



**NPA 250**

# NUMBERING RELIEF

**C.N.A.**



# **Planning Document**

## **NPA 250 Numbering Relief**

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**ANNEX F**

Distribution List

# Planning Document NPA 250 Relief

## 1. EXECUTIVE SUMMARY

NPA 250 consists of 273 exchanges, including the rapidly growing exchanges of Victoria, Nanaimo, Parksville, Campbell River, Comox, Duncan, Port Hardy and Saanich, located on Vancouver Island, and Kelowna, North and South Kamloops, Prince George, Vernon, Penticton, Fort St. John, Nelson, Prince Rupert and Quesnel, located on the mainland in the interior and on the coast (north and east of the Lower Mainland, which is served by NPAs 604 and 778) of the province of British Columbia in Canada.

The results of the 2004 General Numbering Resource Utilization Forecast (G-NRUF) indicated that NPA 250 would exhaust by May 2009. Subsequently the Canadian Numbering Administrator (CNA) conducted an initial Relief Planning Numbering Resource Utilization Forecasts (R-NRUF) for NPA 250 with a due date of July 1, 2004, and continued conducting R-NRUFs at semi-annual intervals. The Projected Exhaust Dates changed in subsequent R-NRUFs, and, in the most recent July 2006 R-NRUF conducted which captured the impact of the planned introduction of Wireless Number Portability, the results projected NPA 250 would exhaust in January 2008.

In this Planning Document the CNA and RPC have identified 25 different Relief Options to ensure that an adequate quantity of telephone numbers is available for assignment in the geographic area covered by NPA 250.

The objective of the NPA Relief Planning process is to ensure that Central Office (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](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.



## 2. INTRODUCTION

In 1996, NPA 250 was created by splitting the entire geographic area of British Columbia covered by NPA 604 into two geographic areas. The Lower Mainland (the south-western part of mainland BC) retained NPA 604, and Vancouver Island and the rest of the mainland outside the Lower Mainland were reassigned to NPA 250. NPA 250 consists of 273 exchanges, including the rapidly growing exchanges of Victoria, Nanaimo, Parksville, Campbell River, Comox, Duncan, Port Hardy, Saanich, Kelowna, North and South Kamloops, Prince George, Vernon, Penticton, Fort St. John, Nelson, Prince Rupert and Quesnel.

On November 3, 2001 a Concentrated Overlay using the new NPA 778 was introduced over a portion of NPA 604 to provide numbering relief to the NPA 604 geographic serving area.

In accordance with the Guidelines, the Canadian Numbering Administrator (CNA) is required to conduct an annual General Numbering Resource Utilization Forecast (G-NRUF) in February of each year. The input from the G-NRUF is used to estimate the Projected Exhaust Date for each Canadian NPA.

The chart and data contained in Annex A, Figure 3 provides a summary of the actual and forecast quantities of Central Office (CO) Code assignments for current and previous NRUFs for NPA 250. This information was used by the CNA to determine the Projected Exhaust Date for NPA 250.

When an NPA is projected to exhaust within 72 months, 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 250 relief must be in place well before 766 CO Codes are assigned, to allow for changes in the CO Code forecast.

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 July 2004 Relief Planning Numbering Resource Utilization Forecast (R-NRUF) results indicated that the majority of the projected CO Code growth in NPA 250 was limited to about 24 exchanges. In the remaining NPA 250 exchanges there was little projected growth. In July 2006 an R-NRUF was conducted which captured 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 Date for NPA 250 to January 2008. See Annex A, Figures 2, 33, 34 and 35 for diagrams showing exchanges, major cities, highways and rivers.

It is very important to closely monitor the future CO Code requirements 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 creation of a Jeopardy Condition requiring Special Conservation Procedures for NPA 250. 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 in the geographic area requiring relief.

### 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](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 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 minimise the quantity of number changes, the area with the largest number of customers usually retains the existing NPA. Boundaries between old and new NPA(s) are usually determined by natural, physical or jurisdictional boundaries based on geographical features.

NPA splits have occurred with enough frequency so that technical aspects have been addressed and established implementation procedures are generally understood. Public education and acceptance of the process has been made easier because of the numerous NPA splits that have occurred throughout North America. This method generally provides long-term relief for an area.

#### **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 implemented, 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.).
- Not 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 necessitates 10-digit dialling of local calls between the old and new NPAs coincident with NXX codes being implemented in the new NPA (universal 10-digit dialling for all local calls eliminates customer confusion). It has also been established that any 7-digit local calling from adjacent areas into the overlay area must be converted to 10-digit dialling at the time of relief. Exceptions to this policy may be considered if there is a need for continued code protection (i.e., for 7-digit local dialling across an NPA boundary).

The Distributed Overlay strategy may be considered in situations when growth in telephone numbers is expected to be more or less evenly distributed throughout the existing NPA requiring relief. 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 CO Code assignment monitoring and CO Code 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.
- Same location, two or more NPAs in 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.
- Same location, two or more NPAs in 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 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 250 contains 273 exchanges. The exchanges in NPA 250 are listed in Annex B Table 1.

As indicated in the following table, NRUFs for NPA 250 were used to determine Projected Exhaust Date, i.e. the dates when CO Codes in NPA 250 would be expected to exhaust.

NRUF	Projected Exhaust Date
G-NRUF February 2004	May 2009
R-NRUF July 2004	June 2009
R-NRUF February 2005	November 2009
R-NRUF July 2005	March 2010
R-NRUF February 2006	April 2010
R-NRUF July 2006	January 2008

Refer to Annex A, Figures 4, 5, 6 and 7 for graphs that represent the rate of CO Code utilization in NPA 250.

Currently 7-digit local dialling is permitted within NPA 250. There is no local dialling between NPA 250 and adjacent NPAs 604/778, 403, 780, 907, 360/564, 509, 208 and 406; hence no CO codes are protected to permit 7-digit local dialling between NPA 250 and these NPAs. Local dialling between NPA 250 and adjacent NPA 867 exists only for Lower Post BC and Watson Lake YT. In theory, one CO Code should be protected in the NPA 250 area from being assigned in Lower Post. In practice, since there is no need for any future CO Codes in Watson Lake, Code Protection in the NPA 250 area can be treated as non-existent. Since there is in effect no CO Code Protection in the NPA 250 area, no dialling changes are needed in any adjacent NPAs.

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

The four NPA relief methods previously described in this Planning Document are the Geographic Split, the Overlay, the Boundary Realignment, and the Technology-specific Overlay.

Based on the first three of the above methods used alone and in combination, the following 25 relief options were identified and examined in detail:

- Geographic Split - 3 options (Plans 1a, 1b & 1c)
- Boundary Realignment - 3 options (Plans 2a, 2b and 2c)
- Concentrated Overlay - 14 options (Plans 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k, 3l, 3m and 3n)
- Distributed Overlay - 1 option (Plan 4a)
- Distributed Overlay with Boundary Realignment - 4 options (Plans 4b, 4c, 4d and 4e)

A 26th Relief Option using the 4th NPA relief method, the Technology-Specific Overlay (Plan 5), was examined in less detail.

Future Projected Exhaust Dates were developed for all Relief Options, except for Plan 5, using assumptions A through D.

The Projected Exhaust Date of NPA 250 established by the CNA in September 2006 is January 2008. The NPA is in a Jeopardy Condition. The advance in the Projected Exhaust Date has meant that some of the relief options in this Planning Document are no longer feasible because the relief dates that would have been required for these options have passed. The relief date for all Plans must be no later than October 2007.

- A. Future Projected Exhaust Dates will not be significantly affected by any CO Code protection that would be required if there is any 7-digit local dialling across NPA boundaries after relief.
- B. Relief Plans 3d, 3f, 3h, 3j and 3l include setting aside 5 CO Codes for future growth of NorthwTel exchange areas in NPA 250; it is assumed that this pool of CO Codes will not exhaust before the future Projected Exhaust Date of any of the Relief Plans.
- C. Relief Plans 2b, 3e, 3g, 3i, 3k and 3m include setting aside 5 CO Codes in NPA 250 for certain exchange areas in northern BC in case any CO Code growth occurs (the current forecast is for no CO code growth in these exchange areas); it is assumed that this pool of CO Codes will not exhaust before the future Projected Exhaust Date of any of the Relief Plans.
- D. Relief Plan 3n includes setting aside 40 CO Codes in NPA 250 for growth in exchanges in Kitimat-Stikine and Peace River regional districts.

The NorthwTel exchange areas excluded from an Overlay in Relief Plans 3d, 3f, 3h, 3j and 3l are listed in Annex B Table 4.

Kitimat-Stikine and Peace River municipalities requested that they avoid having to dial 10-digits for local calls. Kitimat-Stikine also requested that area code 250 should not change for northern BC. In recognition of these requests, the Relief Planning Committee created Relief Plans 2b, 3e, 3g, 3i, 3k, 3m and 3n. Relief Plans 2b, 3e, 3g, 3i, 3k, and 3m excluded "certain exchange areas in northern BC" from an Overlay or Boundary Realignment. Criteria were developed for selecting which exchanges should be included in the

list of "certain exchanges in northern BC". The list does not include all exchanges in the Kitimat-Stikine and Peace River districts as not all exchanges meet the criteria. Relief Plan 3n excludes exchanges in the Kitimat-Stikine and Peace River regional districts from an Overlay.

Annex B Table 5 contains a list of the certain exchange areas in northern BC and the criteria for their selection. The rationale for selection of exchanges was based on criteria other than individual requests from specific regional districts.

Annex B Table 6 contains a list of the exchanges in the Kitimat-Stikine and Peace River regional districts.

In some small communities in BC, local exchange carriers provide service using equipment that can provide 10-digit local dialling and announcements e.g. a mandatory 10-digit dialling announcement, but cannot provide automatic call completion after the end of a network announcement, as would normally be required during a transition period from 7 to 10-digit local dialling (permissive dialling period) leading up to an overlay. Investments that would be required to upgrade or replace network elements in small communities would be significant relative to their size, and such investments would be for the provision of a capability that would only be used for a short time, i.e. the duration of the permissive dialling period. It is therefore recommended that if the relief method that is adopted includes an overlay, then where a Telecommunication Service Provider's (TSP's) network does not support permissive dialling in a small community, the TSP not be required to provide permissive dialling in that small community, but must use additional alternative methods of educating customers in that community. Such methods of education could include, but may not be limited to, advertisements in local newspapers (in areas where local newspapers are published), notices provided to customer using their billing notification method (e.g. paper mail or email), and information on websites.

