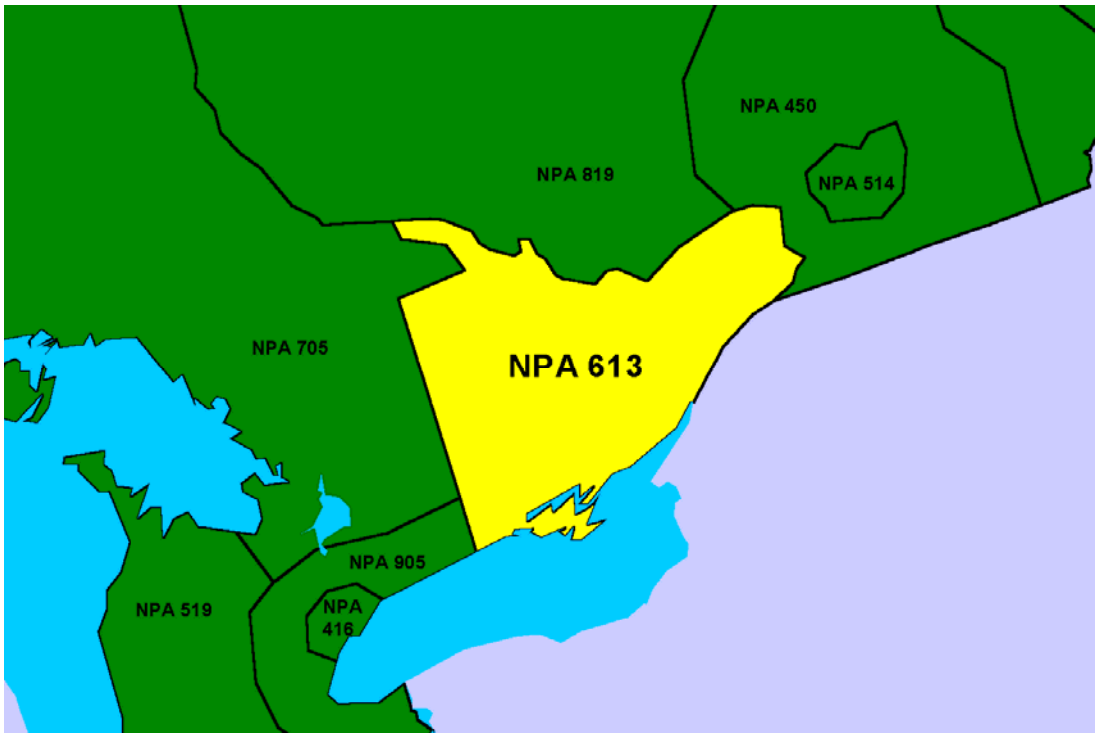
Initial Planning Document NPA 613 Numbering Relief

CNA

Science Applications International
Corporation (SAIC Canada)

Version 1 IPD Based on August 15, 2000 Relief Planning COCUS Results



November 1, 2000

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

Initial Planning Document NPA 613 Numbering Relief

1. EXECUTIVE SUMMARY

Ottawa, located in NPA 613, and Hull, located in NPA 819, have the largest numbering demand in NPAs 613 and 819. Free calling between Ottawa and Hull is made facilitated by using local 7-digit dialing between the two NPAs. Consequently, a large number of Central Office (CO) Codes are protected to maintain the integrity of 7-digit dialing since the same CO Code cannot be assigned in each NPA in Ottawa-Hull. This circumstance is prematurely causing exhaust of both NPAs. This Initial Planning Document (IPD) identifies possible solutions for providing relief for the NPA 613 geographic area.

Based on the August 15, 2000 NPA 613 Relief Planning Central Office Code Utilization Survey (R-COCUS), the existing 800 Central Office (CO) Codes, of which 758 are assignable, are forecast to exhaust in January 2006 if the protection of CO Codes to maintain 7-digit dialing between the Ottawa-Hull free calling areas of NPAs 613 and 819 is retained. The exhaust of NPA 613 will be deferred to 2Q 2008 if CO Code protection is removed.

Relief Planning of both NPAs is interdependent; therefore, the date of relief for NPA 613 must be determined based on the earliest exhaust date of either of the NPAs. The NPA 819 Relief Planning COCUS indicates that NPA 819 will exhaust in 1Q 2005 if CO Code protection is retained and will exhaust in 2Q 2024 if CO Code protection is removed. Consequently, NPA 613 Relief Planning must take the earliest exhaust date of NPA 819 (i.e., 1Q 2005) into consideration.

