary EAS changes to a new NPA, and Outside Calgary EAS retains NPA 403

The 124 Exchange Areas in NPA 403 outside the Calgary EAS would retain NPA 403, and the Calgary EAS portion of NPA 403, comprised of 18 Exchange Areas, would be re-assigned to a new NPA. Using this Relief Option, approximately 1.050 million people in the Calgary EAS would be affected by a telephone number change. The larger quantity of number changes required by this option is a drawback compared to the quantity of number changes required by Plan 1a.

After such a split, NPA 403 and the new NPA would be expected to exhaust in 2039 and 2023, respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20-year period, not including the impacts of NPA 780 relief.

6.1.3. 780 plan 1a: Geographic Split of NPA 780 – Outside Edmonton EAS changes to a new NPA, and Edmonton EAS retains NPA 780

The Edmonton EAS portion of NPA 780 comprised of 32 Exchange Areas would retain NPA 780, and the remainder of NPA 780, comprised of 163 Exchange Areas, would be re-assigned to a new NPA. The area that would retain NPA 780 contains the rapidly growing Exchange Area of Edmonton, Sherwood Park and St. Albert, while the new NPA would contain the rapidly growing Exchange Areas of Bonnyville and Drayton Valley. Using this Relief Option, approximately 0.511 million people outside the Edmonton EAS would be affected by a telephone number change.

After the split, NPA 780 and the new NPA would be expected to exhaust in 2029 and 2044 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and two new NPAs would be required in the province during the next 20-year period.

6.1.4. 780 plan 1b: Geographic Split of NPA 780 – Edmonton EAS changes to a new NPA, and Outside Edmonton EAS retains NPA 780

The 163 Exchange Areas in NPA 780 outside the Edmonton EAS would retain NPA 780, and the Edmonton EAS portion of NPA 780 comprised of 32 Exchange Areas, would be re-assigned to a new NPA. Using this Relief Option, approximately 0.969 million people in the Edmonton EAS would be affected by a telephone number change. The larger quantity of number changes required by this option is a drawback compared to the quantity of number changes required by Plan 1a.

After this split, NPA 780 and the new NPA would be expected to exhaust in 2044 and 2029 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and two new NPAs would be required in the province during the next 20 year period.

6.1.5. Joint plan 1a: Calgary EAS retains NPA 403, Edmonton EAS retains NPA 780, and the rest of Alberta changes to a new NPA

The Calgary EAS portion of NPA 403, comprised of 18 Exchange Areas, would retain NPA 403, and the Edmonton EAS portion of NPA 780, comprised of 32 Exchange Areas, would retain NPA 780. The remaining 287 Exchange Areas in Alberta would be re-assigned to a single new NPA. Approximately 1.073 million people outside the Calgary EAS and Edmonton EAS would be affected by a telephone number change.

A number of CO Codes within the remaining 287 Exchange Areas are assigned in both NPAs 403 and 780. This overlap of CO Codes would require some CO Code reassignments in either NPA 403 or NPA 780 coincident with relief, this change being in addition to the change of NPA. The quantity of overlapping CO Codes grew from 77 as of November 2004 to 100 in September 2006, and will continue to increase as additional NXXs are assigned prior to relief. Customers in 100+ NXXs outside the Calgary and Edmonton EAS boundaries would have to take a six-digit (NPA/NXX) number change instead of a three-digit (NPA) number change. See Annex B Table 3 for a list of overlapping CO Code assignments in areas outside of the Calgary and Edmonton EAS areas. This option would require the dual-assignment of CO Codes in these Exchange Areas during the permissive period, coincident with additional consumer awareness activities.

After the split, NPA 403, NPA 780 and the new NPA would be expected to exhaust in 2023, 2029 and 2011 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20-year period.

6.1.6. Joint plan 1b: Calgary EAS retains NPA 403, and the rest of NPA 403 changes to a new NPA in phase 1; Edmonton EAS retains NPA 780, and the rest of NPA 780 changes to the new NPA with a realigned boundary in phase 2

As the first phase of relief (January 2007), the Calgary EAS portion of NPA 403, comprised of 18 Exchange Areas, would retain NPA 403 and the remainder of NPA 403, comprised of 124 Exchange Areas, would be re-assigned to a new NPA. Approximately 0.562 million people outside the Calgary EAS would be affected by a telephone number change.

In the second phase of relief (January 2008), the Edmonton EAS portion of NPA 780, comprised of 32 Exchange Areas, would retain NPA 780, and the boundaries of the new NPA 403 relief NPA would be realigned to include the remainder of NPA 780, comprised of 163 Exchange Areas outside the Edmonton EAS area, which would have access to resources from the new NPA. Approximately 0.511 million people outside the Edmonton EAS would be affected by a telephone number change.

A number of CO Codes outside the Calgary and Edmonton EAS boundaries are assigned in both NPAs 403 and 780. The quantity of overlapping CO Codes grew from 77 as of November 2004 to 100 in September 2006, and will continue to increase as additional NXXs are assigned prior to relief. Customers in 100+ NXXs outside the Calgary EAS boundaries would have to take a six-digit (NPA/NXX) number change instead of a three-digit (NPA) number change. See Annex B Table 3 for a list of overlapping CO Code assignments in areas outside of the Calgary and Edmonton EAS areas. This option would require the dual-assignment of CO Codes in these Exchange Areas during the permissive period, coincident with additional consumer awareness activities, and would require special CO Code Assignment practices in NPA 780 between phase 1 and phase 2.

After this double split, NPA 403, NPA 780 and the new NPA would be expected to exhaust in 2023, 2029 and 2011 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20-year period.

6.2. Concentrated Overlay

Four Concentrated Overlay Relief Options were evaluated, one each for NPAs 403 and 780 and two for joint NPA 403/780 relief (403 plan 2, 780 plan 2, and Joint plans 2a & 2b). Joint plan 2b also includes a Boundary Realignment as part of the second phase of Concentrated Overlay Relief.

The main advantage of all options that use the Overlay Method as opposed to the Geographic Split Method is that number changes are not required. With an overlay NPA, 7-digit dialling is eliminated and 10-digit dialling becomes mandatory for local calling within, from, and usually to, the overlay area. These dialling changes usually take place at the time of relief (e.g. in all previously-approved Canadian reliefs using overlays), however one of the Distributed Overlay Relief Options being considered would retain 7-digit local dialling in NPA 403 beyond the initial phase of relief for some period of time during which special CO Code assignment practices would be required.

