

The Southern Region consists of the following 84 Exchange Areas:

1	Actonvale	29	Lawrenceville	57	St-Marc
2	Baie-du-Fèvre	30	Les Cèdres	58	St-Ours
3	Beauharnois	31	Longueuil	59	St-Paul-d'Abbottsford
4	Bedford	32	Mansonville	60	St-Pie
5	Beloeil	33	Marieville	61	St-Pie-de-Guire
6	Boucherville	34	Napierville	62	St-Polycarpe
7	Bromont	35	Notre-Dame-de-Stanbridge	63	St-Rémi
8	Chambly	36	Ormstown	64	Ste-Rosalie
9	Chateauguay	37	Pierreville	65	St-Simon
10	Clarenceville	38	Rigaud	66	St-Thomas-d'Aquin
11	Contrecoeur	39	Rivière Beaudette	67	St-Zépherin
12	Côteau-du-Lac	40	Roxton Falls	68	Ste-Hélène-de-Bagot
13	Côteau-Landing	41	Sorel	69	Ste-Julie-de-Verchères
14	Cowansville	42	St-Aimé	70	Ste-Justine-de-Newton
15	Dunham	43	St-Blaise	71	Ste-Madeleine
16	Eastman	44	St-Bruno	72	Ste-Marthe
17	Farnham	45	St-Césaire	73	Ste-Martine
18	Franklin Centre	46	St-Chrysostôme	74	Ste-Victoire
19	Frelighsburg	47	St-Clet	75	Sutton
20	Granby	48	St-Constant	76	Upton
21	Hemmingford	49	St-Damase	77	Valcourt
22	Henryville	50	St-Denis	78	Valleyfield
23	Howick	51	St-Hughes	79	Varennnes
24	Hudson	52	St-Hyacinthe	80	Vaudreuil
25	Huntingdon	53	St-Jean	81	Venise-en-Québec
26	Knowlton	54	St-Jude	82	Verchères
27	Lacolle	55	St-Lambert	83	Waterloo
28	Laprairie	56	St-Liboire	84	Yamaska

In these two geographic split options (Plans 2a and 2b), the 44 Exchange Areas are included in one NPA and the remaining 84 Exchange Areas are included in the second NPA.

With these options, the Exchange Areas and NPA 450 assigned CO Codes would split as follows:

Area	Number of Exchange Areas in Split regions	Assigned CO Codes in NPA 450 (2008-11-10)	
		% of Total NPA 450 CO Codes	Qty of NPA 450 CO Codes
450 North – (Exchange Areas in Northern Region)	44	40%	255
450 South – (Exchange Areas in Southern Region)	84	60%	384

With these two options (Plans 2a and 2b), number changes would be required in either region (as defined above).

Split Options 3a and 3b – St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North

Split 3 places LIR 04 entirely in the North.

- 3a - Split LIR 04 entirely in the North – Northern Region (59 Exchange Areas) retains NPA 450 and Southern Region (69 Exchange Areas) changes to New NPA
- 3b - Split LIR 04 entirely in the North - Southern Region (69 Exchange Areas) retains NPA 450 and Northern Region (59 Exchange Areas) changes to New NPA

The Northern Region consists of the following 59 Exchange Areas:

1	Berthierville	21	Mirabel-St-Augustin	41	St-Jean-de-Matha
2	Brownsburg	22	Mirabel-Ste-Scholastique	42	St-Jérôme
3	Chomedey	23	Morin Heights	43	St-Lin
4	Côteau-du-Lac	24	Oka	44	St-Michel-des-Saints
5	Côteau-Landing	25	Ormstown	45	St-Polycarpe
6	Crabtree	26	Pont-Viau	46	St-Sauveur
7	Franklin Centre	27	Rawdon	47	St-Vincent-de-Paul
8	Hudson	28	Rigaud	48	St-Zénon
9	Huntingdon	29	Rivière Beaudette	49	Ste-Adèle
10	Joliette	30	Shawbridge	50	Ste-Anne-des-Plaines
11	L'Épiphanie-l'Assomption	31	St-Alphonse-de-Rodriguez	51	Ste-Julienne
12	Lachute	32	St-André-Est	52	Ste-Justine-de-Newton
13	Lanoraie	33	St-Barthélémy	53	Ste-Marguerite
14	Laval-Est	34	St-Calixte-de-Kilkenny	54	Ste-Marthe
15	Laval-Ouest	35	St-Clet	55	Ste-Rose
16	Lavaltrie	36	St-Eustache	56	Ste-Thérèse
17	Le Gardeur	37	St-Félix-de-Valois	57	Terrebonne
18	Les Cèdres	38	St-Gabriel-de-Brandon	58	Valleyfield
19	Mascouche	39	St-Hippolyte	59	Vaudreuil
20	Mirabel-Aéroport	40	St-Jacques		

The Southern Region consists of the following 69 Exchange Areas:

1	Actonvale	24	Lawrenceville	47	St-Marc
2	Baie-du-Fèvre	25	Longueuil	48	St-Ours
3	Beauharnois	26	Mansonville	49	St-Paul-d'Abbottsford
4	Bedford	27	Marieville	50	St-Pie
5	Beloeil	28	Napierville	51	St-Pie-de-Guire
6	Boucherville	29	Notre-Dame-de-Stanbridge	52	St-Rémi
7	Bromont	30	Pierreville	53	Ste-Rosalie
8	Chambly	31	Roxton Falls	54	St-Simon
9	Chateauguay	32	Sorel	55	St-Thomas-d'Aquin
10	Clarenceville	33	St-Aimé	56	St-Zépherin
11	Contrecoeur	34	St-Blaise	57	Ste-Hélène-de-Bagot
12	Cowansville	35	St-Bruno	58	Ste-Julie-de-Verchères
13	Dunham	36	St-Césaire	59	Ste-Madeleine
14	Eastman	37	St-Chrysostôme	60	Ste-Martine
15	Farnham	38	St-Constant	61	Ste-Victoire
16	Frelighsburg	39	St-Damase	62	Sutton
17	Granby	40	St-Denis	63	Upton
18	Hemmingford	41	St-Hughes	64	Valcourt
19	Henryville	42	St-Hyacinthe	65	Varennes
20	Howick	43	St-Jean	66	Venise-en-Québec
21	Knowlton	44	St-Jude	67	Verchères
22	Lacolle	45	St-Lambert	68	Waterloo
23	Laprairie	46	St-Liboire	69	Yamaska

In these two geographic split options (Plans 3a and 3b), the 59 Exchange Areas would be included in one NPA and the remaining 69 Exchange Areas would be included in the other NPA.

With these options, the Exchange Areas and NPA 450 assigned CO Codes would split as follows:

Area	Number of Exchange Areas in Split regions	Assigned CO Codes in NPA 450 (2008-11-10)	
		% of Total NPA 450 CO Codes	Qty of NPA 450 CO Codes
450 North – (Exchange Areas in Northern Region)	59	49%	310
450 South – (Exchange Areas in Southern Region)	69	51%	329

With these two options (Plans 3a and 3b), number changes would be required in either region (as defined above).

Split Options 4a and 4b – LIR 16 (Sorel Region) Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North

Split 4 is a modification of Split 2. In Split 4 LIR 16 (Sorel Region) as well as Independent LIRs 07 & 08 & the Independent Exchange of Baie-du-Fèvre are included in the Northern region.