The following alternatives were evaluated using the assumptions shown below:

1. 7-digit dialing between the Ottawa-Hull exchanges of Naps 613 and 819 will be replaced by 10-digit dialing beginning February 2004;
2. CO Code protection in NPAs 613 and 819 will be eliminated and mandatory 10-digit dialing will be introduced by **October 2004**; and,
3. for all three Concentrated Overlay Options, an implementation date for the new NPA will be on or before 1Q 2005, which will extend the life expectancy of NPA 613 up to the year 2012. Advancing the introduction of a concentrated overlay to before 1Q 2005 can further extend the life expectancy of NPA 613.

A. Split the NPA into two geographic areas (three options):

i NPA 613 Ottawa Exchange[1] Split (A-i): The area served by the Ottawa Exchange Central Offices would retain NPA 613 and the area served by the remainder of the existing NPA 613 Exchanges would be grouped in the new NPA.

ii NPA 613 Regional Municipality of Ottawa-Carleton (RMOC) Exchange Split (A-ii): The area served by the 14 Exchanges in the RMOC would retain NPA 613 and the area served by the remaining existing Exchanges in NPA 613 would be grouped in the new NPA.

iii NPA 613 Ottawa Extended Area Service (EAS) Split (A-iii): The area served by the Exchanges which have EAS (i.e., Free Calling) with the Ottawa Exchange would retain NPA 613 and the area served by the remainder of the existing NPA 613 Exchanges would be grouped in the new NPA.

1. This exchange appears in the LERG as OTTAWAHULL. To avoid confusion the CNA will refer to this exchange as the Ottawa Exchange in NPA 613.

B. Introduce a new NPA using the Concentrated Overlay method (two options):

i NPA 613 Ottawa Exchange Concentrated Overlay (B-i): Effective 1Q 2005, the future CO Code growth of the area served by the existing NPA 613 Ottawa Exchange would be provisioned by the new NPA and the area served by the remainder of the Exchanges would continue to utilize the remaining CO Codes available for assignment in NPA 613.

ii NPA 613 RMOC Exchange Concentrated Overlay (B-ii): Effective 1Q 2005, the future CO Code growth of the area served by the 14 Exchanges of the RMOC in the existing NPA 613 would be provisioned by the new NPA and the area served by the remainder of the NPA 613 Exchanges would continue to utilize the remaining CO Codes available for assignment in NPA 613.

C. Introduce new NPA using the distributed Overlay method:

The future CO Code growth in all Exchanges of the area served by the existing NPA 613 would be provisioned by the new NPA.

D. Introduce new NPA using the Concentrated Overlay method in the Ottawa and Hull Exchanges of NPAs 613 and 819

Effective Q1 2005, the future CO Code growth of the area served by the existing Ottawa and Hull[2] Exchanges in NPAs 613 and 819 would be served by the new NPA using the Concentrated Overlay Method. The area served by the remainder of the Exchanges in NPAs 613 and 819 would continue to utilize the remaining CO Codes available for assignment in NPAs 613 and 819.

This Relief Method is unprecedented in Canada, since the concentrated overlay area encompasses two separate NPAs, however, given the uniqueness of the Ottawa-Hull area telephone-calling pattern, the CNA did consider this a viable option.

The following is a comparison of the alternatives evaluated:

Description	NPA 613 Ottawa Exchange Split (A-i)	NPA 613 RMOC Exchange Split (A-ii)	NPA 613 Ottawa EAS Exchange Split (A-iii)	NPA 613 Ottawa Conc. Exchange Overlay (B-i)	NPA 613 RMOC Exchange Conc. Overlay (B-ii)	NPA 613 Distributed Overlay (C)	NPA 613 & 819 Ottawa-Hull Exchange Conc. Overlay (D)
Exhaust – NPA 613	2021	2019	2016	2013	2013	2008	2013
Exhaust – NPA 819	2024	2024	2024	2024	2024	2024	2038
Exhaust –New NPA	2030	2032	2043	2031	2031	2025	2028
Approximate Number Changes Required	1.5 M	1.3 M	1.1 M	Nil	Nil	Nil	Nil
Dialing Impact	10D	10D	10D	10D	10D	10D	10D
Permissive Dialing	Required	Required	Required	Required	Required	Required	Required

This IPD is being issued in accordance with Canadian Steering Committee on Numbering approved NPA Relief Planning and Notification Guidelines (INC 97-0404-016, dated January 27, 1999) to facilitate the selection of a consensus NPA 613 code relief method and a relief date.