6.2.1. 403 plan 2: Concentrated Overlay of a new NPA on the Calgary EAS, and Outside Calgary EAS grows with NPA 403

This Relief Option would overlay a new NPA over the Calgary EAS portion of the NPA 403 area, comprised of 18 Exchange Areas. The portion of NPA 403 outside the Calgary EAS, comprised of 124 Exchange Areas, would continue to grow using the remaining CO Codes available for assignment in NPA 403.

With such an overlay, NPA 403 and the new NPA would be expected to exhaust in 2013 and 2037 respectively.

This Relief Option increases the number of separate Relief Planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20 years.

6.2.2. 780 plan 2: Concentrated Overlay of a new NPA on the Edmonton EAS, and Outside Edmonton EAS grows with NPA 780

This Relief Option would overlay a new NPA over the Edmonton EAS portion of the NPA 780 area, which is comprised of 32 Exchange Areas. The portion of NPA 780 outside the Edmonton EAS, comprised of 163 Exchange Areas, would continue to grow using the remaining CO Codes available for assignment in NPA 780.

With this overlay, NPA 780 and the new NPA would be expected to exhaust in 2018 and 2045 respectively.

This Relief Option increases the number of separate relief planning areas in Alberta from two to three, and two new NPAs would be required in the province during the next 20 years.

6.2.3. Joint plan 2a: Calgary EAS grows with NPA 403, Edmonton EAS grows with NPA 780, and the rest of Alberta receives a Concentrated Overlay of a single new NPA

The Calgary EAS portion of NPA 403, with 18 Exchange Areas, would grow with the remainder of the NPA 403 resources, and the Edmonton EAS portion of NPA 780, comprised of 32 Exchange Areas, would grow with the remainder of the NPA 780 resources. The remaining 287 Exchange Areas in Alberta, outside the Calgary and Edmonton EAS areas would be overlayed with a new NPA in a single-phase Concentrated Overlay.

NPA 403s, NPA 780 and the new NPA would be expected to exhaust in 2011, 2011 and 2035 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20-year period.

6.2.4. Joint plan 2b: Calgary EAS grows with NPA 403, and the rest of NPA 403 receives a Concentrated Overlay of a new NPA in phase 1; Edmonton EAS grows with NPA 780, and the new NPA's boundary is realigned to overlay the rest of NPA 780 in phase 2

At NPA 403 relief (January 2007) the Calgary EAS portion of NPA 403, with 18 Exchange Areas, would grow with the remainder of the NPA 403 resources. The remainder of NPA 403, comprised of 124 Exchange Areas, would get a new area code in the form of a Concentrated Overlay.

At NPA 780 Relief (January 2007) the Edmonton EAS portion of NPA 780, comprised of 32 Exchange Areas, would grow with the remainder of the NPA 780 resources, and the new 403 relief NPA would be expanded to the rest of NPA 780, comprised of 163 Exchange Areas, outside the Edmonton EAS boundaries.

After the concentrated Overlay, NPA 780, NPA 403 and the new NPA would be expected to exhaust in 2011, 2011 and 2035 respectively.

This Relief Option would increase the number of separate relief planning areas in Alberta from two to three, and three new NPAs would be required in the province during the next 20 year period.

6.3. Distributed Overlay

Six Distributed Overlay Relief Options were evaluated, one each for NPAs 430 and 780, and four for joint NPA 403/780 relief (403 plan 2, 780 plan 2, and Joint plans 2a & 2b). Joint plans 3c and 3d also include a Boundary Realignment as part of the second phase of Concentrated Overlay Relief.

6.3.1. 403 plan 3: Distributed Overlay on NPA 403

This Relief Option would overlay a new NPA over all 142 Exchange Areas in NPA 403. NPA 403 and the new NPA would be expected to exhaust in 2009 and 2029 respectively.

This Relief Option would maintain the number of separate relief planning areas in Alberta at two, and two new NPAs would be required in the province during the next 20 years.

6.3.2. 780 plan 3: Distributed Overlay on NPA 780

This Relief Option would overlay a new NPA over all 195 Exchange Areas in NPA 780. NPA 780 and the new NPA would be expected to exhaust in 2010 and 2039 respectively.

This Relief Option would maintain the number of separate relief planning areas in Alberta at two, and two new NPAs would be required in the province during the next 20 years.

6.3.3. Joint plan 3a: Distributed Overlay of a single new NPA on NPAs 403 and 780

This Relief Option would initially overlay a new NPA over all 337 Alberta Exchange Areas (i.e., 142 Exchange Areas in NPA 403 plus 195 Exchange Areas of NPA 780), providing relief to NPAs 403 and 780 at the same time.

NPAs 403, 780 and the new NPA would be expected to exhaust in years 2009, 2021 and 2021 respectively.

This Relief Option would reduce the number of separate relief planning areas in Alberta from two to one, and two new NPAs would be required in the province during the next 20 years.

6.3.4. Joint plan 3b: Distributed Overlays of separate new NPAs on NPAs 403 and 780 at the same time

This Relief Option would overlay a new NPA over all 142 Exchange Areas in NPA 403, and another new NPA over all 195 Exchange Areas in NPA 780, providing relief to NPAs 403 and 780 at the same time (1st Quarter 2008). NPA 403 and its new NPA would be expected to exhaust in 2009 and 2029 respectively. NPA 780 and its new NPA would be expected to exhaust in 2010 and 2039 respectively.

This Relief Option would maintain the number of separate relief planning areas in Alberta at two, and two new NPAs would be required in the province during the next 20 years.

6.3.5. Joint plan 3c: Distributed Overlay on NPA 403 in phase 1; new NPA's boundary realigned to overlay NPA 780 in phase 2

This Relief Option would initially overlay a new NPA over all 142 Exchange Areas in NPA 403. When NPA 780 approaches exhaust, the boundaries of the new 403 overlay NPA would be realigned to include the existing 195 Exchange Areas of NPA 780 (i.e., all 337 Alberta Exchange Areas).

NPAs 403, 780 and the new NPA would be expected to exhaust in years 2009, 2010 and 2021 respectively.