- 4a - Split LIR 16 (Sorel Region) as well as Independent LIRs 07 & 08 & the Independent Exchange of Baie-du-Fèvre are included in the Northern region – Northern Region (60 Exchange Areas) retains NPA 450 and Southern Region (68 Exchange Areas) changes to New NPA
- 4b - Split LIR 16 (Sorel Region) as well as Independent LIRs 07 & 08 & the Independent Exchange of Baie-du-Fèvre are included in the Northern region - Southern Region (68 Exchange Areas) retains NPA 450 and Northern Region (60 Exchange Areas) changes to New NPA

The Northern Region consists of the following 60 Exchange Areas:

1	Baie-du-Fèvre	21	Pierreville	41	St-Lin
2	Berthierville	22	Pont-Viau	42	St-Michel-des-Saints
3	Brownsburg	23	Rawdon	43	St-Ours
4	Chomedey	24	Shawbridge	44	St-Pie-de-Guire
5	Contrecoeur	25	Sorel	45	St-Sauveur
6	Crabtree	26	St-Aimé	46	St-Simon
7	Joliette	27	St-Alphonse-de-Rodriguez	47	St-Thomas-d'Aquin
8	L'Épiphanie-l'Assomption	28	St-André-Est	48	St-Vincent-de-Paul
9	Lachute	29	St-Barthélémy	49	St-Zénon
10	Lanoraie	30	St-Calixte-de-Kilkenny	50	St-Zéphérin
11	Laval-Est	31	St-Denis	51	Ste-Adèle
12	Laval-Ouest	32	St-Eustache	52	Ste-Anne-des-Plaines
13	Lavaltrie	33	St-Félix-de-Valois	53	Ste-Hélène-de-Bagot
14	Le Gardeur	34	St-Gabriel-de-Brandon	54	Ste-Julienne
15	Mascouche	35	St-Hippolyte	55	Ste-Marguerite
16	Mirabel-Aéroport	36	St-Hughes	56	Ste-Rose
17	Mirabel-St-Augustin	37	St-Jacques	57	Ste-Thérèse
18	Mirabel-Ste-Scholastique	38	St-Jean-de-Matha	58	Ste-Victoire
19	Morin Heights	39	St-Jérôme	59	Terrebonne
20	Oka	40	St-Jude	60	Yamaska

The Southern Region consists of the following 68 Exchange Areas:

1	Actonvale	24	Knowlton	47	St-Lambert
2	Beauharnois	25	Lacolle	48	St-Liboire
3	Bedford	26	Laprairie	49	St-Marc
4	Beloeil	27	Lawrenceville	50	St-Paul-d'Abbotsford
5	Boucherville	28	Les Cèdres	51	St-Pie
6	Bromont	29	Longueuil	52	St-Polycarpe
7	Chambly	30	Mansonville	53	St-Rémi
8	Chateauguay	31	Marieville	54	Ste-Rosalie
9	Clarenceville	32	Napierville	55	Ste-Julie-de-Verchères
10	Côteau-du-Lac	33	Notre-Dame-de-Stanbridge	56	Ste-Justine-de-Newton
11	Côteau-Landing	34	Ormstown	57	Ste-Madeleine
12	Cowansville	35	Rigaud	58	Ste-Marthe
13	Dunham	36	Rivière Beaudette	59	Ste-Martine
14	Eastman	37	Roxton Falls	60	Sutton
15	Farnham	38	St-Blaise	61	Upton
16	Franklin Centre	39	St-Bruno	62	Valcourt
17	Frelighsburg	40	St-Césaire	63	Valleyfield
18	Granby	41	St-Chrysostôme	64	Varennes
19	Hemmingford	42	St-Clet	65	Vaudreuil
20	Henryville	43	St-Constant	66	Venise-en-Québec
21	Howick	44	St-Damase	67	Verchères
22	Hudson	45	St-Hyacinthe	68	Waterloo
23	Huntingdon	46	St-Jean		

In these two geographic split options (Plans 4a and 4b), the 60 Exchange Areas would be included in one NPA and the remaining 68 Exchange Areas would be included in the other NPA.

With these options, the Exchange Areas and NPA 450 assigned CO Codes would split as follows:

<i>Area</i>	<i>Number of Exchange Areas in Split regions</i>	<i>Assigned CO Codes in NPA 450 (2008-11-10)</i>	
		<i>% of Total NPA 450 CO Codes</i>	<i>Qty of NPA 450 CO Codes</i>
450 North – (Exchange Areas in Northern Region)	60	48%	306
450 South – (Exchange Areas in Southern Region)	68	52%	333

With these two options (Plans 4a and 4b), number changes would be required in either region (as defined above).

Split Options 5a and 5b – East West split with LIR 13 (Terrebonne – 2 Exchange Areas) in West

Split 5 is an East West split with LIR 13 (Terrebonne – 2 Exchange Areas) in the West.

- 5a - Split East West with LIR 13 (Terrebonne – 2 Exchange Areas) in the West – Eastern Region (56 Exchange Areas) retains NPA 450 and Western Region (72 Exchange Areas) changes to New NPA
- 5b - Split East West with LIR 13 (Terrebonne – 2 Exchange Areas) in the West - Western Region (72 Exchange Areas) retains NPA 450 and Eastern Region (56 Exchange Areas) changes to New NPA

The Eastern Region consists of the following 56 Exchange Areas:

1	Actonvale	20	Pierreville	39	St-Ours
2	Baie-du-Fèvre	21	Rawdon	40	St-Paul-d'Abbottsford
3	Berthierville	22	Roxton Falls	41	St-Pie
4	Bromont	23	Sorel	42	St-Pie-de-Guire
5	Contrecoeur	24	St-Aimé	43	Ste-Rosalie
6	Cowansville	25	St-Alphonse-de-Rodriguez	44	St-Simon
7	Crabtree	26	St-Barthélémy	45	St-Thomas-d'Aquin
8	Dunham	27	St-Césaire	46	St-Zénon
9	Eastman	28	St-Damase	47	St-Zépherin
10	Frelighsburg	29	St-Denis	48	Ste-Hélène-de-Bagot
11	Granby	30	St-Félix-de-Valois	49	Ste-Julienne
12	Joliette	31	St-Gabriel-de-Brandon	50	Ste-Madeleine
13	Knowlton	32	St-Hughes	51	Ste-Victoire
14	L'Épiphanie-l'Assomption	33	St-Hyacinthe	52	Sutton
15	Lanoraie	34	St-Jacques	53	Upton
16	Lavaltrie	35	St-Jean-de-Matha	54	Valcourt
17	Lawrenceville	36	St-Jude	55	Waterloo
18	Le Gardeur	37	St-Liboire	56	Yamaska
19	Mansonville	38	St-Michel-des-Saints		

The Western Region consists of the following 72 Exchange Areas:

1	Beauharnois	25	Longueuil	49	St-Jean
2	Bedford	26	Marieville	50	St-Jérôme
3	Beloeil	27	Mascouche	51	St-Lambert
4	Boucherville	28	Mirabel-Aéroport	52	St-Lin
5	Brownsburg	29	Mirabel-St-Augustin	53	St-Marc
6	Chambly	30	Mirabel-Ste-Scholastique	54	St-Polycarpe
7	Chateauguay	31	Morin Heights	55	St-Rémi
8	Chomedey	32	Napierville	56	St-Sauveur
9	Clarenceville	33	Notre-Dame-de-Stanbridge	57	St-Vincent-de-Paul
10	Côteau-du-Lac	34	Oka	58	Ste-Adèle
11	Côteau-Landing	35	Ormstown	59	Ste-Anne-des-Plaines
12	Farnham	36	Pont-Viau	60	Ste-Julie-de-Verchères
13	Franklin Centre	37	Rigaud	61	Ste-Justine-de-Newton
14	Hemmingford	38	Rivière Beaudette	62	Ste-Marguerite
15	Henryville	39	Shawbridge	63	Ste-Marthe
16	Howick	40	St-André-Est	64	Ste-Martine
17	Hudson	41	St-Blaise	65	Ste-Rose
18	Huntingdon	42	St-Bruno	66	Ste-Thérèse
19	Lachute	43	St-Calixte-de-Kilkenny	67	Terrebonne
20	Lacolle	44	St-Chrysostôme	68	Valleyfield
21	Laprairie	45	St-Clet	69	Varenes
22	Laval-Est	46	St-Constant	70	Vaudreuil
23	Laval-Ouest	47	St-Eustache	71	Venise-en-Québec
24	Les Cèdres	48	St-Hippolyte	72	Verchères

In these two geographic split options (Plans 5a and 5b), the 56 Exchange Areas would be included in one NPA and the remaining 72 Exchange Areas would be included in the other NPA.