2. This exchange appears in the LERG as OTTAWAHULL. To avoid confusion the CNA will refer to this exchange as the Hull Exchange in NPA 819.

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

2. INTRODUCTION

NPA 613 consists of 131 Exchanges serving mainly Ottawa, Kingston, Belleville, Brockville, Cornwall and surrounding communities of the eastern part of Ontario in Canada. The Exchanges serving the Ottawa-Carleton area in NPA 613 have free calling with the Hull area free calling Exchanges in NPA 819. In order to retain 7-digit dialing for local calling between the exchanges of these two NPAs, a large number of CO Codes continue to remain protected and this situation is causing the premature exhaust of both NPAs. This IPD identifies possible solutions for providing relief to the NPA 613 geographic area.

Based on the August 15, 2000 NPA 613 Relief Planning Central Office Code Utilization Survey (R-COCUS), the existing 800 Central Office (CO) Codes, of which 758 are assignable, are forecast to exhaust in January 2006 if the protection of CO Codes to maintain 7-digit dialing between the Ottawa-Hull free calling areas of NPAs 613 and 819 is retained. The exhaust of NPA 613 will be deferred to 2Q 2008 if CO Code protection is removed.

Relief Planning of both NPAs is interdependent; therefore, the date of relief for NPA 613 must be determined based on the earliest exhaust date of either of the NPAs. The NPA 819 Relief Planning COCUS indicates that NPA 819 will exhaust in 1Q 2005 if CO Code protection is retained and will exhaust in 2Q 2024 if CO Code protection is removed. Consequently, NPA 613 Relief Planning must take the earliest exhaust date of NPA 819 (i.e., 1Q 2005) into consideration.

With the rapid growth in services (e.g., wireless, internet, etc.), an increase in the number of service providers due to local competition, and an ever-increasing number of protected CO Codes, the number of CO Codes available for assignment in both NPAs is being depleted and will result in the premature exhaust of both NPAs.

It is very important to closely monitor the expansion plans of all existing and emerging service providers to ensure that mandatory 10-digit dialing is implemented, CO Code protection is removed and relief is provided far enough in advance that no shortage of assignable CO Codes occurs and that a jeopardy condition does not arise.