This Relief Option would reduce the number of separate relief planning areas in Alberta from two to one, and two new NPAs would be required in the province during the next 20 years.

6.3.6. Joint plan 3d: Distributed Overlay on NPA 403 in phase 1; retention of 7-digit local dialling until the new NPA's boundary is realigned to overlay NPA 780 in phase 2

This Relief Option would initially overlay a new NPA over all 142 Exchange Areas in NPA 403 without immediately transitioning to 10-digit local dialling. When NPA 780 approaches exhaust, the boundaries of

the new NPA would be realigned to include the existing 195 Exchange Areas of NPA 780 (i.e., all 337 Alberta Exchange Areas) and mandatory 10-digit local dialling would be introduced.

7-digit local dialling in NPA 403 would be retained until 15 months prior to the Projected Exhaust Date for NPA 780. 7-digit dialling could be administered in NPA 403 and the 403 overlay NPA using special CO Code assignment practices. Fifteen months prior to the Projected Exhaust Date for NPA 780 mandatory 10-digit dialling would be implemented in Alberta and the 403 overlay NPA would also be used to provide relief in NPA 780. In the event that the exhaust of the new 403 overlay NPA without 10-digit dialling is expected to occur before the exhaust of NPA 780, 10-digit dialling would have to be implemented earlier in NPA 403.

NPAs 403, 780 and the new NPA would be expected to exhaust in years 2009, 2010 and 2021 respectively.

This Relief Option would reduce the number of separate Relief Planning areas in Alberta from two to one, and two new NPAs would be required in the province during the next 20 years.

6.4. Summary of Relief Options

The following table summarizes the dates, and the number change and dialling impacts for the alternative Relief Options. The Exhaust Dates shown below are future exhaust dates after implementation of each Relief Option (Plan). In the case of Distributed Overlays, for the purpose of calculating the Projected Exhaust Date, it is assumed that all CO Codes in the existing NPA will be assigned prior to assignment of CO Codes from the new NPA.

Plan	Description	Exhaust Dates				Relief Timing & Type		Pop'n affected by # changes (millions)	Local Dial # of digits
		NPA 403	NPA 780	New NPA 1	New NPA 2	Dates (area) [thru 2025 only]	Type		
403-1a	Outside Calgary EAS changes to a new NPA, and Calgary EAS retains NPA 403	2023	-	2039	4	**2007** (403)	S	0.562	7
						2021 (403)	O	Nil	7>10
							*		
403-1b	Calgary EAS changes to a new NPA, and Outside Calgary EAS retains NPA 403	2039	-	2023		**2007** (403)	S	1.050	7
						2021 (New NPA 1)	S/O*	?m/Nil*	7/10*
780-1a	Outside Edmonton EAS changes to a new NPA, and Edmonton EAS retains NPA 780	-	2029	2044		**2008** (780)	S	0.511	7
						2027 (780)	O	Nil	7>10
780-1b	Edmonton EAS changes to a new NPA, and Outside Edmonton EAS retains NPA 780	-	2044	2029		**2008** (780)	S	0.969	7
						2027 (New NPA 1)	S/O*	?m/Nil*	7/10*
Joint-1a	Calgary EAS retains NPA 403, Edmonton EAS retains NPA 780, and the rest of Alberta changes to a new NPA	2023	2029	2011	2043	**2007** (403)	S	0.562	7
						2007 (780)	S	1.050	7
						2021 (403)	O	Nil	7>10
						2009 (New NPA 1)	?	?m	7
						2022 (780)	O	Nil	7>10
Joint-1b	Calgary EAS retains NPA 403, & the rest of NPA 403 changes to a new NPA in phase 1; Edmonton EAS retains NPA 780, and rest of NPA 780 changes to the new NPA with a realigned boundary in phase 2	2023	2029	2011	2043	**2007** (403)	S	0.562	7
						2008 (780)	S	1.050	7
						2021 (403)	O	Nil	7>10
						2009 (New NPA 1)	?	?m	7
						2027 (780)	O	Nil	7>10
403-2	Concentrated Overlay of a new NPA on the Calgary EAS, and Outside Calgary EAS grows with NPA 403	2013	-	2037	2068	**2007** (403)	S/O*	Nil	7>10
						2011 (403)	S/O*	?m/Nil*	7/10*
						2035 (New NPA 1)	O	Nil	10
						2009 (780)	S/O*	?m/Nil*	7/10*
780-2	Concentrated Overlay of a new NPA on the Edmonton EAS, and Outside Edmonton EAS grows with NPA 780		2018	2045		**2007** (780)	S/O*	Nil	7>10
						2016 (780)	O	Nil	10
Key	O = Overlay, S= Split, * = Options, > = dialling plan conversion, ? = Unknown population affected by number changes								
	Table continues on following page								

Plan	Description	Exhaust Dates				Relief Timing & Type		Pop'n affected by # changes (millions)	Local Dial # of digits
		NPA 403	NPA 780	New NPA 1	New NPA 2	Dates (area) [thru 2025 only]	Type		
Joint-2a	Calgary EAS grows with NPA 403, Edmonton EAS grows with NPA 780, and the rest of Alberta receives a Concentrated Overlay of a single new NPA	2011	2011	2035	**	**2007** (403)	O	Nil	7>10
						2007 (780)	O	Nil	7>10
						2009 (403)	O	Nil	7>10
						2033 (New NPA 1)	?	Nil	7>10
						2009 (780)	O	Nil	7>10
Joint-2b	Calgary EAS grows with NPA 403, and the rest of NPA 403 receives a Concentrated Overlay of a new NPA in phase 1; Edmonton EAS grows with NPA 780, and the new NPA's boundary is realigned to overlay the rest of NPA 780 in phase 2	2011	2011	2035	**	**2007** (403)	S	Nil	7
						2008 (780)	S	Nil	7
						2033 (New NPA 1)	S/O*	?m/Nil*	7/10*
						2009 (403)	S/O*	?m/Nil*	7/10*
						2009 (780)	S/O*	?m/Nil*	7/10*
403-3	Distributed Overlay on NPA 403	2009	-	2029	2044	**2007** (403)	O	Nil	10
						2027 (New NPA 1)	O	Nil	10
780-3	Distributed Overlay on NPA 780	-	2010	2039		**2009** (780)	O	Nil	10
						2037 (New NPA 1)	O	Nil	10
Joint-3a	Distributed Overlay of a single new NPA on NPAs 403 and 780	2009	2021	2021	2032	**2007** (403)	O	Nil	7>10
						2007 (780)	O	Nil	7>10
						2019 (New NPA 1)	O	Nil	10
						2031 (New NPA 2)	O	Nil	10
Joint-3b	Distributed Overlays of separate new NPAs on NPAs 403 and 780 at the same time	2009	2010	2029	2039	**2008** (403)	O	Nil	10
						2027 (New NPA 1)	O	Nil	10
						2008 (780)	O	Nil	10
						2037 (New NPA 1)	O	Nil	10
Joint-3c	Distributed Overlay on NPA 403 in phase 1; new NPA's boundary realigned to overlay NPA 780 in phase 2	2009	2010	2021	2032	**2008** (403)	O	Nil	7>10
						2009 (780)	O	Nil	10
						2019 (New NPA 1)	O	Nil	7>10
Joint-3d	Distributed Overlay on NPA 403 in phase 1; retention of 7-digit local dialling until the new NPA's boundary is realigned to overlay NPA 780 in phase 2	2009	2010	2021	2032	**2008** (403)	O	Nil	7
						2009 (780)	O	Nil	7>10
						2019 (New NPA 1)	O	Nil	10
						2031 (New NPA 2)	O	Nil	10
Key	O = Overlay, S= Split, * = Options, > = dialling plan conversion, ? = Unknown population affected by number changes								