With these options, the Exchange Areas and NPA 450 assigned CO Codes would split as follows:

Area	Number of Exchange Areas in Split regions	Assigned CO Codes in NPA 450 (2008-11-10)	
		% of Total NPA 450 CO Codes	Qty of NPA 450 CO Codes
450 East – (Exchange Areas in Eastern Region)	56	33%	214
450 West – (Exchange Areas in Western Region)	72	67%	425

With these two options (Plans 5a and 5b); number changes would be required in either region (as defined above).

Split Options 6a and 6b – East West split with LIR 13 (Terrebonne – 2 Exchange Areas) in East

Split 6 is an East West split with LIR 13 (Terrebonne – 2 Exchange Areas) in the East.

- 6a - Split East West with LIR 13 (Terrebonne – 2 Exchange Areas) in the East – Eastern Region (58 Exchange Areas) retains NPA 450 and Western Region (70 Exchange Areas) changes to New NPA
- 6b - Split East West with LIR 13 (Terrebonne – 2 Exchange Areas) in the East - Western Region (70 Exchange Areas) retains NPA 450 and Eastern Region (58 Exchange Areas) changes to New NPA

The Eastern Region consists of the following 58 Exchange Areas:

1	Actonvale	21	Pierreville	41	St-Paul-d'Abbottsford
2	Baie-du-Fèvre	22	Rawdon	42	St-Pie
3	Berthierville	23	Roxton Falls	43	St-Pie-de-Guire
4	Bromont	24	Sorel	44	Ste-Rosalie
5	Contrecoeur	25	St-Aimé	45	St-Simon
6	Cowansville	26	St-Alphonse-de-Rodriguez	46	St-Thomas-d'Aquin
7	Crabtree	27	St-Barthélémy	47	St-Zénon
8	Dunham	28	St-Césaire	48	St-Zépherin
9	Eastman	29	St-Damase	49	Ste-Hélène-de-Bagot
10	Frelighsburg	30	St-Denis	50	Ste-Julienne
11	Granby	31	St-Félix-de-Valois	51	Ste-Madeleine
12	Joliette	32	St-Gabriel-de-Brandon	52	Ste-Victoire
13	Knowlton	33	St-Hughes	53	Sutton
14	L'Épiphanie-l'Assomption	34	St-Hyacinthe	54	Terrebonne
15	Lanoraie	35	St-Jacques	55	Upton
16	Lavaltrie	36	St-Jean-de-Matha	56	Valcourt
17	Lawrenceville	37	St-Jude	57	Waterloo
18	Le Gardeur	38	St-Liboire	58	Yamaska
19	Mansonville	39	St-Michel-des-Saints		
20	Mascouche	40	St-Ours		

The Western Region consists of the following 70 Exchange Areas:

1	Beauharnois	25	Longueuil	49	St-Jérôme
2	Bedford	26	Marieville	50	St-Lambert
3	Beloil	27	Mirabel-Aéroport	51	St-Lin
4	Boucherville	28	Mirabel-St-Augustin	52	St-Marc
5	Brownsburg	29	Mirabel-Ste-Scholastique	53	St-Polycarpe
6	Chambly	30	Morin Heights	54	St-Rémi
7	Chateauguay	31	Napierville	55	St-Sauveur
8	Chomedey	32	Notre-Dame-de-Stanbridge	56	St-Vincent-de-Paul
9	Clarenceville	33	Oka	57	Ste-Adèle
10	Côteau-du-Lac	34	Ormstown	58	Ste-Anne-des-Plaines
11	Côteau-Landing	35	Pont-Viau	59	Ste-Julie-de-Verchères
12	Farnham	36	Rigaud	60	Ste-Justine-de-Newton
13	Franklin Centre	37	Rivière Beaudette	61	Ste-Marguerite
14	Hemmingford	38	Shawbridge	62	Ste-Marthe
15	Henryville	39	St-André-Est	63	Ste-Martine
16	Howick	40	St-Blaise	64	Ste-Rose
17	Hudson	41	St-Bruno	65	Ste-Thérèse
18	Huntingdon	42	St-Calixte-de-Kilkenny	66	Valleyfield
19	Lachute	43	St-Chrysostôme	67	Varenes
20	Lacolle	44	St-Clet	68	Vaudreuil
21	Laprairie	45	St-Constant	69	Venise-en-Québec
22	Laval-Est	46	St-Eustache	70	Verchères
23	Laval-Ouest	47	St-Hippolyte		
24	Les Cèdres	48	St-Jean		

The difference between the split options 5 and 6 East/West splits is LIR 13 (Terrebonne) the two Exchange Areas that make up LIR 13. LIR 13 is located to the NE of the island of Montreal. There is no easily described boundary from a consumers' point of view. The boundary is based entirely upon LIRs.

In these two geographic split options (Plans 6a and 6b), the 58 Exchange Areas are included in one NPA and the remaining 70 Exchange Areas are included in the second NPA.

With these options, the Exchange Areas and NPA 450 assigned CO Codes would split as follows:

Area	Number of Exchange Areas in Split regions	Assigned CO Codes in NPA 450 (2008-11-10)	
		% of Total NPA 450 CO Codes	Qty of NPA 450 CO Codes
450 East – (Exchange Areas in Eastern Region)	58	36%	232
450 West – (Exchange Areas in Western Region)	70	64%	407

With these two options (Plans 6a and 6b), number changes would be required in either region (as defined above).

6.1.1. Plans 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 5a, 5b, 6a, 6b: Splits

Description:

Detailed descriptions of the split plans 1a through 6b listed below are provided in section 6.1 above.

If a split plan is implemented, future exhausts of area code 450 and the new area code would be expected to occur as follows:

<u>Plan</u>		<u>Future Exhausts</u>	
		<u>NPA 450</u>	<u>New NPA</u>
1a	St Lawrence River as the boundary (North retains NPA 450)	2053	2047
1b	St Lawrence River as the boundary (South retains NPA 450)	2047	2053
2a	St Lawrence and Ottawa Rivers as the boundary (North retains NPA 450)	2062	2040
2b	St Lawrence and Ottawa Rivers as the boundary (South retains NPA 450)	2040	2062
3a	St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (North retains NPA 450)	2047	2055
3b	St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (South retains NPA 450)	2055	2047
4a	LIR 16 (Sorel Region) Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (North retains NPA 450)	2051	2049
4b	LIR 16 (Sorel Region) Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (South retains NPA 450)	2049	2051
5a	East-West split , LIR 13 (Terrebonne – 2 Exchange Areas) in West (East retains NPA 450)	2053	2045
5b	East-West split, LIR 13 (Terrebonne – 2 Exchange Areas) in West (West retains NPA 450)	2045	2053
6a	East-West Split, LIR 13 (Terrebonne – 2 Exchange Areas) in East (East retains NPA 450)	2051	2048
6b	East-West Split, LIR 13 (Terrebonne – 2 Exchange Areas) in East (West retains NPA 450)	2048	2051