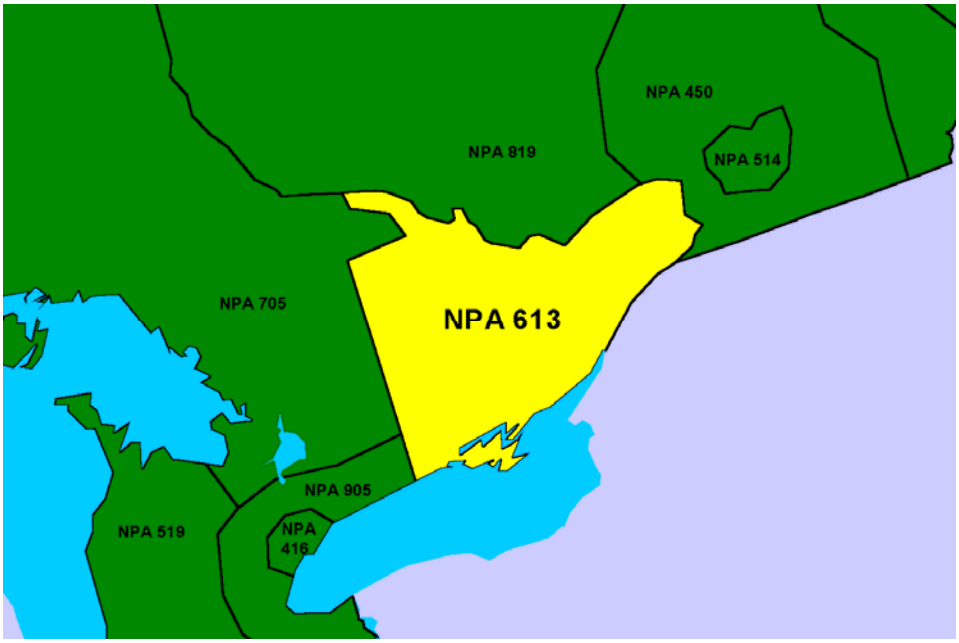
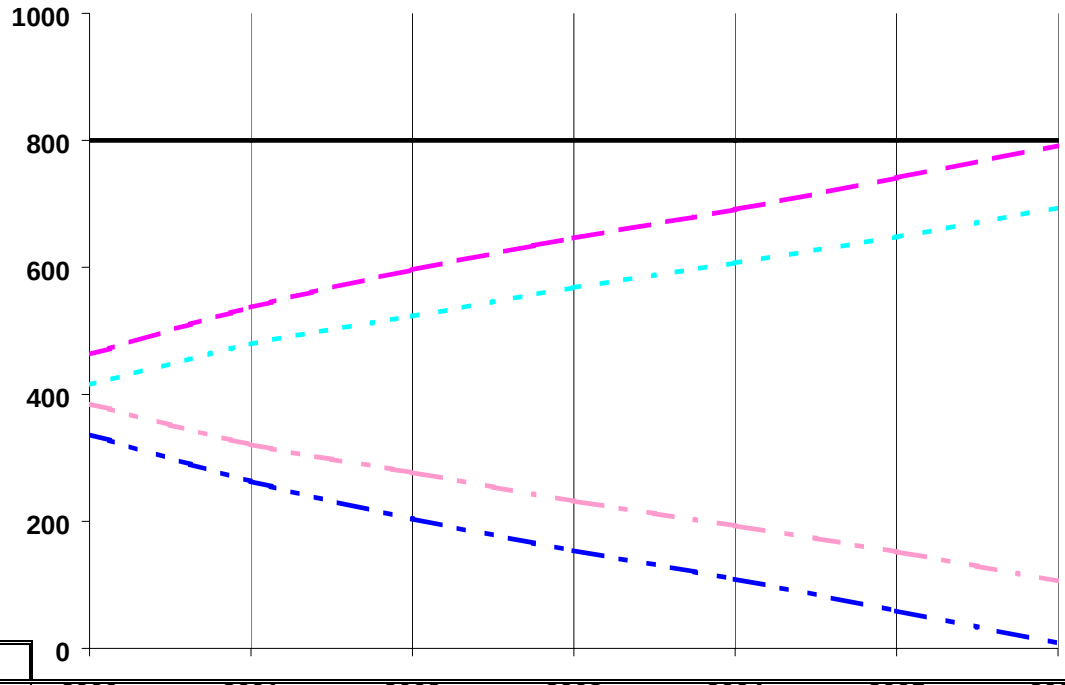


Figure 1 Existing NPA 613

3. CENTRAL OFFICE CODE EXHAUST

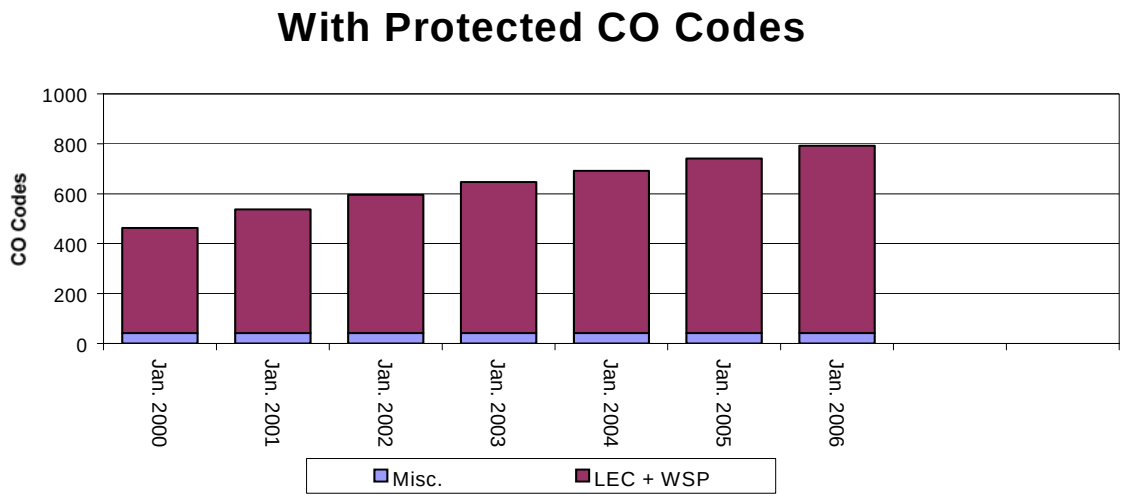
All CO Codes in NPA 613 are expected to exhaust in January 2006. This determination is based on the results of the August 15, 2000 R-COCUS.