7. IDENTIFICATION & ASSESSMENT OF RELIEF OPTIONS CONSIDERED BY THE RELIEF PLANNING COMMITTEE

The Relief Planning Committee considered the sixteen Relief Options that have been identified. These options were assessed using the following criteria:

A. NPA Code Conservation – quantity of new NPAs required in Alberta within the next 15 years (P = 1 or less new NPAs; N = 2 new NPAs; C = 3 or more new NPAs)
B. Number of separate Relief Planning areas in Alberta in the long term (P = decrease; N = stays same; C = increase)
C. Quantity of Number Changes for existing customers' numbers
D. Level of Carrier Costs – e.g., including implementation, customer awareness, (P = Low; N = Medium; C = High)
E. Deferral of Implementation – how long before customers have to make a change (P = deferral of relief implementation; N = no advance or deferral of relief implementation; C = advance of relief implementation)
F. Longevity – the length of time before further relief activity would be required in Alberta (e.g., a new area code, local dial plan changes) (P = 15 or more years; N = 8 through 14 years; C = within 7 years)
G. Geographic Identity – known areas or identifiable geographical features or NPA border identification (P = High, N = Medium; C = Low)
H. Geo-political Identity (P = High, N = Medium; C = Low)
I. Customer Confusion about dialling plan changes (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. Does the option consider the potential direction for future reliefs in Alberta (P = Yes; C = No)

P = Pro N = Neutral C = Con

Plan	Relief Options	A	B	C	D	E	F	G	H	I	J	K	Sum	
403-1a	Outside Calgary EAS changes to a new NPA, and Calgary EAS retains NPA 403	C	C	C	C	N	N	C	P	N	C	C	-6	
403-1b	Calgary EAS changes to a new NPA, and Outside Calgary EAS retains NPA 403	C	C	C	C	N	N	C	P	N	C	C	-6	
780-1a	Outside Edmonton EAS changes to a new NPA, and Edmonton EAS retains NPA 780	N	C	C	C	N	C	C	P	P	C	C	-5	
780-1b	Edmonton EAS changes to a new NPA, and Outside Edmonton EAS retains NPA 780	N	C	C	C	N	C	C	P	P	C	C	-5	
Joint-1a	Calgary EAS retains NPA 403, Edmonton EAS retains NPA 780, and the rest of Alberta changes to a new NPA	N	C	C	C	N	C	C	P	C	C	C	-7	403
		N	C	C	C	C	C	C	P	C	C	C	-8	780
													-7.5	Av.
Joint-1b	Calgary EAS retains NPA 403, & the rest of NPA 403 changes to a new NPA in phase 1; Edmonton EAS retains NPA 780, and the rest of NPA 780 changes to the new NPA with a realigned boundary in phase 2	N	C	C	C	N	C	C	P	C	C	C	-7	403
		N	C	C	C	N	C	C	P	C	C	C	-7	780
													-7	Av.
403-2	Concentrated Overlay of a new NPA on the Calgary EAS, and Outside Calgary EAS grows with NPA 403	C	C	P	N	C	C	C	P	C	P	C	-4	
780-2	Concentrated Overlay of a new NPA on the Edmonton EAS, and Outside	N	C	P	N	C	C	C	N	N	P	C	-3	

Plan	Relief Options	A	B	C	D	E	F	G	H	I	J	K	Sum	
	Edmonton EAS grows with NPA 780													
Joint-2a	Calgary EAS grows with NPA 403, Edmonton EAS grows with NPA 780, and the rest of Alberta receives a Concentrated Overlay of a single new NPA	N	C	P	N	C	C	C	P	C	P	P	-1	
Joint-2b	Calgary EAS grows with NPA 403, and the rest of NPA 403 receives a Concentrated Overlay of a new NPA in phase 1; Edmonton EAS grows with NPA 780, and the new NPA's boundary is realigned to overlay the rest of NPA 780 in phase 2	N	C	P	N	C	C	C	P	C	P	P	-1	
403-3	Distributed Overlay on NPA 403	N	N	P	P	N	P	P	N	N	P	C	+4	
780-3	Distributed Overlay on NPA 780	N	N	P	P	N	N	P	N	C	P	P	+4	
Joint-3a	Distributed Overlay of a single new NPA on NPAs 403 and 780	P	P	P	P	N	N	N	C	N	P	P	+5	
Joint-3b	Distributed Overlays of separate new NPAs on NPAs 403 and 780 at the same time	N	N	P	P	N	P	P	N	N	P	C	+4	
Joint-3c	Distributed Overlay on NPA 403 in phase 1; new NPA's boundary realigned to overlay NPA 780 in phase 2	P	P	P	N	N	N	N	C	C	P	P	+3	403
		N	N	P	P	C	N	P	N	C	P	P	+3	780
Joint-3d	Distributed Overlay on NPA 403 in phase 1; retention of 7-digit local dialling until the new NPA's boundary is realigned to overlay NPA 780 in phase 2	P	P	P	N	N	C	N	C	C	P	P	+2	403
		P	P	P	N	N	N	N	N	N	P	P	+5	780
													+3.5	Av.