See Annex A, Figures 8 through 32b for diagrams of the Relief Options identified by the CNA and the RPC.

In 1995, BC's NPA 604 was relieved by splitting BC into two areas, thereby establishing a boundary for a new NPA (NPA 250), and changing the boundaries of the existing NPA 604, as approved by the CRTC and as described in Bellcore Information Letter 95-08-11. Subsequently CRTC Order 2000-786 provided for another relief of NPA 604 using a concentrated overlay of a new NPA (NPA 778) with specified boundaries, and limited future CO Code assignments in NPA 604 to areas within NPA 604 lying outside the boundaries of the NPA 778 overlay.

If approval is given to any of the Relief Options identified in this document that are Geographic Splits, or are Overlays with a Boundary Realignment, or require a change in the area where future CO Code assignments can be made, then the CRTC Order for Relief will effectively supplant requirements in previously approved or ordered Reliefs, since existing NPA boundaries and/or CO Code assignment limitations that had been ordered or approved by the CRTC for a prior Relief will be modified when the new Relief Option is implemented.

CO Code 236 is the only NXX in the current list of Projected Future Canadian Geographic NPAs that does not correspond to any CO Codes assigned in NPAs 250, 604 and 778. It is therefore recommended that NPA 236 be identified as the most suitable NPA for this relief if it requires a new NPA, or for a future relief of NPA 778 if this relief does not require a new NPA. See Annex B Table 8 for details of the status in BC NPAs and Adjacent NPAs of NXXs that correspond to Projected Future Canadian Geographic NPAs.

## **6.1. Geographic Split**

Three different Relief Options were evaluated to introduce a new NPA in the NPA 250 area using the Geographic Split method of providing CO Code relief. With each of these options, number changes are required in the area that does not retain NPA 250. Telephone numbers were changed throughout NPA 250 in 1996/1997 when it was split from NPA 604 (permissive dialling ended on April 6, 1997). 7-digit



local dialling was retained in both NPAs from the split until November 2001 when NPA 778 was introduced and 10-digit local dialling became mandatory in NPA 604/778, and 7-digit local dialling continued only in NPA 250.

In two of the geographic split options, an existing physical feature easily lends itself for use as a boundary to split NPA 250. In these two options, the Strait of Georgia would be used as the boundary to separate NPA 250 exchanges located on Vancouver Island and NPA 250 exchanges located on the mainland of British Columbia. If the Strait of Georgia is used as the split boundary, the Southern and Northern Gulf Islands would be grouped with Vancouver Island, and the Queen Charlotte Islands would be grouped with the mainland, in order to align these islands with existing transportation and communication links. With this boundary, the NPA 250 population and assigned CO Codes would split as follows:

NPA and Area	Estimated Population (Note 1)			Assigned CO Codes in NPA 250 (Note 4)	
	No. of People	% of Total BC	% of Total NPA 250	% of Total BC CO Codes	% of Total NPA 250 CO Codes
250 mainland (Note 2)	1,002,000	24.2%	59.5%	32.7%	66.3%
250 Vancouver Island (Note 3)	682,000	16.4%	40.5%	16.7%	33.7%

Notes:

1. Populations based on 2003 estimates from [www.bcstats.gov.bc.ca/data/pop/popstart.htm](http://www.bcstats.gov.bc.ca/data/pop/popstart.htm), and lists of exchanges by NPA.
2. "250 mainland" also includes the Queen Charlotte Islands, and central coast islands and communities except for Ocean Falls.
3. "250 Vancouver Island" also includes all southern Gulf Islands, northern Gulf Islands (except Texada), and Ocean Falls.
4. "Assigned CO Codes in NPA 250" indicates the quantity of CO Codes in service or assigned in exchanges in each area expressed as a % of the total CO Codes in service or assigned in NPA 250 or in all BC exchanges as of July 9, 2004.
5. The following population data for BC NPAs 604/778 is provided for comparison:

NPA and Area	Estimated Population 2003			Assigned CO Codes	
	No. of people	% of Total BC	% of NPAs 604+778	% of Total BC CO Codes	% of Total NPAs 604+778
604/778 overlay	2,287,000	55.2%	92.9%	45.5%	89.8%
604 outside overlay	176,000	4.2%	7.1%	5.2%	10.2%

6. Population related to quantity of "Available for Assignment" and "New Entrants Reserved (NER)" CO Codes as of July 9, 2004:

NPA and Area	Estimated Population 2004		Qty Avail. & NER CO Codes	Avail & NER CO Codes per 10000 Popn.
	No. of people	% of Total BC		
250	1,699,400	40.6%	167	1.0
604/778 overlay	2,308,000	55.2%	673	2.9
604 outside overlay	177,600	4.2%	210	11.9
Total BC	4,147,000	100.0%	1050	2.5

With these two options (Plans 1a and 1b); number changes would be required either on Vancouver Island or in the NPA 250 mainland area (as defined above).

The third Geographic Split option (Plan 1c) would separate the northern mainland, which would retain NPA 250, from the southern mainland and Vancouver Island where number changes would be required. With this option (Plan 1c) the population split would be as follows:

NPA and Area	Estimated Population (Note 1)			Assigned CO Codes in NPA 250 (Note 3)	
	No. of People	% of Total BC	% of Total NPA 250	% of Total BC (Note 4)	% of Total NPA 250
250 northern mainland (Note 2)	321,000	7.7%	19.1%	13.1%	26.7%
250 southern mainland & Vancouver Island	1,363,000	32.9%	80.9%	36.0%	73.3%

## Notes:

1. Populations based on 2003 estimates from [www.bcstats.gov.bc.ca/data/pop/popstart.htm](http://www.bcstats.gov.bc.ca/data/pop/popstart.htm), and lists of exchanges by NPA.
2. "250 northern mainland" includes the Queen Charlotte Islands and islands close to the northern mainland.
3. "Assigned CO Codes in NPA 250" indicates the quantity of CO Codes in service, assigned or reserved in exchanges in each area expressed as a % of the total CO Codes in service, assigned or reserved in NPA 250 or in all BC exchanges as of Feb 22, 2005.
4. The remaining % is accounted for by NPAs 604 and 778, which have 50.9% of the Total BC quantity of CO Codes in service, assigned, or reserved.

The main attribute of a split is that the local dialling plan does not have to be changed either in the old NPA or in the new NPA, and users in both NPAs could continue with 7-digit local dialling.

Because there is no local calling across the Strait of Georgia, an advantage of having the Strait of Georgia as a split boundary (Plans 1a and 1b) would be that code protection to maintain 7-digit local calling across the new boundary would not have to be considered.

With Plan 1c the split boundary would be between northern and southern mainland exchanges and a small amount of code protection would have to be considered. 7-digit local calling exists between Lac La Hache, on the northern side of the split boundary, and 100 Mile House and 108 Mile House on the southern side, hence a small amount of code protection would be needed unless 10-digit dialling is mandated for local calls that cross the boundary.

### **6.1.1. Geographic Split of NPA 250, with Vancouver Island reassigned to a new NPA (Plan 1a):**

#### Description:

The mainland portion of NPA 250, with 218 exchanges, would retain NPA 250, and the Vancouver Island portion of NPA 250, with 55 exchanges, would be reassigned to a new NPA. The area that would retain NPA 250 contains the rapidly growing exchanges of Kelowna, Kamloops, Prince George, Vernon, Penticton, Fort St. John, Cranbrook and Nelson, while the new NPA would contain the rapidly growing exchanges of Victoria, Nanaimo, Duncan, Campbell River and Courtenay. Using this option, approximately 682,000 people on Vancouver Island would be affected by a telephone number change to the new NPA.

After the split, NPA 250 and the new NPA would be expected to exhaust in 2020 and 2044 respectively.

This Relief Option would increase the number of separate Relief Planning areas in BC from three to four, and two more new NPAs would be required in BC after this relief during the next 20 year period.

#### Assessment:

The RPC does not recommend this Relief Option because 682,000 people would be affected by a telephone number change, including the government offices and legislature on Vancouver Island. In addition, this plan would add relief planning areas in BC, and there would be a large time difference between the future exhaust dates of the split areas.

**6.1.2. Geographic Split of NPA 250, with mainland reassigned to a new NPA (Plan 1b):**Description:

The Vancouver Island portion of NPA 250, with 55 exchanges, would retain NPA 250, and the mainland portion of NPA 250, with 218 exchanges, would be reassigned to a new NPA. There would be around 1,002,000 people in the NPA 250 mainland area that would be affected by a telephone number change to the new NPA. 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 250 and the new NPA would be expected to exhaust in 2044 and 2020 respectively.

This Relief Option would increase the number of separate Relief Planning areas in BC from three to four, two more new NPAs would be required in BC after this relief during the next 20 year period.

Assessment:

The RPC does not recommend this Relief Option because 1,002,000 people on the BC mainland would be affected by a telephone number change. In addition, this plan would add relief planning areas in BC, and there would be a large time difference between the future exhaust dates of the split areas.

**6.1.3. Geographic Split of NPA 250, with southern mainland and Vancouver Island reassigned to a new NPA (Plan 1c):**Description:

The Vancouver Island and the southern mainland portions of NPA 250, with approximately 163 exchanges, would be assigned the new NPA. The northern mainland portion of NPA 250, with approximately 110 exchanges, would retain NPA 250. Around 1,400,000 people in southern BC and Vancouver Island would be affected by a telephone number change to the new NPA, and approximately 300,000 people would retain their existing telephone numbers. The larger quantity of number changes required by this option is a drawback compared to the quantity of number changes required by Plans 1a and 1b.

After this split, NPA 250 and the new NPA would be expected to exhaust in 2103 and 2015 respectively.

This Relief Option would increase the number of separate Relief Planning areas in BC from three to four, and three more new NPAs would be required in BC after this relief during the next 20 year period.

Assessment:

The RPC does not recommend this Relief Option because approximately 1,500,000 people would be affected by a telephone number change, including the government offices and legislature on Vancouver Island. In addition, this plan would add relief planning areas in BC, there would be an extremely large time difference between the future exhaust dates of the split areas, and the length of time before relief of the new NPA would be required would be less than eight years.