Assessment:

The RPC does not recommend any of these Split Relief Options. There would be insufficient time to implement any of them as split options require a minimum of two years to implement. In addition, between 33% and 67% of the people (based on the percentage of CO Codes in each part of the NPA being split) would be affected by a telephone number change, which would be very inconvenient for those people and particularly expensive for business customers as they would be required to change their advertising, stationery, etc. A split would provide little or no benefit since customers and Carriers have previously changed to mandatory 10-digit local dialling. A change back to 7-digit local dialling would also be inconsistent with the industry migration towards the Uniform Dialling Plan (i.e., 10-digit local and toll dialling). In addition,

costs for TSPs would be higher for a split due to the need to reprogram wireless telephones, change back-office support and billing systems, etc. One drawback of the split options is that the number of separate Relief Planning areas in Québec would be increased to five (5) compared to the four (4) for the Distributed Overlay and three (3) for the Boundary Extension Overlay option. The use of a new NPA in a split configuration for the geographic area served by NPA 450 would be an inefficient use of numbering resources compared to an overlay option because it would require two new NPAs to be implemented in subsequent relief projects between 2040 and 2062 versus one subsequent relief project in 2028 for a Boundary Extension Overlay or 2050 for a Distributed Overlay (i.e., 3 new NPAs versus 2).

6.2 NPA Boundary Extension Overlay

One Relief Option was evaluated using the Boundary Extension Overlay method of providing NPA relief.

6.2.1 Plan 7: NPA 438 Boundary Extension Overlay

Description:

Currently, NPA 450 and 438 are expected to exhaust in the years 2010 and 2043 respectively. The PED for NPA 438 is based on the January 2008 G-NRUF results. This Relief Option would extend the boundaries of NPA 438 to include all the 128 Exchange Areas comprising NPA 450. NPA 450 resources will not be assigned to the 6 exchanges in the current NPA 514/438 area.

This Relief Option would reduce the number of separate Relief Planning areas in Québec from four (4) to three (3).

After the Boundary Extension Overlay, the NPA 450 and the 438 NPA would be expected to exhaust in 2010 and 2028 respectively.

Assessment:

The RPC views this option as a viable relief option and preferable to all of the split options because it would not require telephone number changes that would inconvenience customers and would cost Carriers and customers less to implement than splits. Overlays are more convenient than Splits for customers and are less expensive for business customers as they would not be required to change their advertising, stationery, etc. as there are no number changes required. Costs for TSPs would be lower for an overlay due to the avoidance of the need to reprogram wireless telephones, and lower costs to change office support and billing systems, etc.

One advantage of the Boundary Extension Overlay option is that the number of separate Relief Planning areas in Québec would be reduced to three (3) compared to four (4) for the Distributed Overlay and five (5) for the split options. The use of existing NPA 438 in a Boundary Extension Overlay of the geographic area served by NPA 450 would be an efficient use of numbering resources compared to the Distributed Overlay option because it would not require a new NPA to be implemented at this time. This option does not change the boundaries of NPA 450. In addition, this Boundary Extension Overlay option may cost carriers and customers less to

implement than a new Distributed Overlay NPA since a new NPA will not have to be entered into many systems and tables. With the Boundary Extension Overlay of NPA 250 by NPA 778, the costs incurred by the Incumbent LEC (ILEC), TELUS, were lower than the costs that would have been incurred with a Distributed Overlay. On the other hand, the wireless company associated with the ILEC, TELUS Mobility, would have preferred a Distributed Overlay primarily because of the wireless company's lower costs to implement and maintain a Distributed Overlay as a new NPA would have had the same boundary as the existing NPA. Therefore, some Carriers prefer the Boundary Extension Overlay option while some other Carriers prefer the Distributed Overlay option. Implementing a boundary change for NPA 438 would eliminate the need for Carriers to make customers in the 450/514 region aware of the existence of new NPA 579 and its boundaries; however it would require Carriers to make customers in the 450/514 region aware of the expanded boundary of NPA 438. Also since the length of time available for implementation of relief for NPA 450 is short and NPA 438 is already recognized by Carriers operating in the rest of the North American Numbering Plan Area, the incidence of errors due to the relief NPA not being implemented in customer and Carrier networks will be less than if a completely new NPA were to be introduced. One drawback of the Boundary Extension Overlay option is that it reduces the PED of NPA Code 438 from 2043 to 2028, thus requiring subsequent relief in the 438/450/514 region in about 2026 (relief is generally implemented about 12 to 18 months prior to exhaust), compared to 2041 for NPA 438/514 and about 2048 for NPA 450/579.

6.3 Distributed Overlay

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

6.3.1. Plan 8: Distributed Overlay of New NPA on NPA 450

Description:

This Relief Option would introduce a new area code to overlay area code 450.

Area code 450 and the new area code would be expected to exhaust in 2010 and 2050 respectively.

Assessment:

The RPC views this option as a viable relief option and preferable to all of the split options because it would not require telephone number changes that would inconvenience customers and would cost Carriers and customers less to implement than splits. Overlays are more convenient than splits for customers and are less expensive for business customers as they would not be required to change their advertising, stationery, etc. as there are no number changes required. Costs for TSPs would be lower for an overlay due to the avoidance of need to reprogram wireless telephones, and lower costs to change office support and billing systems, etc.

Based on experience with the boundary expansion of NPA 778 to cover all of area codes 604 and 250 in British Columbia, it is possible that the ILEC's costs of implementing a Distributed

Overlay of a new NPA on NPA 450 could be greater than the costs of implementing a Boundary Extension Overlay. In addition, this particular Distributed Overlay option would retain the existing boundaries of the NPA 450 area, and provide a longer time frame (40 years versus 18 years for the boundary extension option) before relief would be required again in this region. Drawbacks of the Distributed Overlay option are that the number of separate Relief Planning areas in Québec would remain as four (4), compared to three (3) for the Boundary Extension Overlay and five (5) for the split options, and the next new NPA to be assigned in the 450/514 region will be in 2009 rather than 2027 for the Boundary Extension Overlay. Implementing new NPA 579 would eliminate the need for Carriers to make customers in the 450/514 region aware of the existence of a boundary change for NPA 438; however it would require Carriers to make customers in the 450/514 region aware of the new NPA 579 serving the NPA 450 area.

7. SUMMARY OF RELIEF OPTIONS

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

Plan		Projected Exhaust Dates		Relief - Timing & Type		Qty & % of NPA 450 CO Codes affected by Number. Changes*	Local Dial # of digits
#	Description	NPA 450	New NPA	Relief Date	Type		
1a	Split - St Lawrence River as the boundary (North retains NPA 450)	2010 2053	2047	2010 (450) 2051 (450) 2045 (new NPA)	S ? ?	350 / 55% ? ?	10 ? ?
1b	Split - St Lawrence River as the boundary (South retains NPA 450)	2010 2047	2053	2010 (450) 2045 (450) 2051 (new NPA)	S ? ?	289 / 45% ? ?	10 ? ?
2a	Split - St Lawrence and Ottawa Rivers as the boundary (North retains NPA 450)	2010 2062	2040	2010 (450) 2060 (450) 2038 (new NPA)	S ? ?	384 / 60% ? ?	10 ? ?
2b	Split - St Lawrence and Ottawa Rivers as the boundary (South retains NPA 450)	2010 2040	2062	2010 (450) 2038 (450) 2060 (new NPA)	S ? ?	255 / 40% ? ?	10 ? ?
3a	Split - St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (North retains NPA 450)	2010 2047	2055	2010 (450) 2045 (450) 2053 (new NPA)	S ? ?	392 / 51% ? ?	10 ? ?
3b	Split - St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (South retains NPA 450)	2010 2055	2047	2010 (450) 2053 (450) 2045 (new NPA)	S ? ?	310 / 49% ? ?	10 ? ?
4a	Split – LIR 16 (Sorel Region), Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (North retains NPA 450)	2010 2051	2049	2010 (450) 2049 (450) 2047 (new NPA)	S ? ?	333 / 52% ? ?	10 ? ?
4b	Split – LIR 16 (Sorel Region), Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (South retains NPA 450)	2010 2049	2051	2010 (450) 2047 (450) 2049 (new NPA)	S ? ?	306 / 48% ? ?	10 ? ?
5a	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in West (East retains NPA 450)	2010 2053	2045	2010 (450) 2051 (450) 2043 (new NPA)	S ? ?	425 / 67% ? ?	10 ? ?