Notes:

1. None of the Relief Options require Exchange Area boundary changes.
2. For the purposes of this matrix, it is assumed that Relief Options 403-1a, 403-1b, 780-1a, 780-1b, Joint-1a & Joint-1b will retain 7-digit local dialling within the area code.

If P, N and C are assigned a weighting of +1, 0 and -1, respectively, then analysis of the Plans per the above table gives the highest rating of 5 points to Joint-3a, and 4 points to Joint-3b, or 403-3 and 780-3.

The Relief Planning Committee did not consider the Technology Specific Overlay Relief Option for the reasons stated in section 4.4. Given that telephone numbers can be portable between technologies (e.g., between a wireline provider and a wireless CLEC), it is not possible to maintain a complete separation between numbering resources for different technologies.

The Relief Planning Committee does not recommend any of the Geographic Split Relief Options because they would require a significant quantity of number changes and would result in a mix of 7- and 10-digit local dialling for exchanges near the new NPA boundary. The number changes would require the reprogramming of large quantities of cell phones. In addition, the proposed split boundaries do not follow any discernible geographic features and would result in an unbalanced distribution of CO Codes between NPAs. Retention of 7-digit local dialling with geographic splits is not compatible with the evolution towards 10-digit local dialling that is taking place in Canada.

The Relief Planning Committee does not recommend any of the Concentrated Overlay Relief Options because insufficient assigned CO Codes remain in NPAs 403 and 780 to provide a reasonable period of time until the next relief is required. For example, in Relief Option Joint-2a NPAs 403 and 780 would again require relief within two years of the current relief.

The Relief Planning Committee prefers a Distributed Overlay Relief Option because no number changes are required, the life of the relief is greater than with a Concentrated Overlay and NPAs 403 and 780 boundaries are unchanged.

8. DIALLING CHANGES FOR LOCAL CALLS

The following tables describe the existing local dialling arrangements and the new local dialling arrangements in NPA 403, the NPA 403 Relief NPA, and neighbouring NPA 780 after relief using a Geographic Split, an Overlay, and a 403 & 780 Overlay (Boundary Realignment). The toll call dialling arrangement is not impacted by NPA relief.

Local Dialling Plan for Customers in 403 NPA

Dial Plan Scenarios	Number of digits			
	Today	After 403 Split	After 403 Overlay	After 403 & 780 Overlay
Landline to Wireless within NPA	7	7	10	10
Landline to Wireless from NPA 403 to Adjacent NPAs	7	7 &/or 10	10	10
Landline to Landline within NPA	7	7	10	10
Landline to Landline from NPA 403 to Adjacent NPAs	7	7 &/or 10	10	10
Wireless to Wireless within NPA	7/10/11	7/10/11	10/11	10/11
Wireless to Wireless from NPA 403 to Adjacent NPAs	7/10/11	7 &/or 10/11	10/11	10/11
Wireless to Landline within NPA	7/10/11	7/10/11	10/11	10/11
Wireless to Landline from NPA 403 to Adjacent NPAs	7/10/11	7 &/or 10/11	10/11	10/11

Local Dialling Plan for Customers in the 403 Relief NPA

Dial Plan Scenarios	Number of digits			
	Today	After 403 Split	After 403 Overlay	After 403 & 780 Overlay
Landline to Wireless within NPA	N/A	7	10	10
Landline to Wireless from Relief NPA to Adjacent NPAs	N/A	7 &/or 10	10	10
Landline to Landline within NPA	N/A	7	10	10
Landline to Landline from Relief NPA to Adjacent NPAs	N/A	7 &/or 10	10	10
Wireless to Wireless within NPA	N/A	7/10/11	10/11	10/11
Wireless to Wireless from Relief NPA to Adjacent NPAs	N/A	7 &/or 10/11	10/11	10/11
Wireless to Landline within NPA	N/A	7/10/11	10/11	10/11
Wireless to Landline from Relief NPA to Adjacent NPAs	N/A	7 &/or 10/11	10/11	10/11

Local Dialling Plan for Customers in Neighbouring 780 NPA

Dial Plan Scenarios	Number of digits			
	Today	After 403 Split	After 403 Overlay	After 403 & 780 Overlay
Landline to Wireless within NPA	7	7	7	10
Landline to Wireless from NPA 780 to Adjacent NPAs	7	7	7 or 10	10
Landline to Landline within NPA	7	7	7	10
Landline to Landline from NPA 780 to Adjacent NPAs	7	7	7 or 10	10
Wireless to Wireless within NPA	7/10/11	7/10/11	7/10	10
Wireless to Wireless from NPA 780 to Adjacent NPAs	7/10/11	7 &/or 10/11	10/11	10/11
Wireless to Landline within NPA	7/10/11	7/10/11	7/10	10
Wireless to Landline from NPA 780 to Adjacent NPAs	7/10/11	7 &/or 10/11	10/11	10/11

9. PROPOSED SCHEDULE

The Relief Planning Committee 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.

No.	Task or Event	Duration (mo's)	Start Date	End Date
1	CNA identifies NPA exhaust and notifies by e-mail CRTC staff, CSCN, NANPA & CISC that the NPA will exhaust*	2	02-2004	04-2004
2	CNA conducts R-NRUF and begins preparation of IPD	2	05-2004	07-2004
3	CRTC issues Public Notice to establish RPC and Interested Parties list. CNA announces the date for the initial NPA Relief Planning meeting, requests contributions and issues the initial press release.	3	08-2004	10-2004
4	CNA completes and distributes IPD to RPC	N/A	09-2004	09-2004
5	RPC participants review IPD	2	09-2004	11-2004
6	CNA chairs initial RPC meeting to present, explain and discuss the NPA Relief Planning process and the IPD. RPC schedules next meeting/conference call	N/A	11-2004	11-2004
7	CNA distributes revised IPD based upon initial meeting discussions	2	11-2004	01-2005
8	RPC participants provide comments on revised IPD as contributions to the RPC	1	01-2005	02-2005
9	RPC participants review contributions, if any, prior to second meeting/conference call	1	01-2005	02-2005
10	CNA chairs subsequent RPC meetings/conference calls to finalize Planning Document	1	10-2006	11-2006
11	CNA revises and forwards Planning Document (PD) to the CISC and CRTC	.5	11-2006	11-2006
12	CISC reviews and forwards PD to the CRTC for approval	1	11-2006	12-2006
13	CRTC initiates a process to approve/revise the PD and establish the Relief Option and Relief Date	2	12-2006	02-2007
14	Interested Parties submit comments and reply comments to CRTC	1	02-2007	03-2007
15	CRTC issues Decision & directs RPC to develop an NPA Relief Implementation Plan (RIP)	3	03-2007	06-2007
16	CNA requests and obtains assignment of Relief NPA(s) from the NANPA and schedules meeting of RPC to develop a consensus RIP and Planning Letter (PL)	.5	06-2007	07-2007
17	CNA chairs RPC meeting to create Task Forces	0	07-2007	07-2007