The year-over-year change in the forecasts due to new business strategies, Telecom Decision CRTC 94-19, which allows for local competition, and the granting of Personal Communications Services (PCS) licenses for the introduction of PCS service in 1996 have all contributed to the earlier than expected requirement for relief of NPA 613. The following graph is based on results from the August 15, 2000 R-COCUS and represents the rate of CO Code utilization in NPA 613.



Year (January)	2000	2001	2002	2003	2004	2005	2006
NPA Capacity	800	800	800	800	800	800	800
COCUS with Protection	463	537	596	646	691	741	792
COCUS no Protection	415	479	523	568	607	648	694
NXX Availability no Protection	385	321	277	232	193	152	106
NXX Availability with Protection	337	263	204	154	109	59	8

Figure 2 NPA 613 CO Code Exhaust Protection August 2000 R - COCUS



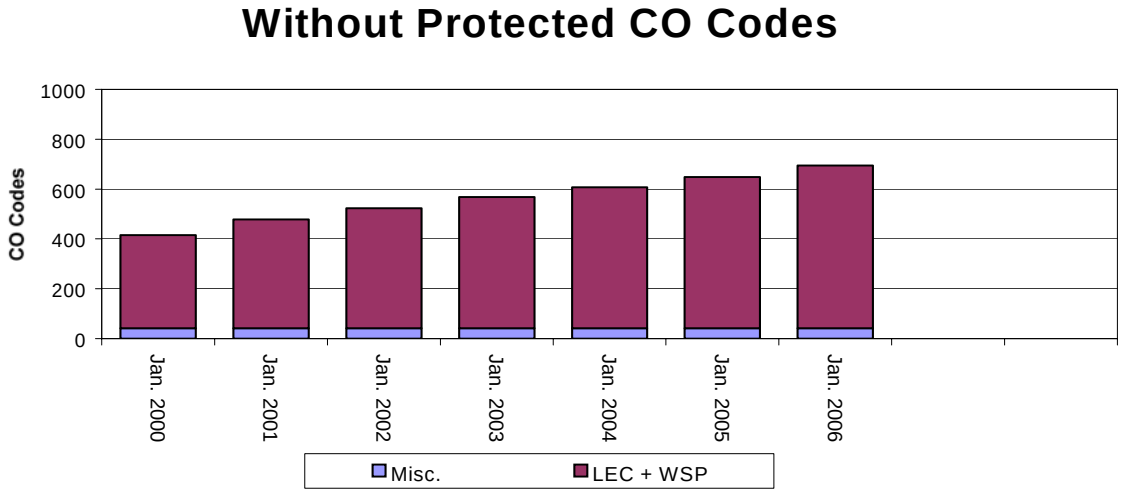


Figure 3 NPA 613 August 15, 2000 Relief COCUS

Figures 2 and 3 highlight the need to have mandatory 10-digit dialing in place and CO Code protection eliminated by October of the year 2004 in NPAs 613 and 819.

NPA 613 relief must be in place well in advance of reaching 758 assigned CO Codes, to allow for forecast volatility.

4. CODE RELIEF METHODS

Once the necessity for NPA code relief was established, all code relief methods were considered, but only the following alternatives were examined in detail.

A. Geographic Split (three options);

B. Concentrated Overlay within one NPA (two options);

C. Distributed Overlay; and,

D. Concentrated Overlay over parts of the two NPAs.

4.1. Geographic Split

4.1.1. Definition

By this method, the exhausting NPA is split into two or more geographic areas, leaving the existing NPA code to serve an area with the highest consumer density (to minimize number changes), and assigning a new NPA code(s) to the remaining area. This method traditionally divides areas by jurisdictional, natural or physical boundaries between the old and the new NPA.

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

- Old method of NPA relief is familiar to the public and has well established implementation procedures.
- Ten-digit dialing required for local calls between different NPAs.
- Number changes required in new NPA boundaries.
- Reprogramming or replacement of equipment (switches, PBXs, cellular phones, etc.).
- Existing customers inconvenienced.
- More economic burden (businesses, public costs, stationery, etc.).
- Not as expensive to display in telephone directory.
- Requires a permissive dialing 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 dialing of local calls between the old and new NPAs coincident with NXX codes being implemented in the new NPA (universal 10-digit dialing for all local calls eliminates customer confusion).

The Distributed Overlay strategy is considered in situations when growth in telephone numbers is expected to be more or less evenly distributed throughout the existing NPA.

A Concentrated Overlay strategy is considered when growth in telephone numbers continuously occurs or is expected to occur in a specific area of the existing NPA(s). Given the unique nature of telephone calling patterns and the demand for CO Codes in the Ottawa-Hull area, the CNA has also considered introduction of the Concentrated Overlay strategy in part of the geographic area that is served by two contiguous NPAs.