Plan		Projected Exhaust Dates		Relief - Timing & Type		Qty & % of NPA 450 CO Codes affected by Number Changes*	Local Dial # of digits
#	Description	NPA 450	New NPA	Relief Date	Type		
5b	East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in West (West retains NPA 450)	2010 2045	2053	2010 (450) 2043 (450) 2051 (new NPA)	S ? ?	214 / 33% ? ?	10 ? ?
6a	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in East (East retains NPA 450)	2010 2051	2048	2010 (450) 2049 (450) 2046 (new NPA)	S ? ?	407 / 64% ? ?	10
6b	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in East (West retains NPA 450)	2010 2048	2051	2010 (450) 2046 (450) 2049 (new NPA)	S ? ?	232 / 36% ? ?	10
7	NPA 438 Boundary Extension Overlay	2010 2028	2028 ¹	2010 (450) 2026 (438/450/514)	O(BE) O	Nil Nil	10 10
8	Distributed Overlay of New NPA on NPA 450	2010	2050	2010 (450) 2048 (450/new NPA)	O(D) O	Nil Nil	10 10
Key	10 = mandatory 10-digit local dialling, O(BE) = Boundary Extension Overlay, O(D) = Distributed Overlay, S = Split. ? = Unknown (population affected by number changes, subsequent relief type and dial plan) * As of 10 November 2008 1 Numbering resources in the geographic region served by NPA 438 (i.e., the combined area served by NPAs 450 and 514) are projected to exhaust in 2028. However, the PED for NPA 438 for the geographic region served by NPA 514 only is 2043 based on the January 2008 G-NRUF.						

8. COMPARATIVE ASSESSMENT OF RELIEF OPTIONS

The CNA identified 14 Relief Options in section 6 of this document. A Pro, Neutral or Con (P, N or C) rating was established for each Relief Option for each of the following attributes. The results are listed in the table below the list of attributes.

- A. NPA Code Conservation – quantity of relief NPAs required in NPA 450 within the next 20 years, including the current relief project (P = 0 relief NPAs; N = 1 relief NPA; C = 2 or more relief NPAs)
- B. NPA Code Conservation – quantity of new NPA assignments required for NPA 450 within the next 15 years, including the current relief project (P = 0 new NPAs; N = 1 new NPAs; C = 2 or more new NPAs)
- C. Number of separate Relief Planning areas in Québec in the long term after this relief project is completed (P = decrease; N = stays same; C = increase)
- D. Quantity of Number Changes for existing customers' numbers (none = P, many = C)
- E. Level of Carrier Costs – e.g., including implementation, customer awareness, rate of return (P = Low; N = Medium; C = High)
- F. Time required to implement relief, i.e., time between the CRTC's Decision date and the date when CO Codes in the new/relief NPA can be activated (shortest = P, medium = N, longest = C)
- G. Longevity – the length of time between this relief and subsequent relief activity in NPA 450 (e.g., a new area code) (P = 20 or more years; N = 9 through 19 years; C = within 8 years)
- H. Geographic Identity – NPA boundaries align with boundaries of known areas (e.g., existing NPA areas, provinces) or identifiable geographical features (e.g., rivers, islands) (P = High; N = Medium; C = Low)
- I. Reprogram Mobile Phones – requirement to reprogram wireless devices to accommodate the number changes (P = low; N = Medium; C = High)
- J. Potential maximum quantity of NPAs in an Exchange Area in the next 15 years (1 NPA = P, 2 NPAs = N, 3 NPAs = C)
- K. Does the option set the potential direction for future reliefs in NPA 450? (P = Yes; C = No)
- L. Potential for customer confusion (e.g., caused by boundary, number and dialling plan changes) (P = Low Confusion; N = Medium Confusion; C = High Confusion)

Relief Option		Ratings by attributes												Overall
#	Description	A	B	C	D	E	F	G	H	I	J	K	L	SCORE
1a	Split - St Lawrence River as the boundary (North retains NPA 450)	N	N	C	C	C	C	P	N	C	P	C	C	-5
1b	Split - St Lawrence River as the boundary (South retains NPA 450)	N	N	C	C	C	C	P	N	C	P	C	C	-5
2a	Split - St Lawrence and Ottawa Rivers as the boundary (North retains NPA 450)	N	N	C	C	C	C	P	N	C	P	C	C	-5
2b	Split - St Lawrence and Ottawa Rivers as the boundary (South retains NPA 450)	N	N	C	C	C	C	P	N	C	P	C	C	-5
3a	Split - St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (North retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
3b	Split - St Lawrence and Ottawa Rivers as the boundary, LIR 04 in North (South retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
4a	Split – LIR 16 (Sorel Region) Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (North retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
4b	Split – LIR 16 (Sorel Region) Independent LIRs 07 & 08, & the Independent Exchange of Baie-du-Fèvre in North (South retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
5a	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in West (East retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
5b	East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in West (West retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
6a	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in East (East retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
6b	Split - East West Split – LIR 13 (Terrebonne – 2 Exchange Areas) in East (West retains NPA 450)	N	N	C	C	C	C	P	C	C	P	C	C	-6
7	NPA 438 Boundary Extension Overlay	C	P	P	P	P	P	N	N	P	N	P	N	6 Max / 3 Min
		C	P	P	P	N	N	N	C	P	N	P	N	
8	Distributed Overlay of New NPA on NPA 450	N	N	N	P	P	P	P	P	P	N	P	P	8 Max / 6 Min
		N	N	N	P	N	N	P	P	P	N	P	P	

Note: Relief Options 7 and 8 have two different overall scores reflecting differing opinions amongst the RPC participants.

If P, N and C are assigned a weighting of +1, 0 and -1, respectively, then analysis of the above table gives the highest ratings to the two Overlay Plans 7 and 8 and a significantly lower rating to the twelve split options. The two Overlay Plans 7 and 8 are clearly superior to the split options when assessed using the above criteria.

The RPC recommends that one of the two overlay options, Plan 7 - NPA 438 Boundary Extension Overlay, and Plan 8 - Distributed Overlay of New NPA on NPA 450 should be used as the relief method for NPA 450.

Some RPC participants (Bell Canada and Bell Mobility) prefer Plan 7 - NPA 438 Boundary Extension Overlay as the overlay method since the use of an existing NPA rather than a new assignment may reduce some Carriers' and some customers' costs and time to implement relief, would reduce the number of planning areas in Québec, and allow a new NPA assignment to be deferred until 2026. This relief method is consistent with the previous relief method used in NPA 250.

Some RPC participants (TELUS including TELUS Mobility, Québecor on behalf of Videotron, Rogers Communications Inc. (Rogers Telecom, Rogers Wireless, Fido) and Cogeco Cable,) prefer Plan 8 - Distributed Overlay of New NPA on NPA 450 as the overlay method since the use of a new NPA rather than an extension of an existing NPA may reduce some Carriers' costs and customer confusion would be low since this option would not change any existing NPA boundaries, and would delay subsequent reliefs for NPAs 450 and 514/438 to 2050 and 2043 respectively. This relief method is consistent with the previous relief methods used in NPAs 514 and 418.