No.	Task or Event	Duration (mo's)	Start Date	End Date
18	RPC and its Task Forces develop and obtain consensus on the various components of the RIP and PL (a series of meetings/conference calls might be required)	3	07-2007	10-2007
19	CNA forwards consensus RIP to CISC and the PL to NANPA	.5	10-2007	11-2007
20	CISC reviews and forwards RIP to the CRTC for approval	1	11-2007	12-2007
21	CRTC approves RIP and notifies Interested Parties	2	12-2007	02-2008
22	CNA issues second media release and sends approved RIP to NANPA, TRA, LNP Consortium and RPC members	.5	02-2008	03-2008
23	Task Forces, Telecommunications Service Providers and users execute the RIP	9	03-2008	12-2008
24	Permissive Dialling Period in the event of a Split / 7- to 10- digit Dialling Transition Period in the event of an Overlay (To be determined based upon CRTC approved Relief Option)	3	12-2008	03-2009
25	Relief Date (i.e., earliest date when CO Codes in the new overlay NPA may be activated)		03-2009	03-2009
26	CNA submits Final Report to CISC within two months of Relief implementation		03-2009	05-2009
27	Projected Exhaust Date (NPA 403)		10-2009	
28	Projected Exhaust Date (NPA 780)		11-2010	

* When an NPA is projected to exhaust within a 72-month period, the CNA must commence the Relief Planning process.

** In the event that a new NRUF or actual demand indicates that the exhaust date will change significantly, the CNA may convene a meeting of the NPA Relief Planning Committee to review the issue and make a recommendation to the CISC and CRTC.

10. RECOMMENDATIONS

Based upon its analysis of the Relief Options, the Relief Planning Committee recommends that Relief Option Joint-3a be adopted for use in the upcoming relief of area codes 403 and 780. The Relief Planning Committee prefers this option because no number changes are required, the life of the relief is greater than with a Concentrated Overlay and NPAs 403 and 780 boundaries are unchanged. This option provides simultaneous relief to NPAs 403 and 780 with a single new NPA, and requires mandatory 10-digit local dialling. Simultaneous relief for both NPAs can be achieved by a single customer awareness program, will reduce the costs for consumers and Telecommunications Service Providers and is practical as the Projected Exhaust Dates for NPAs 403 and 780 are only one year apart. The implementation of a single new NPA optimizes the use of numbering resources (NPAs) in Canada.

The RPC surmised that customers in the Calgary and Edmonton areas may prefer separate overlay NPAs for NPAs 403 and 780 as described in Relief Option Joint-3b, which also requires mandatory 10-digit local dialling. However, this option is a less efficient use of numbering resources (NPAs), and introduction of two new NPAs rather than one may increase the cost of relief implementation slightly for consumers and Telecommunications Service Providers. Relief Option Joint-3b is therefore the RPC's second choice of preferred option.

The RPC recommends that relief for NPAs 403 and 780 be implemented in a single phase regardless of the Relief Option chosen by the CRTC.

This RPC concurs with the recommendation of the NPA 250 Relief Planning Committee that consumer awareness activities be coordinated and conducted simultaneously in NPAs 250, 403 and 780.

The RPC recommends that any 7-digit local dialling that currently exists from Lloydminster and Marshall in NPA 306 (Saskatchewan) into NPA 780 be allowed to continue after NPA 780 relief. The rationale for this recommendation is explained in more detail in section 5.

The RPC recommends that NPAs 587 and 825 be set aside for future NPA assignments in Alberta; one of these NPAs would be assigned for the Distributed Overlay recommended above. The rationale for this recommendation is explained in more detail in section 5.

The RPC recommends the Jeopardy Condition in NPA 403 be revoked 60 days prior to NPA 403 relief being implemented. This is explained in more detail in section 11 (Jeopardy Contingency Plan). If a Jeopardy Condition is declared in NPA 780 then this shall be revoked 60 days prior to implementation of joint NPA 403/780 relief.

11. JEOPARDY CONTINGENCY PLAN (NPA 403)

The following measures shall be implemented by all CO Code Holders in NPA 403 once approved by the CRTC.

1) During a Jeopardy Condition, code applicants shall submit all code applications and related correspondence for the jeopardy NPA to CRTC staff in addition to the CNA. The CNA will work closely with CRTC staff in the analysis of these applications.

2) Telecommunications Service Providers (TSPs) will implement the following conservation methods when this Jeopardy Contingency Plan is approved:

   a) age disconnected residential telephone numbers for a maximum of two months;
   b) age disconnected wireless telephone numbers for a maximum of three months;
   c) 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) 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) all CO Code Holders 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) the quantity of reserved numbers shall not 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) within 45 days from the date the CRTC approves this Jeopardy Contingency Plan, CO Code Holders shall 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, as per these Special Conservation Procedures. Once the 45-day period has elapsed, the CNA shall make any reserved CO Code that has not been assigned and for which it has not received a Part 1 Form available for general assignment. Within 60 days from the date that this Jeopardy Contingency Plan becomes effective, 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) reservations of CO Codes will not be permitted until NPA relief is provided;
   i) for all CO Codes that were assigned prior to the date this Jeopardy Contingency Plan becomes effective, the CO Codes must be placed 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. The CNA shall initiate reclamation procedures for all CO Codes that have not been placed In-Service within this timeframe;
   j) reclaimed CO Codes will be made available for general assignment after a three-month aging period.