## **6.2. Boundary Realignment**

### **6.2.1. Boundary Realignment of NPA 778 with NPA 250 (Plan 2a):**

#### Description:

Currently, NPA 250 and 778 are expected to exhaust in the years 2008 and 2023 respectively. This Relief Option would realign the boundaries of NPA 778 to include all the 273 exchanges comprising NPA 250. NPA 250 resources will not be assigned to the 21 exchanges in the current NPA 778 overlay area comprised of Greater Vancouver, Abbotsford, and Mission. NPA 778 and 250 resources will not be assigned to the 23 exchanges in the portion of NPA 604 outside the NPA 778 overlay area.

This Relief Option would reduce the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC following this relief during the next 20 year period.

With this Relief Option initial relief of NPA 250 is provided by boundary realignments of NPAs 250 and 778, and a subsequent relief phase would occur in 2015 when a new NPA would be introduced to overlay all of BC, except for the portion of NPA 604 outside the NPA 778 concentrated overlay area.

#### Assessment:

The RPC does not recommend this option because, unlike Plan 2c, it excludes NPA 604 from the boundary realignment. Excluding the NPA 604 exchange areas advances the date when a new NPA would be required. This Relief Option has some merit in that it would defer the date on which a new NPA would be required and reduces the number of relief planning areas to two.

### **6.2.2. Boundary Realignment of NPA 778 with NPA 250 excluding certain exchanges in northern BC (Plan 2b):**

#### Description:

Currently, NPA 250 and 778 are expected to exhaust in the years 2008 and 2023 respectively. This Relief Option would realign the boundaries of NPA 778 to include all the exchanges comprising NPA 250, except for certain exchanges in northern BC. NPA 250 resources will not be assigned to the 21 exchanges in the current NPA 778 overlay area comprised of Greater Vancouver, Abbotsford, and Mission. NPA 778 and 250 resources will not be assigned to the 23 exchanges in the portion of NPA 604 outside the NPA 778 overlay area. This Relief Option would allow for 7-digit local dialling to be retained in the certain exchanges in northern BC listed in Annex B Table 5. Five CO Codes from NPA 250 would be set aside for future growth of these exchanges. The certain exchanges in northern BC are not located in a single area (as is the case with NorthwTel's exchanges in some other plans) but are spread among other exchanges that would not be excluded and where 10-digit local dialling would be mandated.

This Relief Option would retain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC following this relief during the next 20 year period.

With this Relief Option initial relief of NPA 250 is provided by boundary realignments of NPAs 250 and 778, and a subsequent relief phase would occur in 2015 when a new NPA would be introduced to overlay all of BC, except for the portion of NPA 604 outside the NPA 778 concentrated overlay area.

#### Assessment:

The RPC does not recommend this option because, unlike Plan 2c, it excludes NPA 604 from the boundary realignment. Excluding the NPA 604 exchange areas advances the date when a new NPA

would be required. Contrasted with Plan 2a, this Relief Option does not reduce the number of relief planning areas and the distribution of the certain exchanges in northern BC among exchanges that are not excluded would cause customer confusion.

### **6.2.3. Boundary Realignment of NPAs 604 and 778 at NPA 250 relief (Plan 2c):**

#### Description:

Currently, NPAs 250, 778 and 604 are expected to exhaust in the years 2008, 2023 and 2041 respectively. This Relief Option would realign the boundaries of NPA 778 to cover all 318 exchanges in the province of BC, and realign the boundaries of the area within NPA 604 where new NPA 604 CO Code assignments are available so that new NPA 604 CO Code assignments are available throughout the whole NPA 604 area, i.e. the 21 exchanges in the current NPA 604/778 concentrated overlay area as well as the 22 exchanges in the area of NPA 604 outside the current concentrated overlay. NPA 250 resources will not be assigned to the 43 exchanges in NPAs 604 or the 21 exchanges in the current NPA 778 area. NPA 604 resources will not be assigned in the current NPA 250 area but will be available for assignment in all 43 exchanges in the current NPA 604 area, including the 21 exchanges in NPA 604 that are also in the current NPA 778 overlay.

This option would reduce the number of separate Relief Planning areas in BC from three to one, and one new NPA would be required in BC during the next 20 year period.

With this Relief Option initial relief of NPA 250 is provided by boundary realignments of NPAs 604 and 778, and a subsequent relief would occur in 2017 when a new NPA would be introduced to overlay all of BC.

Because of the significant advance of the Projected Exhaust Date for NPA 250 identified by the July 2006 R-NRUF, NPA 250 relief is required in advance of the normal Relief Planning timeline. In order to accommodate a compressed timeline for relief, this Relief Option can be implemented in two phases. In the first phase, CO Codes in NPA 778 would be made available for assignment in NPA 250 in advance of mandatory 10-digit dialling, subject to Special CO Code Assignment Practices (see Annex B Table 7), and CO Codes in NPA 604 would be made available for assignment again within the current NPA 778 area at the same time. The second phase of Relief would be a transition to mandatory 10-digit local dialling and discontinuation of the Special CO Code Assignment Practices, thereby providing for unrestricted assignment of available NPA 778 CO Codes within the expanded NPA 778 area.

Expansion of the area where new NPA 604 CO Codes can be assigned is expected to reduce the demand for NPA 778 CO Codes in the 21 exchanges in the current NPA 604/778 concentrated overlay area, which will extend the life of NPA 778, and make more NPA 778 CO Codes available for assignment in the current NPA 250 area.

#### Assessment:

The RPC recommends this Relief Option because it defers the introduction of a new NPA in BC, reduces the number of relief planning areas to one, and utilizes NPA 604 CO Codes (which otherwise would not be completely assigned until 2041) throughout the Lower Mainland. This extends the life of NPA 778 in comparison to Plans 2a and 2b, above. This Relief Option retains the geographical identity in both the NPA 250 and NPA 604 areas thereby minimizing customer confusion.

This Relief Option can be deployed more rapidly than other Relief Options because it uses an NPA that is already in service in BC.

Additionally, this Relief Option could be modified to exclude NPA 250 Northwest exchanges from the NPA 778 boundary realignment and from 10-digit dialling should the Commission deem it appropriate.

### **6.3. Concentrated Overlay**

Fourteen different Relief Options were evaluated to introduce the new NPA in the NPA 250 area using the Concentrated Overlay method of providing CO Code relief.

The main advantage of the Overlay method as opposed to the Geographic Split method is that telephone number changes are not necessary in the area where relief is required. However, introduction of an overlay NPA eliminates 7-digit local dialling, and 10-digit local dialling becomes mandatory throughout the overlay NPA area.

With any of the Concentrated Overlay options for NPA 250 shown below, the dial plan for local calling within the area outside the Concentrated Overlay could change to 10-digits or could stay as 7-digits. If there is any local calling across the boundary of the Concentrated Overlay, then the dial plan for that local calling could change to 10-digits, or could stay as 7-digits with code protection.

#### **6.3.1. Concentrated Overlay on NPA 250 Vancouver Island, and NPA 250 mainland grows with NPA 250 (Plan 3a):**

This Option is no longer viable since the quantity of remaining unassigned CO Codes in NPA 250 is too small for this Relief Option to be implemented without requiring a second relief of NPA 250 within two years.

##### Description:

This Relief Option would introduce a new NPA to overlay the 55 exchanges comprising the Vancouver Island portion of the NPA 250 area. The remaining 218 exchanges located in the mainland area of NPA 250 would continue to grow using the remaining CO Codes available for assignment in NPA 250.

With this Overlay, NPA 250 and the new NPA would be expected to exhaust in 2008 and 2062 respectively. This option advances the relief implementation date by one year, in comparison with a Distributed Overlay or a Geographic Split.

This option increases the number of separate Relief Planning areas in BC from three to four, and three new NPAs would be required in BC over the next 20 year period.

##### Assessment:

The RPC does not recommend this Relief Option because it does not extend the life of NPA 250 for the minimum 8-10 years specified by the Canadian NPA Relief Planning Guideline. The second relief of NPA 250 would be required in 2007. In addition, this Relief Option advances initial relief implementation by one year, in comparison with a Distributed Overlay or a Geographic Split.

#### **6.3.2. Concentrated Overlay on NPA 250 Mainland, and Vancouver Island grows with NPA 250 (Plan 3b):**

This Option is no longer viable since the quantity of remaining unassigned CO Codes in NPA 250 is too small for this Relief Option to be implemented without requiring a second relief of NPA 250 within two years.

Description:

This Relief Option would introduce a new NPA to overlay the 218 exchanges comprising the mainland portion of the NPA 250 area. The remaining 55 exchanges in the Vancouver Island area of NPA 250 would continue to grow using the remaining CO Codes available for assignment in NPA 250.

With this overlay option, NPA 250 and the new NPA would be expected to exhaust in 2009 and 2032 respectively. This option advances the relief implementation date by one year, in comparison with a distributed overlay or a split.

This option would increase the number of separate Relief Planning areas in BC from three to four, and three new NPAs would be required in BC over the next 20 year period.

Assessment:

The RPC does not recommend this Relief Option because it does not extend the life of NPA 250 for the minimum 8-10 years specified by the Canadian NPA Relief Planning Guideline. The second relief of NPA 250 would be required in 2007. In addition, this Relief Option advances initial relief implementation by one year, in comparison with a Distributed Overlay or a Geographic Split.

**6.3.3. Concentrated Overlay on NPA 250 mainland and NPA 778, and Vancouver Island grows with NPA 250 (Plan 3c):**

This Option is no longer viable since the quantity of remaining unassigned CO Codes in NPA 250 is too small for this Relief Option to be implemented without requiring a second relief of NPA 250 within two years.

Description:

This Relief Option would introduce a new NPA to overlay the 218 exchanges comprising the mainland portion of the NPA 250 area and to overlay the NPA 778 Concentrated Overlay area located in the Lower Mainland of BC, which includes 21 exchanges in Greater Vancouver, Abbotsford, and Mission. The remaining 55 exchanges in the Vancouver Island portion of NPA 250 would continue to grow using the remaining CO Codes available for assignment in NPA 250.

NPA 250, NPA 778 and the new NPA would be expected to exhaust in the years 2009, 2031 and 2031 respectively. This option advances the relief implementation date by one year, in comparison with a distributed overlay or a split.

This option would maintain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC during the next 20 year period.