With respect to the implementation timeframe, the RPC recognizes that:

- 1) Bell Canada indicates it will require a minimum of 15 months, and preferably a longer time period, from the date of a CRTC Decision to implement an overlay of NPA 450 using either one of the two overlay methods identified above (i.e., a new Distributed Overlay or Boundary Extension Overlay). This is the minimum timeframe needed by Bell Canada to allocate funding and staff resources, form a project team, and implement network and information systems changes for an overlay.
- 2) TELUS indicates that it will require an approximately similar timeframe as Bell Canada.
- 3) Rogers indicates that it will require less than 15 months for network implementation, and notes that consumer awareness activities may take a longer interval than its network implementation.

9. DIALLING IMPACTS FOR LOCAL CALLS

None of the Relief Options considered in this document would change the local dialling plans in area code 450 or in adjacent area codes.

Currently 10-digit dialling has been mandatory since October 2006 for local calls originating within area code 450, and for local calls originating in adjacent area codes and terminating in area code 450.

The mandatory 10-digit local dialling that exists between some Exchange Areas in NPA 450 and some Exchange Areas in adjacent NPAs 438/514, 343/613 and 819 is listed in the table below.

Toll call dialling arrangements for NPA 450 will not be impacted by NPA relief.

NPA 450 Exchange Areas	Neighbouring NPA	Exchange Area in Neighbouring NPA
Actonvale	819	South Durham, St-Nazaire-d'Acton
Baie-du-Fèvre	819	Drummondville, Nicolet, Trois Rivières
Beauharnois	438/514	Montréal
Bedford	438/514	Montréal
Beloil	438/514	Montréal
Boucherville	438/514	Montréal
Chambly	438/514	Montréal
Châteauguay	438/514	Lachine, Montréal, Pointe-Claire
Chomedey	438/514	Lachine, Montréal, Roxboro
Clarenceville	438/514	Montréal
Contrecoeur	438/514	Montréal
Eastman	819	Deauville, Magog, Sherbrooke
Franklin Centre	438/514	Montréal
Hemmingford	438/514	Montréal
Howick	438/514	Montréal
Hudson	438/514	Île-Perrot, Montréal, Pointe-Claire, Roxboro, Ste-Geneviève
L'Épiphanie-l'Assomption	438/514	Montréal
Lachute	819	Grenville
	438/514	Montréal
Lacolle	438/514	Montréal
Laprairie	438/514	Lachine, Montréal
Laval-Est	438/514	Lachine, Montréal
Laval-Ouest	438/514	Lachine, Montréal, Roxboro, Ste-Geneviève
Lavaltrie	438/514	Montréal
Lawrenceville	819	Magog, Sherbrooke
Le Gardeur	438/514	Montréal
Les Cèdres	438/514	Île-Perrot, Montréal
Longueuil	438/514	Montréal
Mansonville	819	Deauville, Magog, Sherbrooke
Marieville	438/514	Montréal
Mascouche	438/514	Montréal
Mirabel-Aéroport	438/514	Lachine, Montréal, Pointe-Claire, Roxboro, Ste-Geneviève

NPA 450 Exchange Areas	Neighbouring NPA	Exchange Area in Neighbouring NPA
Mirabel-St-Augustin	438/514	Montréal
Mirabel-St-Scholastique	438/514	Montréal
Napierville	438/514	Montréal
Oka	438/514	Montréal
Pont-Viau	438/514	Lachine, Montréal
Rawdon	438/514	Montréal
Rigaud	438/514	Île-Perrot, Montréal, Roxboro, Ste-Geneviève
Rivière-Beaudette	343/613	Lancaster
Shawbridge	438/514	Montréal
St-André-Est	438/514	Montréal
St-Barthélémy	819	Maskinongé
St-Bruno	438/514	Montréal
St-Calixte-de-Kilkenny	438/514	Montréal
St-Chrysostôme	438/514	Montréal
St-Constant	438/514	Lachine, Montréal, Roxboro
St-Denis	438/514	Montréal
St-Eustache	438/514	Montréal
St-Hippolyte	438/514	Montréal
St-Hyacinthe	819	St-Nazaire-d'Acton
St-Jean	438/514	Montréal
St-Jérôme	819	Grenville
St-Lambert	438/514	Montréal
St-Lin	438/514	Montréal
St-Marc	438/514	Montréal
St-Ours	438/514	Montréal
St-Pie-du-Guire	819	Drummondville, St-Guillaume
St-Rémi	438/514	Montréal
St-Sauveur	438/514	Montréal
St-Vincent-de-Paul	438/514	Lachine, Montréal
St-Zéphirin	819	Drummondville, Nicolet
Ste-Anne-des-Plaines	438/514	Montréal
Ste-Hélène-de-Bagot	819	St-Nazaire-d'Acton
Ste-Julie-de-Verchères	438/514	Montréal
Ste-Julienne	438/514	Montréal
Ste-Madeleine	438/514	Montréal
Ste-Martine	438/514	Montréal
Ste-Rose	438/514	Lachine, Montréal
Ste-Thérèse	438/514	Montréal
Terrebonne	438/514	Montréal
Valcourt	819	Bromptonville, Sherbrooke
Varennes	438/514	Montréal
Vaudreuil	438/514	Île-Perrot, Lachine, Montréal, Pointe-Claire, Roxboro, Ste-Geneviève
Venise-en-Québec	438/514	Montréal
Verchères	438/514	Montréal

10. CO CODES FOR INITIAL CODE ASSIGNMENTS AND CO CODES FOR INITIAL CODE ASSIGNMENTS FOR NEW ENTRANTS ONLY

Prior to NPA relief, a quantity of CO Codes in the exhausting NPA will typically be set aside per Telecom Decisions CRTC 2001-365 and 2008-89 (re: NPA 613 relief) as unavailable for assignment in order to ensure that some CO Codes in the exhausting NPA will be available for assignment to initial code applicants for a period of time following relief via an overlay.

In Telecom Public Notice 2008-17, the CRTC stated in item 7 that: "In developing its recommendations in the Planning Document, the 450 RPC is directed to set aside, at a minimum, 7 central office codes for initial code assignments and 10 central office codes for initial code assignments for new entrants only."

The CNA interprets this statement to mean that these codes should be set aside immediately and not be made available for assignment until the Commission approves a relief method.

If the CRTC-approved relief method is an overlay, then all 17 set aside CO Codes would only become available for initial code assignments for new entrants only and initial code assignments when the general pool of assignable CO Codes exhausts or during the two year time period after implementation of the overlay.

If the CRTC-approved relief method is a split, the 17 set aside CO Codes would only become available for initial code assignments for new entrants only and initial code assignments when the general pool of assignable CO Codes exhausts. After implementation of the split, any remaining set aside CO Codes would be returned to the general pool of assignable CO Codes.

CRTC staff has advised the CNA that in a Jeopardy Condition, the 7 CO Codes set aside for initial code assignments would be made available for assignment prior to relief being implemented.