3) 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 Code Holder can demonstrate that, due to circumstances beyond its control, 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.

4) When applying for a CO Code for growth for the switching entity/POI serving an exchange, CO Code Holders shall:

   a) complete and submit the attached Telephone Number Utilization Report Form;
   b) certify that all held telephone numbers have been released;
   c) certify that reserved numbers do not exceed ten percent of the total quantity of numbers;
   d) certify that all existing CO Codes per service provided in that exchange by that switching entity or POI, are projected to exhaust within four months and provide supporting documentation (i.e., complete Appendix B Months to Exhaust Certification Worksheet); and,
   e) certify that each reseller's/dealer's inventory has been reduced to an amount equal to two times the highest month's end customer number assignment rate from the previous year for that reseller/dealer. This certification must be provided at the time of applying for a CO Code for growth or within 60 days from the date the Jeopardy Contingency Plan becomes effective, whichever is later. In the event that the Code Applicant does not submit the certification within 60 days of the date the Jeopardy Contingency Plan becomes effective, then the CNA shall advise Commission staff. Exceptional issues (e.g., inventory provision for start-up resellers/dealers, inventory provision for resellers/dealers that anticipate activations in excess of historical trends, and resellers/dealers that refuse to cooperate in reducing their inventories) may be referred to the Commission for resolution.

5) 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 the date of application. In the event that a CO Code Holder is unable to place the CO Code In-Service within four months of the date of application, 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.

6) A TSP 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.

7) The CNA will compare subsequent NRUF inputs with the July 2006 R-NRUF inputs, in order to assess forecasting trends. The CNA shall monitor all inputs and shall test them for reasonableness in consultation with the Telecommunications Service Provider. 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 J-NRUF input from all potential and current CO Code Holders quarterly starting in December 2006, until 4 months before relief is provided. The July 2006 R-NRUF input will be used as a baseline for comparison of subsequent J-NRUF inputs as well as 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 Provider. If the CNA is dissatisfied with the reasonableness, or the rationale provided for the deviations, then the matter will be referred to the Commission.

9) In the absence of the most recently required NPA 403 NRUF from a Code Holder or proposed Competitive Local Exchange Carrier (CLEC), the CNA will request a completed NRUF from that entity prior to the assignment of a CO Code.

10) When a CO Code Applicant requests more CO Codes than it identified in its July 2006 R-NRUF or most recent subsequent NPA 403 J-NRUF, the CNA will discuss the matter with the Code Applicant and if the 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 [the date identified on the NPA CO Code Inventory Chart]” 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) This JCP shall remain in effect until 60 days before NPA Relief has been implemented. This period of time equals 66 days less 6 days, since a CO Code applicant needing to activate a new CO Code in the minimum amount of time and applying for a CO Code 66 days prior to the Relief Date can receive a CO Code in the post-Relief NPA, less a cushion of 6 days so the earliest effective date of CO Code in the new post-Relief NPA is no sooner than 6 days after the NPA Relief date

14) 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.

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.).

Telephone Number Utilization Report

Entity Name: _____ **Contact name:** _____
Address : _____ **City, Prov/Terr, Postal code:** _____
Telephone: _____ **Facsimile:** _____
E-Mail : _____
Date : _____

Telephone Number Utilization for: **Switch/POI CLLI:**
Exchange Name **Province / Territory :**

NPA	NXX	Portable (Y or N)	Quantities of Telephone Numbers							% Utilization
			Reseller Inventory	Assigned	R&H	Admin	Ported Out	Available	Aging	
TOTAL										

% Utilization = (Reseller Inventory+Assigned+R&H+Admin+Ported Out+Aging)/(100)

NPA 403 CO Code Inventory Chart
(Revised: December 7, 2006)

The following chart and the instructions it contains will apply in NPA 403 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 assigned and in-service as at 2006-10-19. It identifies 38 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 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.

A	Total CO Codes In an NPA (NXX format)	**800**
B	**CO Codes unassignable prior to a Jeopardy Condition:**	
	N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911)	8
	Special Use Codes (555, 950 & 976)	3
	Protected Codes	0
	Home NPA(s) (403)	1
	Current Neighbouring NPAs (780 - see Note 1 for others)	1
	Future Canadian Geographic NPAs (see Note 2)	19
	Plant Test Codes (958 & 959)	2
	Special 7-digit Dialling Codes (610 & 810)	2
	911 Misdial Codes (914 & 915)	2
	Subtotal	**38**
C	Assignable CO Codes prior to Jeopardy with none set aside for new entrants after relief (C=A-B)	**762**
D	**CO Codes unassignable prior to Jeopardy that become assignable in a Jeopardy Condition:**	
	Future Canadian Geographic NPAs - assign 354, 365, 367, 428, 437, 460, 468, 474, 487, 584, 639, 672, 683, 753, 871, 879 & 942; do not assign 587 & 825 (recommended future AB NPAs)	17
	911 Misdial Codes (914 & 915)	2
	Subtotal	**19**
E	Assignable CO Codes in a Jeopardy Condition with none set aside for new entrants after relief (E=C+D)	**781**
F	Assigned CO Codes as of 2006-10-19	**618**
G	CO Codes set aside for assignment to Future New Entrants after Relief	**4**
H	**Net CO Codes available for assignment as of 2006-10-19 without Jeopardy Condition** (H=C-F-G)	**140**
I	**Net CO Codes available for assignment as of 2006-10-19 in a Jeopardy Condition** (I=E-F-G)	**159**

Note 1: Current neighbouring Canadian NPAs other than 780 are already assigned as CO Codes in NPA 403 (i.e. NPAs 250 & 306); current neighbouring US NPA 406 is available outside Coutts EAS Exchange Areas in NPA 403.

Note 2: 18 out of a total 37 Future Canadian Geographic NPAs are already assigned as CO Codes in NPA 403.

12. JEOPARDY CONTINGENCY PLAN (NPA 780)

The following measures shall be implemented by all CO Code Holders in NPA 780 once approved by the CRTC and following the declaration of a Jeopardy Condition by the CNA.

1) During a Jeopardy Condition, code applicants shall submit all code applications and related correspondence for the jeopardy NPA to CRTC staff in addition to the CNA. The CNA will work closely with CRTC staff in the analysis of these applications.