Assessment:

The RPC does not recommend this Relief Option because it does not extend the life of NPA 250 for the minimum 8-10 years specified by the Canadian NPA Relief Planning Guideline. The second relief of NPA 250 would be required in 2007. In addition, this Relief Option advances initial relief implementation by one year, in comparison with a Distributed Overlay or a Geographic Split.

#### **6.3.4. Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas in NPA 250 (Plan 3d):**

##### Description:

This Relief Option would introduce a new NPA to overlay NPA 250 except for the 15 NorthwTel Exchange Areas in NPA 250. Five CO Codes from NPA 250 would be set aside for future growth of NorthwTel Exchange Areas in NPA 250. With the exclusion of the five set-aside codes in NPA 250, NPA 250 and the new NPA would be expected to exhaust in 2008, and 2031 respectively.

When the set-aside codes approach exhaust, further relief of the NorthwTel exchange areas would be provided by boundary realignment and would require 10-digit local dialling if not already implemented.

This option would increase the number of separate Relief Planning areas in BC from three to four, and two new NPAs would be required in BC over the next 20 year period.

##### Assessment:

If 7-digit local dialling is not retained in the NorthwTel Exchange Areas, the RPC would recommend this Relief Option. If 7-digit local dialling is retained in the NorthwTel exchange areas, the RPC does not agree to recommend this Relief Option because retention of 7-digit dialling could create dialling conflicts due to the large local calling areas of some Wireless Service Providers. It may be possible to avoid these conflicts for a limited period of time through special CO Code assignment practices after relief.

In addition, retention of 7-digit local dialling in parts of NPA 250 after relief would set a precedent that would be difficult to emulate in other area codes in Canada.

#### **6.3.5. Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC (Plan 3e):**

##### Description:

This Relief Option would introduce a new overlay NPA on NPA 250 excluding certain exchanges in northern BC. Five CO Codes from NPA 250 would be set aside for future growth of these exchange areas. With the exclusion of the five set-aside codes in NPA 250, NPA 250 and the new NPA would be expected to exhaust in 2008, and 2031 respectively.

When the set-aside codes approach exhaust, further relief of certain northern BC exchange areas would be provided by Boundary Realignment and would require 10-digit local dialling if not already implemented.

This option would increase the number of separate Relief Planning areas in BC from three to four, and two new NPAs would be required in BC over the next 20 year period.

##### Assessment:

If 7-digit local dialling is not retained in certain exchanges in northern BC, the RPC would recommend this Relief Option.

If 7-digit local dialling is retained in certain exchanges in northern BC until the exhaust of the set-aside CO Codes, the RPC does not recommend this Relief Option for the following reasons:

- Retention of 7-digit dialling could create dialling conflicts due to the large local calling areas of some Wireless Service Providers. It may be possible to avoid these conflicts for a limited period of time through special CO Code assignment practices after relief.



- The distribution of the certain exchanges in northern BC among exchanges that would not be excluded would cause customer awareness difficulties. There are some concerns about how to put limits on which exchanges in northern BC would be excluded from the overlay and retain 7-digit local dialling. Adding exchanges to the list of exchanges to be excluded from the overlay and to retain 7-digit local dialling would advance the Relief Date for NPA 250.
- Retention of 7-digit local dialling in parts of NPA 250 after relief would set a precedent that would be difficult to emulate in other area codes in Canada.

**6.3.6. Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas in NPA 250, with Boundary Realignments for NPA 250, 778 and the new NPA at NPA 778 relief (Plan 3f):**

Description:

This Relief Option would initially introduce a new NPA to overlay all exchanges in NPA 250 except for the 15 NorthwTel exchange areas in NPA 250. Five CO Codes from NPA 250 would be set aside for the future growth of NorthwTel Exchange Areas in NPA 250. At the time of NPA 778 relief, the boundaries of the new NPA and 258 exchange areas of NPA 250 would be realigned to include the existing NPA 778 Concentrated Overlay area, and the boundary of the NPA 778 area would be extended to include the new NPA and 258 exchange areas of NPA 250.

With the exclusion of the five set-aside codes from NPA 250, NPAs 250, 778 and the new NPA would be expected to exhaust in 2007, 2023 and 2026 respectively. This plan would mean that the relief for NPA 778 would not require a new NPA until 2024.

When the set-aside codes approach exhaust, further relief of the NorthwTel Exchange Areas would be provided by additional boundary realignments and would require 10-digit local dialling if not already implemented.

This option would retain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC over the next 20 year period.

Assessment:

If 7-digit local dialling is not retained in the NorthwTel Exchange Areas, the RPC would recommend this Relief Option.

If 7-digit local dialling is retained in the NorthwTel Exchange Areas, the RPC does not agree to recommend this Relief Option because retention of 7-digit dialling could create dialling conflicts due to the large local calling areas of some Wireless Service Providers. It may be possible to avoid these conflicts for a limited period of time through special CO Code assignment practices after relief.

In addition, retention of 7-digit local dialling in parts of NPA 250 after relief would set a precedent that would be difficult to emulate in other area codes in Canada.

Unlike Plan 3l, this Relief Option excludes NPA 604 from the boundary realignment. Excluding the NPA 604 Exchange Areas advances the date when a new NPA would be required. This Relief Option has some merit in that it would defer the date on which a new NPA would be required and reduces the number of relief planning areas to two.

**6.3.7. Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC, with Boundary Realignments of NPAs 250, 778 and the new NPA at NPA 778 relief (Plan 3g):**

Description:

This Relief Option would initially introduce a new NPA to overlay NPA 250 excluding certain exchanges in northern BC. Five CO Codes from NPA 250 would be set aside for the future growth of these exchange areas in NPA 250. At the time of NPA 778 relief, the boundaries of the new NPA and NPA 250, excluding certain northern exchanges, would be realigned to include the existing NPA 778 Concentrated Overlay area, and the boundary of the NPA 778 area would be extended to include the new NPA and NPA 250 excluding certain northern exchanges.

With the exclusion of the five set-aside codes from NPA 250, NPAs 250, 778 and the new NPA would be expected to exhaust in 2007, 2023 and 2026 respectively. This plan would mean that the relief for NPA 778 would not require a new NPA until 2024.

When the set-aside codes approach exhaust, further relief of certain northern BC exchange areas would be provided by additional boundary realignments and would require 10-digit local dialling if not already implemented.

This option would retain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC over the next 20 year period.

Assessment:

If 7-digit local dialling is not retained in the certain exchanges in northern BC, the RPC might recommend this Relief Option except for the fact that, unlike Plan 3m, this Relief Option excludes NPA 604 from the boundary realignment. Excluding the NPA 604 Exchange Areas advances the date when the next new NPA would be required.

If 7-digit local dialling is retained in certain exchanges in northern BC until the exhaust of the set-aside CO Codes, the RPC does not recommend this Relief Option for the following reasons:

- Retention of 7-digit dialling could create dialling conflicts due to the large local calling areas of some Wireless Service Providers. It may be possible to avoid these conflicts for a limited period of time through special CO Code assignment practices after relief.
- The distribution of the certain exchanges in northern BC among exchanges that would not be excluded would cause customer awareness difficulties. There are some concerns about how to put limits on which exchanges in northern BC would be excluded from the overlay and retain 7-digit local dialling. Adding exchanges to the list of exchanges to be excluded from the overlay and to retain 7-digit local dialling would advance the Relief Date for NPA 250.
- Retention of 7-digit local dialling in parts of NPA 250 after relief would set a precedent that would be difficult to emulate in other area codes in Canada.

**6.3.8. Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding NorthwTel exchange areas in NPA 250 (Plan 3h):**

Description:

This Relief Option would introduce a new NPA to overlay the area covered by the existing NPA 778 Concentrated Overlay area and all exchanges in NPA 250 except for the 15 NorthwTel Exchanges. Five

CO Codes from NPA 250 would be set aside for future growth of NorthwTel exchange areas in NPA 250.

With the exception of the 5 set-aside codes from NPA 250, NPAs 250, 778 and the new NPA would be expected to exhaust in 2007, 2026 and 2026 respectively. This plan would defer the exhaust of NPA 778 from 2023 to 2026. These dates assume that all NPA 250 NXX codes (with the exception of the 5 set-aside codes for NorthwTel) and all NPA 778 NXX codes are assigned before all NXX codes in the new NPA are assigned.

When the set-aside codes approach exhaust, further relief of the NorthwTel Exchange Areas would be provided by boundary realignments and would require 10-digit local dialling if not already implemented.

This Relief Option would retain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC during the next 20 year period.

Assessment:

If customers will be confused over the next few years by the appearance of CO Codes in one area of the province from NPAs previously associated with a different area of the province (e.g., CO Codes in NPA 778 assigned in Fort St. John), then this Relief Option will have less merit than Relief Options which postpone Boundary Realignments for a few years, e.g. until NPA 778 relief.

**6.3.9. Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding certain exchanges in northern BC (Plan 3i):**

Description:

This Relief Option would introduce a new NPA to overlay the area covered by the existing NPA 778 Concentrated Overlay area and all exchanges in NPA 250 excluding certain exchanges in northern BC. Five CO Codes from NPA 250 would be set aside for future growth of certain exchanges in northern BC.

With the exception of the 5 set-aside codes from NPA 250, NPAs 250, 778 and the new NPA would be expected to exhaust in 2007, 2026 and 2026 respectively. This plan would defer the exhaust of NPA 778 from 2023 to 2026. These dates assume that all NPA 250 NXX codes (with the exception of the 5 set aside for certain northern BC exchanges) and all NPA 778 NXX codes are assigned before all NXX codes in the new NPA are assigned.

When the set-aside codes approach exhaust, further relief of certain northern BC Exchange Areas would be provided by boundary realignments and would require 10-digit local dialling if not already implemented.

This Relief Option would retain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC during the next 20 year period.

Assessment:

If customers will be confused over the next few years by the appearance of CO Codes in one area of the province from NPAs previously associated with a different area of the province (e.g., CO Codes in NPA 778 assigned in northern BC), then this Relief Option will have less merit than Relief Options which postpone Boundary Realignments for a few years, e.g. until NPA 778 relief.