In conformance with the above directive and discussion, and since a Jeopardy Condition has been in effect since 10 November 2008, the RPC recommends that the CNA maintain the quantity of CO Codes set aside for initial code assignments as follows:

- 10 CO Codes set aside for initial code assignments to new entrants only
- no CO Codes set aside for initial code assignments to applicants in general
- the 10 CO Codes set aside for initial code assignments to new entrants only shall be available for assignment as initial codes for new entrants for activation on or after the relief date
- any of the CO Codes that were set aside for initial code assignments to new entrants only that remain unassigned two years after relief via an overlay shall be returned to the general assignment pool
- a new entrant is an entity who at the time of its first request for assignment of CO Codes in an NPA does not provide any telecommunications service in the NPA and does not hold any CO Codes in the NPA
- in the event that a split is approved, all CO Codes set aside for initial code assignments shall be returned to the general assignment pool on the Relief Date.

11. JEOPARDY CONTINGENCY PLAN (JCP)

The RPC has developed the following JCP for inclusion in the PD for NPA 450, based on recent JCPs submitted by other RPCs and changes currently being proposed for the Canadian NPA Relief Planning Guidelines.

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

During a Jeopardy Condition, CO Code Applicants shall submit all CO Code applications and related correspondence for the Jeopardy NPA to CRTC staff in addition to the CNA. The CNA shall only assign CO Codes from the exhausting NPA to a CO Code Applicant upon approval of CRTC staff.

The following measures shall be implemented by the CNA and all CO Code Holders in NPA 450 when this JCP is approved by the CRTC and while a Jeopardy Condition is in effect.

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

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

- e) a completed Telephone Number Utilization Report;
 - f) confirmation that the requested Growth CO Code was forecasted in the most recent NRUF, or an explanation as to why it was not is attached; and,
 - g) confirmation that the requested Growth CO Code will be placed In-Service within four months of the date of assignment.
- 4) Any Growth CO Codes assigned after the implementation of this JCP must be activated in the network and placed In-Service within four months of assignment. In the event that a CO Code Holder is unable to place the CO Code In-Service within four months of the date of assignment, the CO Code Holder must submit a written request for extension to the CNA. Such written requests must include documentation explaining the reason(s) for the missed date and proposing the new In-Service date. If the explanation includes reasons beyond the control of the CO Code Holder, the CNA may extend the In-Service date a maximum of one month. If the CO Code Holder does not place the CO Code In-Service within the one-month extension, the CNA shall reclaim the CO Code immediately at the end of the one-month extension unless CRTC staff approves a further extension.
- 5) A Telecommunications Service Provider (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.
- 6) The CNA will compare the initial J-NRUF input to the recent NRUF inputs, in order to assess forecasting trends. The CNA shall monitor all inputs and shall test them for reasonableness in consultation with the 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.
- 7) The CNA will request subsequent J-NRUF input from all current and prospective CO Code Holders quarterly until 3 months before relief is provided. The initial J-NRUF input will be used as a baseline for comparison of subsequent J-NRUF input as well as to evaluate the effectiveness of the JCP. The CNA shall monitor all J-NRUF inputs and shall test them for reasonableness in consultation with the 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.
- 8) A CO Code Applicant must have submitted a completed J-NRUF to the CNA before the CNA may assign a CO Code to that CO Code Applicant.
- 9) When a CO Code Applicant requests more CO Codes than it identified in its most recent J-NRUF forecast, the CNA will discuss the matter with the CO Code Applicant, and if the CO Code Applicant wishes to proceed with the request, the CNA will forward the request to CRTC staff for consideration.
- 10) The CO Codes identified in the NPA CO Code Inventory Chart as "CO Codes unassignable prior to a Jeopardy Condition that become assignable 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 11 February 2009" have been assigned.

- 11) After each J-NRUF, the CNA shall provide the Commission and the RPC participants with a report providing an updated NPA CO Code Inventory Chart for the NPA in jeopardy as well as the aggregate results of the most recent J-NRUF.
- 12) In order that New Entrants might be assured of receiving CO Codes in the exhausting NPA during a Jeopardy Condition, the 10 CO Codes in NPA 450 that have been set aside for initial code assignments for New Entrants only for activation following relief via an overlay shall be made available for initial code assignments for New Entrants only for activation prior to relief if no CO Codes are available from the general assignment pool.
- 13) Exceptional issues or concerns may be referred by the CNA, or by individual entities (with a courtesy copy to the CNA), to the Commission for resolution.
- 14) In a situation where the Relief Date is on or after the PED, the quantity of CO Codes that may be assigned to a CO Code Applicant prior to the end of the Jeopardy Condition (e.g., 66 days prior to the Relief Date) shall be limited to the quantity forecasted by the CO Code Applicant in its most recent NRUF forecast submitted prior to the Jeopardy Condition being declared by the CNA (if no previous NRUF was submitted, then the previous forecast will be deemed to be zero codes). When making requests to obtain CO Codes prior to the end of the Jeopardy Condition, the CO Code Applicant may change the Exchange Area or the month when the CO Code assignment is required, provided a new J-NRUF and explanation accompanies the application. The control imposed by this option may be relaxed if subsequent J-NRUFs defer the PED to after the Relief Date. CO Codes that become available for assignment due to future reduced demand from other current and prospective CO Code Holders may be assigned at the discretion of CRTC staff.
- 15) If the CNA determines that the implementation of the JCP has not extended the Projected Exhaust Date of the NPA beyond the Relief Date, the CNA will consult with Commission staff and further CO Code conservation and assignment procedures may be ordered by the Commission (e.g., rationing, lottery, etc.).

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

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

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

Signature of Authorized Representative of Code Holder

Title

Date

Contact information:

Entity Name: _____
Address: _____

Contact Name: _____
City, Province, Postal Code: _____
Facsimile: _____

Switch Identification (Switching Entity/POI) CLLI: _____

Exchange Area: _____

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

- I certify that all held telephone numbers have been released
- I certify the total quantity of reserved numbers does not exceed 10% of the total quantity of telephone numbers as defined in Appendix G of the Canadian CO Code (NXX) Assignment Guidelines

I certify that each reseller/dealer has been advised of the Jeopardy Condition and the requirement that they would only be allocated additional numbers during the Jeopardy Condition on the provision to the CO Code Holder of written confirmation that their number inventory has been reduced to an amount less than two times the highest quantity of customer numbers assigned in any month during the previous 12 months. Additional numbering resources will only be provided by the CO Code Holder to the reseller/dealer to the extent that the reseller's/dealer's inventory can only increase up to a maximum of three months' inventory.

- the Part 1 form submitted with the application has the Jeopardy Condition box in section 6 checked (this certifies that the existing CO Codes are projected to exhaust within 4 months of the date of the application or within the period specified in an approved Jeopardy Contingency Plan, and that the months-to-exhaust is documented on an Appendix B submitted to the CNA)
- the Telephone Number Utilization Report on the page 2 of this form has been completed

- the requested Growth CO Code was forecasted in the most recent NRUF, or an explanation as to why it was not is attached.
- the requested Growth CO Code will be placed In-Service within four months of the date of assignment

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

(Note: if the spreadsheet below does not show on your display, please change the Word view to "Print Layout" or "Reading Layout")

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

$\% \text{ Utilization} = (\text{Reseller Inventory} + \text{Assigned} + \text{R\&H} + \text{Admin} + \text{Ported Out} + \text{Aging}) / (100)$

Remarks: _____

NPA 450 CO Code Inventory Chart

The following chart and the instructions it contains will apply in NPA 450 in a Jeopardy Condition.

The chart shown below lists quantities of CO Codes unassignable prior to a Jeopardy Condition, CO Codes that become assignable in a Jeopardy Condition, and CO Codes in NPA 450 assigned and In-Service as of 11 February 2009. For an Overlay option it identifies 53 CO Codes that are unassignable prior to a Jeopardy Condition, 25 of which become assignable in a Jeopardy Condition. For a Split option it identifies 46 CO Codes that are unassignable prior to a Jeopardy Condition, 18 of which become assignable in a Jeopardy Condition the CO Codes that become assignable in a Jeopardy Condition shall only be made available for assignment when all other available CO Codes have been assigned. The types of CO Codes that become assignable in a Jeopardy Condition should be made available in the same order as listed in the chart.