2) Telecommunications Service Providers (TSPs) will implement the following conservation methods when a Jeopardy Condition is declared:

   a) age disconnected residential telephone numbers for a maximum of two months;
   b) age disconnected wireless telephone numbers for a maximum of three months;
   c) 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) 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) all CO Code Holders 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) the quantity of reserved numbers shall not 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) within 45 days from the date that the CNA declares a Jeopardy Condition, CO Code Holders shall 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, as per these Special Conservation Procedures. Once the 45-day period has elapsed, the CNA shall make any reserved CO Code that has not been assigned and for which it has not received a Part 1 Form available for general assignment. 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) reservations of CO Codes will not be permitted until NPA relief is provided;
   i) for all CO Codes that were assigned prior to the Jeopardy Condition being declared, the CO Codes must be placed 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. The CNA shall initiate reclamation procedures for all CO Codes that have not been placed In-Service within this timeframe;
   j) reclaimed CO Codes will be made available for general assignment after a three-month aging period.

3) 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 Code Holder can demonstrate that, due to circumstances beyond its control, 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, 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.

4) When applying for a CO Code for growth for the switching entity/POI serving an exchange, CO Code Holders shall:

   a) complete and submit the attached Telephone Number Utilization Report Form;
   b) certify that all held telephone numbers have been released;
   c) certify that reserved numbers do not exceed ten percent of the total quantity of numbers;
   d) certify that all existing CO Codes per service provided in that exchange by that switching entity or POI, are projected to exhaust within four months and provide supporting documentation (i.e., complete Appendix B Months to Exhaust Certification Worksheet); and,
   e) certify that each reseller's/dealer's inventory has been reduced to an amount equal to two times the highest month's end customer number assignment rate from the previous year for that reseller/dealer. This certification must be provided at the time of applying for a CO Code for growth or within 60 days from the date that the CNA declares a Jeopardy Condition, whichever is later. In the event that the Code Applicant does not submit the certification within 60 days of the date the CNA declares a Jeopardy Condition, then the CNA shall advise Commission staff. Exceptional issues (e.g., inventory provision for start-up resellers/dealers, inventory provision for resellers/dealers that anticipate activations in excess of historical trends, and resellers/dealers that refuse to cooperate in reducing their inventories) may be referred to the Commission for resolution.

5) 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 the date of application. In the event that a CO Code Holder is unable to place the CO Code In-Service within four months of the date of application, 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.

6) A TSP 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.

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 Telecommunications Service Provider. 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 potential and current CO Code Holders quarterly until 3 months before relief is provided. The initial J-NRUF input will be used as a baseline for comparison of subsequent J-NRUF input as well as 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 Provider. If the CNA is dissatisfied with the reasonableness, or the rationale provided for the deviations, then the matter will be referred to the Commission.

9) In the absence of a J-NRUF from a Code Holder or proposed Competitive Local Exchange Carrier (CLEC), the CNA will request a complete J-NRUF from that entity prior to the assignment of an initial CO Code from the pool of CO Codes set aside for Initial Code Applicants.

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 Code Applicant and if the 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 [the date identified on the NPA CO Code Inventory Chart]” 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) This JCP shall remain in effect until 60 days before NPA Relief has been implemented. This period of time equals 66 days less 6 days, since a CO Code applicant needing to activate a new CO Code in the minimum amount of time and applying for a CO Code 66 days prior to the Relief Date can receive a CO Code in the post-Relief NPA, less a cushion of 6 days so the earliest effective date of CO Code in the new post-Relief NPA is no sooner than 6 days after the NPA Relief date.

14) 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.

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.).

Telephone Number Utilization Report

Entity Name: _____ **Contact name:** _____
Address : _____ **City, Prov/Terr, Postal code:** _____
Telephone: _____ **Facsimile:** _____
E-Mail : _____
Date : _____

Telephone Number Utilization for: **Switch/POI CLLI:**
Exchange Name **Province / Territory :**

NPA	NXX	Portable (Y or N)	Quantities of Telephone Numbers							% Utilization
			Reseller Inventory	Assigned	R&H	Admin	Ported Out	Available	Aging	
TOTAL										

% Utilization = (Reseller Inventory+Assigned+R&H+Admin+Ported Out+Aging)/(100)

NPA 780 CO Code Inventory Chart
(Revised: December 7, 2006)

The Chart below and the instructions it contains will apply in the event the CNA declares a Jeopardy Condition.

The following chart 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 780 assigned and in-service as at 2006-10-19. It identifies 36 CO Codes that are unassignable prior to a Jeopardy Condition, 13 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.

A	Total CO Codes In an NPA (NXX format)	**800**
B	**CO Codes unassignable prior to a Jeopardy Condition:**	
	N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911)	8
	Special Use Codes (555, 950 & 976)	3
	Protected Codes	0
	Home NPA(s) (XXX)	1
	Current Neighbouring NPA (250, 403, 306 & 867)	4
	Future Canadian Geographic NPAs (see Note 1)	15
	Plant Test Codes (958 & 959)	2
	Special 7-digit Dialling Codes (610 & 810)	2
	911 Misdial Codes (912)	**1**
	Subtotal	**36**
C	Assignable CO Codes prior to Jeopardy with none set aside for new entrants after relief (C=A-B)	**764**
D	**CO Codes unassignable prior to Jeopardy that become assignable in a Jeopardy Condition:**	
	Future Canadian Geographic NPAs - assign 249, 257, 263, 273, 343, 368, 382, 537, 548, 579, 851,& 873; do not assign 236 (recommended future BC NPA) or 587 & 825 (recommended future AB NPAs)	12
	911 Misdial Codes (912)	1
	Subtotal	**13**
E	Assignable CO Codes in a Jeopardy Condition with none set aside for new entrants after relief (E=C+D)	**777**
F	Assigned Codes as of 2006-10-19	**578**
G	CO Codes set aside for assignment to Future New Entrants after relief	**4**
H	**Net CO Codes available for assignment as of 2006-10-19 without Jeopardy Condition** (H=C-F-G)	**182**
I	**Net CO Codes available for assignment as of 2006-10-19 in Jeopardy Condition** (I=E-F-G)	**195**

Note 1: 22 out of a total 37 Future Canadian Geographic NPAs are already assigned as CO Codes in NPA 780.

NPAs 403 & 780
PLANNING DOCUMENT

ANNEXES