**6.3.10. Concentrated Overlay on NPAs 250, 604 and 778, excluding NorthwTel exchanges in NPA 250, with Boundary Realignments of NPAs 250, 604 and 778 at NPA 250 relief (Plan 3j):**

Description:

This Relief Option would introduce a new NPA to overlay the province of BC excluding 15 NorthwTel exchanges. The boundaries of NPA 250 would be aligned to cover the province of BC, and the boundaries of NPAs 604 and 778 would be realigned to cover the province of BC excluding 15 NorthwTel exchanges. Five CO Codes from NPA 250 would be set aside for future growth of NorthwTel Exchange Areas in NPA 250.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2007, 2027, 2027 and 2027 respectively.

When the set-aside codes approach exhaust, further relief of the NorthwTel exchange areas would be provided by additional boundary realignments and would require 10-digit local dialling if not already implemented.

This option reduces the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC during the next 20 years.

Assessment:

The RPC recommends this Relief Option because it virtually maximizes the use of numbering resources in BC and immediately reduces the number of relief planning areas to two and subsequently to one, which will remove the requirement to implement separate relief plans at different times for different areas in BC. In addition, this Relief Option allows for the full utilization of CO Codes in NPA 604. This Relief Option also allows the retention of 7-digit dialling for customers in the NorthwTel exchanges in NPA 250 until the exhaust of the set-aside CO Codes. If customers will be confused over the next few years by the appearance of CO Codes in one area of the province from NPAs previously associated with a different area of the province (e.g., CO Codes in NPA 604 or 778 assigned in Fort St. John), then this Relief Option will have less merit than Relief Options which postpone Boundary Realignments for a few years, e.g. until NPA 778 relief.

**6.3.11. Concentrated Overlay on NPAs 250, 604 and 778, excluding certain exchanges in northern BC, with Boundary Realignments of NPAs 250, 604 & 778 coincident with NPA 250 relief (Plan 3k):**

Description:

This Relief Option would introduce a new NPA to overlay the province of BC excluding certain northern BC exchanges. The boundaries of NPAs 250, 604 and 778 would be realigned to cover the province of BC excluding certain northern BC exchanges.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2007, 2027, 2027 and 2027 respectively.

When the set-aside codes approach exhaust, further relief of certain northern BC exchange areas would be provided by additional boundary realignments and would require 10-digit local dialling if not already implemented.

This option reduces the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC during the next 20 years.

Assessment:

The RPC recognizes this Relief Option as similar to plan 3j but with different areas excluded from the overlay. This option eventually maximizes the use of numbering resources in BC. It immediately reduces the number of relief planning areas to two and subsequently to one, which will remove the requirement to implement separate relief plans at different times for different areas in BC. In addition, this Relief Option allows for the full utilization of CO Codes in NPA 604. This Relief Option allows the retention of 7-digit dialling for customers in certain northern BC exchanges in NPA 250 until the exhaust of the set-aside CO Codes, however the distribution of the certain exchanges among exchanges that would not be excluded will cause customer awareness difficulties. There are some concerns about how to put limits on which exchanges in northern BC would be excluded from the overlay and retain 7-digit local dialling. Adding exchanges to the list of exchanges to be excluded from the overlay and to retain 7-digit local dialling would advance the Relief Date for NPA 250. If customers will be confused over the next few years by the appearance of CO Codes in one area of the province from NPAs previously associated with a different area of the province (e.g., CO Codes in NPA 604 or 778 assigned in Fort St. John), then this Relief Option will have less merit than Relief Options which postpone Boundary Realignments for a few years, e.g. until NPA 778 relief.

**6.3.12. Concentrated Overlay on NPA 250 excluding NorthwTel exchanges in NPA 250, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief (Plan 3I):**

Description:

This Relief Option would introduce a new NPA to overlay NPA 250, excluding 15 NorthwTel exchanges. The boundaries of NPAs 250, 604, 778 and the new NPA would be realigned to cover the province of BC at the time of NPA 778 relief.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2007, 2020, 2027 and 2027 respectively.

This option reduces the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC during the next 20 years.

Assessment:

The RPC recommends this Relief Option because it virtually maximizes the use of numbering resources in BC and immediately reduces the number of relief planning areas to two and subsequently to one, which will remove the requirement to implement separate relief plans at different times for different areas in BC. In addition, this Relief Option allows for the full utilization of CO Codes in NPA 604. This Relief Option also allows the retention of 7-digit dialling for customers in the NorthwTel exchanges in NPA 250 until the exhaust of the set-aside CO Codes.

This Relief Option is superior to option 3j if any customer confusion is expected in the next few years if CO Codes in an NPA previously associated with one area of the province are assigned in another area of the province (e.g., CO Codes in NPA 604 or 778 assigned in Fort St. John).

**6.3.13. Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief (Plan 3m):**

Description:

This Relief Option would introduce a new NPA to overlay NPA 250, excluding certain northern BC exchanges. The boundaries of NPAs 250, 604, 778, and the new overlay NPA would be realigned to cover the province of BC at the time of NPA 778 relief.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2007, 2023, 2027 and 2027 respectively.

This option reduces the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC during the next 20 years.

Assessment:

The RPC recognizes that this Relief Option eventually maximizes the use of numbering resources in BC and immediately reduces the number of relief planning areas to two and subsequently to one, which will remove the requirement to implement separate relief plans at different times for different areas in BC. In addition, this Relief Option allows for the full utilization of CO Codes in NPA 604. This Relief Option allows the retention of 7-digit dialling for customers in certain northern BC exchanges in NPA 250 until the exhaust of the set-aside CO Codes, however the distribution of the certain exchanges among exchanges that would not be excluded will cause customer awareness difficulties.

This Relief Option is superior to option 3k if any customer confusion is expected in the next few years if CO Codes in an NPA previously associated with one area of the province are assigned in another area of the province (e.g., CO Codes in NPA 604 or 778 assigned in Kitimat).

**6.3.14. Concentrated Overlay on NPA 250 excluding exchanges in Kitimat-Stikine and Peace River Regional Districts (Plan 3n):**

Description:

This Relief Option would introduce a new NPA to overlay NPA 250 except for the exchanges in the Kitimat-Stikine and Peace River regional districts. Forty CO Codes from NPA 250 would be set aside for future growth of the exchanges in the Kitimat-Stikine and Peace River regional districts. With the exclusion of the forty set-aside codes in NPA 250, NPA 250 would be expected to exhaust in April 2007 and in 2027 (the forty NPA 250 set-aside codes) and the new NPA would be expected to exhaust in 2029.

When the set-aside codes approach exhaust, further relief of the exchanges in the Kitimat-Stikine and Peace River regional districts would be provided by boundary realignment and would require 10-digit local dialling if not already implemented.

This option would increase the number of separate Relief Planning areas in BC from three to four, and three new NPAs would be required in BC over the next 20 year period.

Assessment:

If 7-digit local dialling is not retained in exchanges in Kitimat-Stikine and Peace River regional districts, the RPC would recommend this Relief Option.

If 7-digit local dialling is retained in Kitimat-Stikine and Peace River regional districts until the exhaust of the set-aside CO Codes, the RPC does not recommend this Relief Option for the following reasons:

- Retention of 7-digit dialling could create dialling conflicts due to the large local calling areas of some Wireless Service Providers. It may be possible to avoid these conflicts for a limited period of time through special CO Code assignment practices after relief.
- The distribution of the Kitimat-Stikine and Peace River regional districts among exchanges that would not be excluded may cause customer awareness difficulties. There are some concerns about how to put limits on which exchanges in northern BC would be excluded from the overlay and retain 7-digit local dialling. Adding exchanges to the list of exchanges to be excluded from the overlay and to retain 7-digit local dialling would advance the Relief Date for NPA 250.
- Retention of 7-digit local dialling in parts of NPA 250 after relief would set a precedent that would be difficult to emulate in other area codes in Canada.

#### **6.4. Distributed Overlay**

Five different Relief Options were evaluated to introduce the new NPA using the Distributed Overlay method of providing NPA relief.

##### **6.4.1. Distributed Overlay on NPA 250 (Plan 4a):**

###### Description:

This Relief Option would introduce a new NPA to overlay NPA 250. NPA 250 and the new NPA would be expected to exhaust in 2008 and 2031 respectively.

This option would maintain the number of separate Relief Planning areas in BC at three, and two new NPAs would be required in BC over the next 20 year period.

###### Assessment:

The RPC recommends this Relief Option because it is initially aligned with existing NPAs and applies uniformly across NPA 250, and is therefore easier to communicate and understand than Relief Options which do not align with existing NPA coverages. It does not provide for maximizing the use of numbering resources already in BC or reducing the number of relief planning areas to one, and adds a new NPA to BC immediately. Steps to maximize the use of numbering resource or reduce the number of relief planning areas could be considered and decided at the next relief following NPA 250 relief, e.g. at NPA 778 relief.

##### **6.4.2. Distributed Overlay on NPA 250, with Boundary Realignments of NPA 250, 778 and the new NPA at NPA 778 relief (Plan 4b):**

###### Description:

This Relief Option would initially introduce a new NPA to overlay NPA 250. At the time of NPA 778 relief, the boundaries of the new NPA and NPA 250 would be realigned to include the existing NPA 778/604 Concentrated Overlay area, and the boundary of the NPA 778 area would be extended to include the new NPA and NPA 250.

NPAs 250, 778 and the new NPA would be expected to exhaust in 2008, 2023 and 2026 respectively. This plan would mean that relief for NPA 778 would not be required until 2024.

This option would reduce the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC over the next 20 year period.

Assessment:

The RPC recommends this Relief Option because the new overlay NPA is initially aligned with existing NPA 250, and is therefore easier to communicate and understand than Relief Options which do not align with existing NPA coverages. It does not maximize the use of numbering resources already in BC as well as in Plan 4e or reduce the number of relief planning areas to one, and adds a new NPA to BC immediately. Realigning the boundary of NPA 250 may cause more customer confusion than realigning the boundary of NPA 778 as NPA 250 is a well-established geographic area.

**6.4.3. *Distributed Overlay on NPAs 250 and 778, with Boundary Realignment of NPA 778 at NPA 250 relief (Plan 4c):***

Description:

This Relief Option would introduce a new NPA to overlay NPA 250, and the area covered by the existing NPA 778 Concentrated Overlay area. Coincident with the implementation of the new NPA, the boundary of NPA 778 would be realigned to include the new NPA and NPA 250.