		Overlay	Split
A	Total CO Codes in an NPA (NXX format)	800	800
B	CO Codes unassignable prior to a Jeopardy Condition		
	N11 Service Codes (211, 311, 411, 511, 611, 711, 811, 911)	8	8
	Special Use Codes (555 & 950)	2	2
	Protected Code(s)	0	0
	Home NPA Code(s) (450)	1	1
	Current Neighbouring NPA Codes (514, 819, 343) (CO Codes 438 & 613 are assigned in NPA 450)	3	3
	Future Canadian Geographic NPA Codes (Note 1)	18	18
	Plant Test Codes (958 & 959)	2	2
	Special 7-digit Dialling Codes (610 & 810)	2	2
	CO Codes set aside for New Entrants only before the Relief Date	N/A	10
	CO Codes set aside for Initial Code assignments after relief via an overlay	7	N/A
	CO Codes set aside for Initial Code assignments for New Entrants only after relief via an overlay	10	N/A
	Subtotal	53	46
C	CO Codes assignable prior to a Jeopardy Condition (C=A-B)	747	754
D	CO Codes unassignable prior to a Jeopardy Condition that became assignable in a Jeopardy Condition:		
	Future Canadian Geographic NPA Codes (Note 2)	17	17
	Current Neighbouring NPA Codes (assign 343 in the North Eastern portion of NPA 450 as far as possible from the Rivière-Beaudette EAS)	1	1
	CO Codes set aside for Initial Code assignments after relief via an overlay	7	N/A
	Subtotal	25	18
E	Assignable CO Codes in a Jeopardy Condition (E=C+D)	772	754
F	Assigned CO Codes as of 11 February 2009	646	646
G	Net CO Codes available for assignment as of 11 February 2009 without a Jeopardy Condition (G=C-F)	101	108
H	Net CO Codes available for assignment as of 11 February 2009 in a Jeopardy Condition (H=E-F)	126	126

Notes:

1. 16 out of a total of 34 Future Canadian Geographic NPA Codes are already assigned in NPA 450.
2. The following 18 Future Canadian Geographic NPA Codes are currently unavailable for assignment as CO Codes in NPA 450: 249, 257, 273, 354, 365, 367, 382, 387, 428, 487, 579, 639, 683, 851, 871, 873, 879, and 972. The following 17 Future Canadian Geographic NPA Codes should be made available for assignment as CO Codes in this NPA 450 in and after a Jeopardy Condition: 249, 257, 273, 354, 365, 367, 382, 387, 428, 487, 639, 683, 851, 871, 873, 879, and 972. (See Note 3 for disposition of NPA 579.)
3. The following 1 Future Canadian Geographic NPA should NOT be assigned as a CO Code in NPA 450 and the new NPA: 579. NPA 579 is the only NPA that is not assigned as a CO Code in any of the neighbouring NPAs and is therefore the best choice for an immediate Distributed Overlay or a future distributed overlay following a Boundary Extension Overlay.

12. SELECTION OF RELIEF NPA

In the event that the recommended relief option requires a new NPA Code, the criteria for selection of an appropriate area code for relief is addressed in section 4.6 of the Canadian NPA Relief Planning Guidelines. The criteria that should be taken into account when Future Canadian Geographic NPAs are being considered as candidates for relief of a specific current Canadian Geographic NPA include the following:

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

On the CNA web site there is an NPA Selection Tool that can assist in determining which of the NPA Codes that are currently available for assignment in Canada are most suitable for relief of an exhausting NPA. This NPA Selection Tool is located at:

http://www.cnac.ca/npa_codes/relief/overview.htm.

CO Code 579 is the only CO Code corresponding to a Future Canadian Geographic NPA Code that is not assigned in NPA 450 and any of its neighbouring NPAs 438/514, 613/343 and 819. It is therefore recommended that NPA Code 579 be assigned as the area code for the forthcoming relief of NPA 450 if the relief is a Split or Distributed Overlay, or be reserved for the subsequent relief of NPA 450/438/514 if the forthcoming relief of NPA 450 is a Boundary Extension Overlay using NPA 438.

See Annex B, Table 3 for details of the status in NPA 450 and adjacent NPAs of CO Codes that correspond to Future Canadian Geographic NPA Codes (extracted from NPA Selection Tool).

13. RECOMMENDATIONS

- 1) To ensure that the supply of CO Codes in NPA 450 is maximized and to extend the life of NPA 450 and the relief NPA as much as reasonably possible, the RPC recommends that 17 CO Codes corresponding to future Canadian Geographic NPAs that are currently designated as unavailable for assignment in NPA 450 (i.e., 249, 257, 273, 354, 365, 367, 382, 387, 428, 487, 639, 683, 851, 871, 873, 879, & 942) be made available for assignment at the time of CRTC approval of a split, Distributed Overlay or Boundary Extension Overlay, and in any new NPA when CO Codes become available for assignment in that NPA. Retaining these 17 CO Codes as unavailable for assignment would serve no useful purpose and would unnecessarily reduce the life of area code 450.
- 2) The revised PED be February 2011 based upon the deliberations of the RPC in section 5 of this report regarding the revised quantity of CO Codes available for assignment.
- 3) The Relief Date should be 23 October 2010 in order to provide Carriers and customers with advanced notification and sufficient lead-time to implement relief;
- 4) The relief method be an overlay – however, no consensus concerning the type of overlay was reached.

The following companies preferred the Distributed Overlay using NPA Code 579:

- TELUS including TELUS Mobility;
- Québecor on behalf of Videotron;
- Rogers Communications Inc. (Rogers Telecom, Rogers Wireless, Fido); and
- Cogeco Cable
- ACTQ
- Maskatel

The following companies preferred the Boundary Extension Overlay using existing NPA Code 438:

- Bell Canada including Bell Mobility

- 5) The RPC recommends that the Commission not suspend their deliberations concerning the Relief Implementation Method and Relief Date pending submission of the Relief Implementation Plan (RIP). The RIP including schedule, Consumer Awareness Plan and Network Implementation Plan, will be submitted at a later date for approval for implementation of relief for NPA 450.
- 6) Per the discussion in section 10 of this Planning Document, the RPC recommends that, since a Jeopardy Condition has been in effect since 10 November 2008, the CNA maintain the quantity of CO Codes set aside for initial code assignments as follows:
 - 10 CO Codes set aside for initial code assignments to new entrants only;
 - no CO Codes set aside for initial code assignments to applicants in general;

- the 10 CO Codes set aside for initial code assignments to new entrants only shall be available for assignment as initial codes for new entrants for activation on or after the relief date;
 - any of the CO Codes that were set aside for initial code assignments to new entrants only that remain unassigned two years after relief via an overlay shall be returned to the general assignment pool;
 - a new entrant is an entity who at the time of its first request for assignment of CO Codes in an NPA does not provide any telecommunications service in the NPA and does not hold any CO Codes in the NPA;
 - in the event that a split is approved, all CO Codes set aside for initial code assignments shall be returned to the general assignment pool on the Relief Date.
- 7) Per the discussion in section 12 of this Planning Document, the RPC recommends that NPA Code 579 be assigned as the area code for the forthcoming relief of NPA 450 if the relief is a Split or Distributed Overlay, or be reserved for the subsequent relief of NPA 450/438/514 if the forthcoming relief of NPA 450 is a Boundary Extension Overlay using NPA 438.

**NPA 450
PLANNING DOCUMENT
ANNEXES**