NPAs 250, 778 and the new NPA would be expected to exhaust in 2008, 2026 and 2026 respectively. This plan would defer the exhaust of NPA 778 from 2023 to 2026.

This Relief Option would reduce the number of separate Relief Planning areas in BC from three to two, and two new NPAs would be required in BC during the next 20 year period.

Assessment:

The RPC does not recommend this Relief Option because the overlay NPA initially extends beyond the boundaries of NPA 250 and two NPAs (NPA 778 and the new NPA) will be introduced within the NPA 250 area. This Relief Option will need to be communicated in NPAs 250 and 778/604 and will be somewhat difficult to understand. It does not maximize the use of numbering resources already in BC as well as in Plan 4e or reduce the number of relief planning areas to one, and adds a new NPA to BC immediately.

**6.4.4. *Distributed Overlay on NPAs 250, 604 and 778, with Boundary Realignments of NPAs 250, 604 & 778 at NPA 250 relief (Plan 4d):***

Description:

This Relief Option would introduce a new NPA to overlay the province of BC. The boundaries of NPAs 250, 604 and 778 would be realigned to cover the province of BC at the time of NPA 250 relief.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2008, 2027, 2027 and 2027 respectively.

This option reduces the number of separate Relief Planning areas in BC from three to one, and two new NPAs would be required in BC during the next 20 years.



Assessment:

The RPC does not recommend this Relief Option because the overlay NPA initially extends beyond the boundaries of NPA 250, and the Relief Option introduced three NPAs (NPA 604, NPA 778 and the new NPA) within the NPA 250 area and two NPAs (NPA 250 and the new NPA) into the NPA 604/778 area. This Relief Option will need to be communicated in NPAs 250, 604 and 778 and will be somewhat difficult to understand. However it immediately maximizes the use of numbering resources already in BC, including NPA 604, and reduces the number of relief planning areas to one.

**6.4.5. *Distributed Overlay on NPA 250, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief (Plan 4e):***Description:

This Relief Option would introduce a new NPA to overlay NPA 250. The boundaries of NPAs 250, 604, 778 and the new NPA would be realigned to cover the province of BC at the time of NPA 778 relief.

NPAs 250, 778, 604 and the new NPA would be expected to exhaust in the years 2008, 2023, 2027 and 2027 respectively.

This option reduces the number of separate Relief Planning areas in BC from three to one, and two new NPAs would be required in BC during the next 20 years.

Assessment:

The RPC recommends this Relief Option because the overlay NPA initially aligns with existing NPA 250 and is therefore easier to communicate and understand, and it also evolves to a plan that maximizes the use of numbering resources in BC and reduces the number of relief planning areas to one, which will remove the requirement to implement separate relief plans at different times for different areas in BC. In addition, this Relief Option allows for the full utilization of CO Codes in NPA 604 following NPA 778 relief.

**6.5. *Technology Specific Overlay***Description:

A Technology-specific Overlay of NPA 250 would be 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.

Assessment:

The RPC does not recommend this relief plan, for the reasons shown in section 4.4 of this document.

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.

When all wireless numbers become portable, the overlay NPA will no longer be technology specific.

### 6.6. Summary of Relief Options

The following table summarizes alternative options.

Plan	Description	Exhaust Dates				Relief - Timing & Type		Population affected by number changes	Local Dial # of D
		NPA 250	New NPA	NPA 778	NPA 604	Dates (area) [for the next relief only]	Type		
1a	Geographic Split of NPA 250, with Vancouver Island reassigned to a new NPA	2008 2020	2044	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2018</b> (New Mainland) <b>2042</b> (Island) <b>2039</b> (604)	S O S/O* S/O* O	.682m Nil ?m/Nil* ?m/Nil* Nil	7 10 7/10* 7/10* 10
1b	Geographic Split of NPA 250, with mainland reassigned to a new NPA	2008 2044	2020	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2018</b> (Mainland) <b>2039</b> (604) <b>2042</b> (250 Island)	S O S/O* O S/O*	1.002m Nil ?m/Nil* Nil ?m/Nil*	7 10 7/10* 10 7/10*
1c	Geographic Split of NPA 250, with southern mainland and Vancouver Island reassigned to a new NPA	2008 2103	2015	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2013</b> (New) <b>2033</b> (604) <b>2101</b> (250)	S O S/O* O S/O*	1.5m Nil ?m/Nil* Nil ?m/Nil*	7 10 7/10* 10 7/10*
2a	Boundary Realignment of NPA 778 with NPA 250	2008 2015	2025	2015	2041	<b>2008</b> (250) <b>2013</b> (250+778) <b>2033</b> (604) <b>2023</b> (New)	Bdy rlg O O	Nil Nil Nil	7>10 10 10
2b	Boundary Realignment of NPA 778 with NPA 250 excluding certain exchanges in northern BC	2008 2015 Indef- -inite	2025	2015	2041	<b>2007</b> (250) <b>2013</b> (250+778) <b>2039</b> (604) <b>2023</b> (New)	Bdy rlg O O	Nil Nil Nil	7>10 10 10
2c	Boundary Realignment of NPAs 604 and 778 at NPA 250 relief	2008 2017	2027	2017	2017	<b>2007</b> (250) <b>2015</b> (250+778+604) <b>2025</b> (New)	Bdy rlg O	Nil Nil	7>10 10
3a	Concentrated Overlay on NPA 250 Vancouver Island, and NPA 250 mainland grows with NPA 250	2007 2008 (1Q)	2062	2023	2041	<b>2007</b> (250 Island) <b>2007</b> (250 Mainland) <b>2021</b> (778) <b>2039</b> (604)	O S/O* O O	Nil ?m/Nil* Nil Nil	7>10 7>10* 10 10
3b	Concentrated Overlay on NPA 250 mainland, and Vancouver Island grows with NPA 250	2008 2009 (1Q)	2032	2023	2041	<b>2007</b> (250 Mainland) <b>2007</b> (250 Island) <b>2021</b> (778) <b>2033</b> (604)	O O O O	Nil Nil Nil Nil	7>10 7>10 10 10
3c	Concentrated Overlay on NPA 250 mainland and NPA 778, and Vancouver Island grows with NPA 250	2008 2009 (1Q)	2031	2031	2041	<b>2007</b> (250 Mainland) <b>2008</b> (250 Island) <b>2029</b> (250 Mid / 778/ New) <b>2039</b> (604)	O S/O* O O	Nil ?m/Nil* Nil Nil	7>10 7>10* 10 10

Plan	Description	Exhaust Dates				Relief - Timing & Type		Population affected by number changes	Local Dial # of D
		NPA 250	New NPA	NPA 778	NPA 604	Dates (area) [for the next relief only]	Type		
3d	Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas in NPA 250	2008 Indefinite	2031	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2029</b> (New) <b>2039</b> (604)	0 0 0 0	Nil Nil Nil Nil	10 10 10 10
3e	Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC	2008 Indefinite	2031	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2029</b> (New) <b>2039</b> (604)	0 0 0 0	Nil Nil Nil Nil	10 10 10 10
3f	Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas, with Boundary Realignment of NPAs 250, 778 and the new NPA at NPA 778 relief	2008 Indefinite	2026	2023	2041	<b>2007</b> (250) <b>2021</b> (Bdy rlgN 778) <b>2024</b> (New) <b>2039</b> (604)	0 - 0 0	Nil Nil Nil Nil	10 10 10 10
3g	Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC, with Boundary Realignment of NPAs 250, 778 and the new NPA at NPA 778 relief	2008 Indefinite	2026	2023	2041	<b>2007</b> (250) <b>2021</b> (Bdy rlgN 778) <b>2024</b> (New) <b>2039</b> (604)	0 - 0 0	Nil Nil Nil Nil	10 10 10 10
3h	Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding NorthwTel exchange areas in NPA 250	2008 Indefinite	2026	2026	2041	<b>2007</b> (250+Bdy rlgN) <b>2024</b> (778+New) <b>2039</b> (604)	0 0 0	Nil Nil Nil	10 10 10
3i	Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding certain exchanges in northern BC	2008 Indefinite	2026	2026	2041	<b>2007</b> (250+Bdy rlgN) <b>2024</b> (778+New) <b>2039</b> (604)	0 0 0	Nil Nil Nil	10 10 10
3j	Concentrated Overlay on NPAs 250, 604 & 778, excluding NorthwTel exchanges in NPA 250, with Boundary Realignment of NPAs 250, 604 and 778 at NPA 250 Relief	2008 Indefinite	2027	2027	2027	<b>2007</b> (250+Bdy rlgNs) <b>2025</b> (New/604/778)	0 0	Nil Nil	10 10
3k	Concentrated Overlay on NPAs 250, 604 & 778, excluding certain exchanges in northern BC, with Boundary Realignment of NPAs 250, 604 and 778 at NPA 250 relief	2008 Indefinite	2027	2023 2027	2027	<b>2007</b> (250+Bdy rlgNs) <b>2025</b> (New/604/778)	0 0	Nil Nil	10 10
3l	Concentrated Overlay on NPA 250 excluding NorthwTel exchanges in NPA 250, with Boundary Realignment of NPAs 250, 604 & 778 at NPA 778 relief	2008 Indefinite	2027	2027	2027	<b>2007</b> (250) <b>2021</b> (Bdy rlgNs) <b>2025</b> (New/604/778)	0 0 0	Nil Nil Nil	10 10 10
3m	Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC, with Boundary Realignment of NPAs 250, 604 & 778 at NPA 778 relief	2008 Indefinite	2027	2027	2027	<b>2007</b> (250) <b>2021</b> (Bdy rlgNs) <b>2025</b> (New/604/778)	0 0 0	Nil Nil Nil	10 10 10

Plan	Description	Exhaust Dates				Relief - Timing & Type		Population affected by number changes	Local Dial # of D
		NPA 250	New NPA	NPA 778	NPA 604	Dates (area) [for the next relief only]	Type		
3n	Concentrated Overlay on NPA 250 excluding exchanges in Kitimat-Stikine and Peace River Regional Districts	2007 2027	2029	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2025</b> (250) <b>2027</b> (New) <b>2039</b> (604)	O O O O O	Nil Nil Nil Nil Nil	10 10 10 10 10
4a	Distributed Overlay on NPA 250	2008	2031	2023	2041	<b>2007</b> (250) <b>2021</b> (778) <b>2029</b> (250 + New) <b>2039</b> (604)	O O O O	Nil Nil Nil Nil	10 10 10 10
4b	Distributed Overlay on NPA 250 with Boundary Realignments of NPAs 250, 778 and the new NPA at NPA 778 relief	2008	2026	2023 2026	2041	<b>2007</b> (250) <b>2021</b> (Bdy rlgm 778) <b>2024</b> (250/New / 778) <b>2039</b> (604)	O - O O	Nil Nil Nil Nil	10 10 10 10
4c	Distributed Overlay on NPAs 250 and 778, with Boundary Realignment of NPA 778 at NPA 250 relief	2008	2026	2026	2041	<b>2007</b> (250+Bdy rlgm) <b>2024</b> (250/New/778) <b>2039</b> (604)	O O O	Nil Nil Nil	10 10 10
4d	Distributed Overlay on NPAs 250, 604 and 778, with Boundary Realignments of NPAs 250, 604 & 778 at NPA 250 relief	2008	2027	2027	2027	<b>2007</b> (250+Bdy rlgms) <b>2025</b> (250/604/ 778+New)	O O	Nil Nil	10 10
4e	Distributed Overlay on NPA 250, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief	2008	2023 2027	2027	2027	<b>2007</b> (250) <b>2021</b> (Bdy rlgms) <b>2025</b> (250/604/ 778+New)	O O O	Nil Nil Nil	10 10 10
Key	D = Digit, <b>Bold</b> = Dates of new NPAs, Bdy rlgm = Boundary realignment, O = Overlay, S= Split, * = Options, > = conversion Mld = Mainland, ? = Unknown population affected by number changes								

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

The Relief Planning Committee considered the Initial Planning Document (IPD) developed by the CNA and, based upon discussion, identified a total of 25 Relief Options for consideration. 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.

- A. NPA Code Conservation – quantity of new NPAs required in BC within the 20 year planning cycle (P = 2 or less new NPAs; N = 3 new NPAs; C = 4 or more new NPAs)
- B. Number of separate Relief Planning areas in BC 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, rate of return (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 between the first relief and subsequent relief activity in BC (e.g., a new area code) (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 (N = Medium; C = Low)
- H. Customer Confusion about dialling plan changes (P = low; N = medium; C = high)
- I. Reprogram Mobile Phones – requirement to reprogram wireless devices to accommodate the number changes (P = low; N = Medium; C = High)
- J. The extent to which resources in the original NPA will be used in the future (P = High; N = Medium; C = Low)
- K. Does the option consider the potential direction for future reliefs in BC? (P = Yes; C = No)

Plan	Description of NPA 250 Relief Option	Pro, Neutral or Con for each Attribute											Rating
		A	B	C	D	E	F	G	H	I	J	K	
1a	Geographic Split of NPA 250, with Vancouver Island reassigned to a new NPA	N	C	C	C	N	P	N	P	C	N	C	-4
1b	Geographic Split of NPA 250, with mainland reassigned to a new NPA	N	C	C	C	N	N	N	P	C	N	C	-4
1c	Geographic Split of NPA 250 with southern mainland and Vancouver Island reassigned to a new NPA	C	C	C	C	N	C	C	P	C	C	C	-8
2a	Boundary Realignment of NPA 778 with NPA 250	P	P	P	N	N	C	C	N	P	P	P	4
2b	Boundary Realignment of NPA 778 with NPA 250 excluding certain exchanges in northern BC	P	N	P	N	C	N	C	N	P	P	P	3
2c	Boundary Realignment of NPAs 604 and 778 at NPA 250 relief	P	P	P	N	N	N	N	N	P	P	P	6
3a	Concentrated Overlay on NPA 250 Vancouver Island, and NPA 250 mainland grows with NPA 250	N	C	P	N	C	C	N	N	P	P	P	1
3b	Concentrated Overlay on NPA 250 mainland, and Vancouver Island grows with NPA 250	N	C	P	N	C	C	N	N	P	P	P	1
3c	Concentrated Overlay on NPA 250 mainland and NPA 778, and NPA 250 Vancouver Island area grows with NPA 250	P	N	P	N	C	C	C	N	P	P	P	2
3d	Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas in NPA 250	P	C	P	N	N	P	N	N	P	P	P	5

Plan	Description of NPA 250 Relief Option	Pro, Neutral or Con for each Attribute											Rating
		A	B	C	D	E	F	G	H	I	J	K	
3e	Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC	P	C	P	N	N	P	N	C	P	P	P	4
3f	Concentrated Overlay on NPA 250 excluding NorthwTel exchange areas, with Boundary Realignments for NPAs 250, 778 and the new NPA at NPA 778 relief	P	N	P	N	N	P	N	N	P	P	P	6
3g	Concentrated Overlay on NPA 250 excluding certain exchanges in northern BC, with Boundary Realignments for NPAs 250, 778 and the new NPA at NPA 778 relief	P	N	P	N	N	P	N	C	P	P	P	5
3h	Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding NorthwTel exchange areas in NPA 250	P	N	P	N	N	P	C	N	P	P	P	4
3i	Concentrated Overlay on NPAs 250 and 778 at NPA 250 relief, excluding certain exchanges in northern BC	P	N	P	N	N	P	C	C	P	P	P	4
3j	Concentrated Overlay on NPAs 250, 604 and 778, excluding NorthwTel exchanges in NPA 250, with Boundary Realignments of NPAs 250, 604 and 778 at NPA 250 relief	P	P	P	N	N	P	C	N	P	P	P	6
3k	Concentrated Overlay on NPAs 250, 604 and 778, excluding certain exchanges in northern BC, with Boundary Realignments of NPAs 250, 604 and 778 at NPA 250 relief	P	P	P	N	N	P	C	C	P	P	P	5
3l	Concentrated Overlay on NPA 250 excluding NorthwTel exchanges in NPA 250, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief	P	P	P	N	N	P	C	N	P	P	P	6
3m	Concentrated Overlay on NPA 250 excluding certain northern BC exchanges in NPA 250, with Boundary Realignments of NPAs 250, 604 & 778 at NPA 778 Exhaust	P	P	P	N	N	P	C	C	P	P	P	5
3n	Concentrated Overlay on NPA 250 excluding exchanges in Kitimat-Stikine and Peace River regional districts	P	C	P	N	C	P	N	C	P	P	P	3
4a	Distributed Overlay on NPA 250	P	N	P	N	N	P	N	N	P	P	P	6
4b	Distributed Overlay on NPA 250, with Boundary Realignments of NPAs 250, 778 and the new NPA at NPA 778 relief	P	P	P	N	N	P	C	N	P	P	P	6
4c	Distributed Overlay on NPAs 250 and 778, with Boundary Realignment of NPA 778 at NPA 250 relief	P	P	P	N	N	P	C	N	P	P	P	6
4d	Distributed Overlay on NPAs 250, 604 and 778, with Boundary Realignments of NPAs 250, 604 & 778 at NPA 250 relief	P	P	P	N	N	P	C	N	P	P	P	6
4e	Distributed Overlay on NPA 250, with Boundary Realignments of NPAs 250, 604, 778 and the new NPA at NPA 778 relief	P	P	P	N	N	P	C	N	P	P	P	6
5	Technology Specific Overlay	C	C	C	C	N	C	C	N	C	P	P	-5

## Notes:

1. None of the options require Exchange Area boundary changes.
2. For the purposes of this matrix, it is assumed that Plans 1a, 1b and 1c will retain 7-digit local dialling.

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 6 points to Plans 2c, 3f, 3j, 3l, 4a, 4b, 4c, 4d and 4e, and the next highest rating of 5 points to Plans 3d, 3g, 3k, and 3m.

## 8. DIALLING CHANGES FOR LOCAL CALLS

The following tables reflect the dialling arrangement for Local calls only for Splits and Overlays.

The Toll call dialling arrangement is not impacted due to the NPA relief. The tables below identify recommended modifications to the local dialling plans in NPA 250, the NPA 250 Relief NPA, as well as in neighbouring NPAs 604 and 778.

**Local Dialling Plan for Customers in NPA 250**

Dial Plan Scenarios	Today	After 250 Split	After 250 Overlay
Landline to Wireless within NPA 250	7-digits	7-digits	10-digits
Landline to Wireless from NPA 250 to adjacent NPAs	10-digits	10-digits	10-digits
Landline to Landline within NPA	7-digits	7-digits	10-digits
Landline to Landline from NPA 250 to NPA 867	7-digits	10-digits	10-digits
Wireless to Wireless within NPA	7/10/11-digits	7/10/11-digits	10/11-digits
Wireless to Wireless from NPA 250 to adjacent NPAs	10/11-digits	10/11-digits	10/11-digits

**Local Dialling Plan for Customers in 250 Relief NPA**

Dial Plan Scenarios	Today	After 250 Split	After 250 Overlay
Landline to Wireless within NPA	N/A	7-digits	10-digits
Landline to Wireless from Relief NPA to adjacent NPAs	N/A	10-digits	10-digits
Landline to Landline within NPA	N/A	7-digits	10-digits
Landline to Landline from Relief NPA to adjacent NPAs	N/A	10-digits	10-digits
Wireless to Wireless within NPA	N/A	7/10/11-digits	10/11-digits
Wireless to Wireless from Relief NPA to adjacent NPAs	N/A	10/11-digits	10/11-digits

**Local Dialling Plan for Customers in Neighbouring BC NPAs 604/778**

Dial Plan Scenarios	Today	After 250 Split	After 250 Overlay
Landline to Wireless within NPA	10-digits	10-digits	10-digits
Landline to Wireless from NPA 604/778 to Adjacent NPAs	10-digits	10-digits	10-digits
Landline to Landline within NPA	10-digits	10-digits	10-digits
Wireless to Wireless within NPA	10/11-digits	10/11-digits	10/11-digits
Wireless to Wireless from NPA 604/778 to Adjacent NPAs	10/11-digits	10/11-digits	10/11-digits



## 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.

<b><u>NPA 250 Relief Planning Timeline</u></b>		<b>Start</b>	<b>End</b>
		<b>Date</b>	<b>Date</b>
<b>Number</b>	<b>Task or Event</b>	<b>MM-YYYY</b>	<b>MM-YYYY</b>
1	CNA identifies NPA exhaust and notifies by e-mail CRTC staff, CSCN, NANPA & CISC that the NPA will exhaust*	02-2004	04-2004
2	CNA conducts R-NRUF and begins preparation of IPD	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.	08-2004	10-2004
4	CNA completes and distributes IPD to RPC	08-2004	08-2004
5	RPC participants review IPD	08-2004	10-2004
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	10-2004	10-2004
7	CNA distributes revised IPD based upon initial meeting discussions	10-2004	12-2004
8	RPC participants provide comments on revised IPD as contributions to the RPC		
9	RPC participants review contributions, if any, prior to subsequent meetings/conference calls		
10	CNA chairs subsequent RPC meetings/conference calls to finalize Planning Document		10-2006
11	CNA revises and forwards Planning Document (PD) to the CISC and CRTC	10-2006	11-2006
12	CISC reviews and forwards PD to the CRTC for approval	11-2006	11-2006
13	CRTC initiates a process to approve/revise the PD and establish the Relief Option and Relief Date	N/A	N/A
14	Interested Parties submit comments and reply comments to CRTC	N/A	N/A
15	CRTC issues Decision & directs RPC to develop an NPA Relief Implementation Plan (RIP)	01-2007	01-2007
16	CNA schedules meeting of RPC to develop a consensus RIP and Planning Letter (PL)	01-2007	01-2007
17	CNA chairs RPC meeting to create Task Forces	01-2007	01-2007

<b>NPA 250 Relief Planning Timeline</b>		<b>Start</b>	<b>End</b>
		<b>Date</b>	<b>Date</b>
<b>Number</b>	<b>Task or Event</b>	<b>MM-YYYY</b>	<b>MM-YYYY</b>
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)	02-2007	02-2007
19	CNA forwards consensus RIP to CISC and the PL to NANPA	02-2007	02-2007
20	CISC reviews and forwards RIP to the CRTC for approval	02-2007	03-2007
21	CRTC approves RIP and notifies Interested Parties	03-2007	04-2007
22	CNA issues second media release and sends approved RIP to NANPA, TRA, LNP Consortium and RPC members	04-2007	04-2007
23	Task Forces, Telecommunications Service Providers and users execute the RIP	04-2007	06-2007
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)	Deferred	Deferred
25	Relief Date (Phase 1)	06-2007	06-2007
26	Projected Exhaust Date	01-2008	

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

\*\* In the event that a new R-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

The RPC reviewed all Relief Options and gave the highest rating to Relief Options 2c, 3f, 3j, 3l, 4a, 4b, 4c, 4d and 4e.

On further review of all of the above listed Relief Options, the RPC recommends Relief Option 2c with a two-phased implementation. The first phase consists of a Boundary Realignment of NPA 778 to include all of BC, and unassigned NPA 604 CO Codes being made available for assignment throughout NPA 604. The second phase consists of implementation of mandatory 10-digit dialling in the NPA 250 area.

Some of the advantages that Relief Option 2c has over some or all of the options listed above are:

- NPA 778 is an existing NPA in BC and the use of NPA 778 numbering resources to relieve NPA 250 would allow a quicker and less costly implementation of relief in BC;
- NPA 778 is already opened up in switches throughout the NANP which avoids the need to open a new NPA in NANP networks;
- This Relief Option does not require a new NPA to be assigned to BC for 8 years, whereas all other options require the introduction of a new NPA at NPA 250 relief (i.e., in one year);
- This Relief Option reduces the number of relief planning areas to one;
- NPA 604 would be freed up for assignment in the GVRD, Abbotsford and Mission, thereby extending the life of NPA 778;
- This Relief Option retains the geographical identities of both the NPA 250 and NPA 604 areas, thereby reducing customer confusion in comparison with options that do not.

The two-phased implementation provides a deferred transition to mandatory 10-digit dialling that recognizes customers' and TSPs' needs for a reasonable period of time to make the changes to their terminals, networks and habits. The RPC recommends that mandatory 10-digit dialling in NPA 250 be introduced coincident with the introduction of mandatory 10-digit dialling in NPA 403 or 403 and 780. The advantages of aligning mandatory 10-digit dialling roll-out with NPA 403 or 403 and 780 are that this would facilitate a single joint BC/Alberta customer education and network implementation, thereby reducing costs and facilitating customer awareness.

The delayed implementation of mandatory 10-digit dialling in the NPA 250 area requires Special Central Office Code Assignment Practices (SCOCAPS) for NPA 778 CO Codes. These SCOCAPS are detailed in Annex B, Table 7.

Northwestel has requested that their exchanges in the far north of BC be excluded from any NPA overlay or a change of NPA. The RPC notes that in Relief Option 2c, as in the other options listed above, it would be possible for Northwestel's exchanges to be excluded without impacting NPA Exhaust Dates if the Commission so determines.

A number of the relief options, including Relief Option 2c, result in the introduction of multiple overlay NPAs within a short period of time either at the time of NPA 250 relief or subsequent relief. Relief Option 2c would require the introduction of a new overlay NPA 8 years after the relief of NPA 250. Certain participants in the Relief Planning Committee expressed concern regarding customer confusion involving the presence of three NPAs in an area following subsequent relief.

If the approved Relief Option includes an overlay, then the RPC recommends that in a small community where a Telecommunication Service Provider's (TSP's) network does not support automatic call completion after the end of a network announcement, the TSP not be required to provide the transition announcement in that small community, but must use additional alternative methods of educating customers in that community. Such methods of education could include, but may not be limited to, advertisements in local newspapers (in areas where local newspapers are published), notices provided to customers using their billing notification method (e.g. paper mail or email), and information on websites. The rationale for this recommendation is explained in more detail in section 6.

The RPC recommends that NPA 236 be set aside as the most suitable NPA for the next relief in BC that requires a new NPA. The rationale for this recommendation is explained in more detail in section 6.

The RPC recommends that the Jeopardy Condition in NPA 250 be revoked 60 days prior to phase one of the NPA relief being implemented. This is explained in more detail in section 11 (Jeopardy Contingency Plan).

The RPC recommends that the normally unassignable NPA 250 CO Codes corresponding to Projected Future and Neighbouring Canadian Geographic NPAs that become assignable in a Jeopardy Condition should remain assignable when the Jeopardy Condition ends. See the NPA 250 CO Code Inventory Chart in the Jeopardy Contingency Plan for details.

## 11. JEOPARDY CONTINGENCY PLAN

Since a Jeopardy Condition has been declared by the CNA, the following measures shall be implemented by all CO Code Holders in NPA 250 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 Codes that have 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 this Jeopardy Contingency Plan becomes effective. The CNA shall initiate reclamation procedures for all CO Codes that have not been placed In-Service within this timeframe; and,
  - 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, 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.
- 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 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 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 input, 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 inputs from all potential and current CO Code Holders quarterly, starting in December 2006, until 4 months before phase one 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 TSP. 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 250 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 NPA 250 R-NRUF or most recent subsequent NPA 250 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 phase one of the 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 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 to the Commission for resolution, with a courtesy copy to the CNA.
- 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: \_\_\_\_\_  
 Address : \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 E-Mail : \_\_\_\_\_  
 Date : \_\_\_\_\_

Contact name: \_\_\_\_\_  
 City, Prov/Terr, Postal code: \_\_\_\_\_  
 Facsimile: \_\_\_\_\_

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	
<b>TOTAL</b>										

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



### NPA 250 CO Code Inventory Chart

The following Chart and the instructions it contains will apply in NPA 250 in the Jeopardy Condition.

The Chart below lists the quantities of unassignable CO Codes prior to a Jeopardy Condition, the quantities of assignable CO Codes in a Jeopardy Condition, and the quantity of CO Codes assigned or in-service as at 19 October 2006. It identifies 31 CO Codes that are unassignable prior to a Jeopardy Condition, 14 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 Code that become assignable in a Jeopardy Condition should be made available in the same order as the types are listed in the chart.

<b>A</b>	Total CO Codes in an NPA (NXX format)	<b>800</b>
	<b>CO Codes unassignable prior to a Jeopardy condition :</b>	
	N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911)	8
	Special Use Codes (555, 950 & 976)	3
	Protected Codes	0
	Home NPA(s) (250)	1
	Current Neighbouring NPAs (403, 867 - see Note 1 re others)	2
	Future Canadian Geographic NPAs (see Note 2)	10
	Plant Test Codes (958 & 959)	2
	Special 7-digit Dialling Codes (610 & 810)	2
	911 Misdial Codes (912, 914 & 915)	3
<b>B</b>	Subtotal	<b>31</b>
<b>C</b>	Net Assignable prior to a Jeopardy Condition (C=A-B)	<b>769</b>
	<b>CO Codes unassignable prior to Jeopardy that become assignable in a Jeopardy Condition:</b>	
	Future Canadian Geographic NPAs - assign 257, 273, 437, 584, 683, 871, 873, 879, 942; do not assign 236 (recommended future BC NPA)	9
	911 Misdial Codes (912, 914 & 915)	3
	Current Neighbouring NPAs - assign 867 in southern half of BC only, and 403 on Island only, )	2
<b>D</b>	Subtotal	<b>14</b>
<b>E</b>	Net Assignable in a Jeopardy Condition (E=C+D)	<b>783</b>
<b>F</b>	Assigned & In Service Codes as of 2006-10-19	<b>664</b>
<b>G</b>	Net Available for Assignment as of 2006-10-19 in a Jeopardy Condition (G=E-F)	<b>119</b>
<b>H</b>	Codes Set Aside for Future New Entrants	<b>3</b>
<b>I</b>	Available for Assignment to other applicants as of 2006-10-19 without Jeopardy Condition (I=C-F-H)	<b>102</b>
<b>J</b>	Available for Assignment to other applicants as of 2006-10-19 in a Jeopardy Condition (J=G-H)	<b>116</b>

- Note 1: Current Neighbouring NPAs other than 403 and 867 are already assigned as CO Codes in NPA 250 (i.e. Canadian NPAs 604, 778, 780, and US NPAs 907, 360, 564, 509, 208, 406) If 250-778 (Cassiar) is returned, it should be made unassignable, since NPA 778 may become a Home NPA in the NPA 250 area.
- Note 2: 27 out of a total of 37 Future Canadian Geographic NPAs are already assigned as CO Codes in NPA 250; these assigned NPA 250 CO Codes include 587 & 825 (recommended future AB NPAs).

**NPA 250  
PLANNING DOCUMENT**

**ANNEXES**