4.2.2. General Attributes

- Requires universal 10-digit dialing within the NPA.
- No number changes are required for existing customers.
- Least disruptive to end-users.
- Less economic burden for existing business.
- Same location, two NPAs in residence/business.
- Increased directory costs.

5. IMPACT OF RELIEF METHODS

5.1. Geographic Split

Three geographic split options were assessed; namely, NPA 613 Ottawa Exchange Split, NPA 613 RMOC Exchange Split and NPA 613 Ottawa EAS Split. There are no municipal, physical or natural boundaries that can be used as reference points to split the NPA.

5.1.1. NPA 613 Ottawa Exchange Split (A-i):

The area served by the Ottawa Exchange Central Offices would retain NPA 613 and the area served by the remainder of the existing NPA 613 Exchanges would be grouped in the new NPA. This option would result in approximately 1.5 million number changes. Relief to NPA 613 and the new NPA is expected to last until year 2021 and 2030 respectively.

5.1.2. NPA 613 RMOC Exchange Split (A-ii):

The area served by the 14 Exchanges in the RMOC would retain NPA 613 and the area served by the remaining existing Exchanges in NPA 613 area would be grouped in the new NPA. This option would result in approximately 1.3 million number changes. Relief to NPA 613 and the new NPA is expected to last until year 2019 and 2032 respectively.

5.1.3. NPA 613 Ottawa EAS Split (A-iii):

The area served by the Exchanges which have EAS (i.e., Free Calling) with the Ottawa Exchange would retain NPA 613 and the area served by the remainder of the existing NPA 613 Exchanges would be grouped in the new NPA. This option would result in approximately 1.1 million number changes. Relief to NPA 613 and the new NPA is expected to last until year 2016 and 2043 respectively.

5.2. Concentrated Overlay

Two Concentrated Overlay options for relief planning in NPA 613 were assessed; namely, NPA 613 Ottawa Exchange Concentrated Overlay and NPA 613 RMOC Exchange Concentrated Overlay.

The main advantage of these options is that number changes are not required, however they introduce the new NPA in a specific area within the existing NPA boundaries, eliminate local 7-digit dialing and introduce local 10-digit dialing.

5.2.1. NPA 613 Ottawa Exchange Concentrated Overlay (B-i):

Effective 1Q 2005, the future CO Code growth of the area served by the existing NPA 613 Ottawa Exchange would be provisioned by the new NPA and the area served by the remainder of the Exchanges would continue to utilize the remaining CO Codes available for assignment in NPA 613. Relief to NPA 613 and the new NPA is expected to last until year 2013 and 2031 respectively.

5.2.2. NPA 613 RMOC Exchange Concentrated Overlay (B-ii)

Effective 1Q 2005, the future CO Code growth of the area served by the 14 Exchanges of the RMOC in the existing NPA 613 would be provisioned by the new NPA and the area served by the

remainder of the NPA 613 Exchanges would continue to utilize the remaining CO Codes available for assignment in NPA 613. Relief to NPA 613 and the new NPA is expected to last until year 2013 and 2031 respectively.

5.3. NPA 613 Distributed Overlay (C)

Introduce a new NPA using the Distributed Overlay method of relief planning where future CO Code demand in all exchanges of the existing NPA 613 serving area will be provisioned by CO Codes from the new NPA.

The main advantage of this option is that number changes are not required, however it introduces the new NPA in a specific area within the existing NPA boundaries, eliminates local 7-digit dialing and introduces local 10-digit dialing.

The future CO Code growth in all Exchanges of the area served by the existing NPA 613 would be provisioned by the new NPA. Relief to NPA 613 and the new NPA is expected to last until year 2012 and 2025 respectively.

5.4. NPA 613 & 189 Ottawa-Hull Exchange Concentrated Overlay (D)

Effective Q1 2005, the future CO Code growth of the area served by the existing Ottawa and Hull Exchanges in NPAs 613 and 819 would be served by the new NPA using the Concentrated Overlay Method. The area served by the remainder of the Exchanges in NPAs 613 and 819 would continue to utilize the remaining CO Codes available for assignment in NPAs 613 and 819. Relief to NPA 613, 819 and the new NPA is expected to last until year 2013, 2038 and 2028 respectively.

This Relief Method is unprecedented in Canada, since the concentrated overlay area encompasses two separate NPAs, however, given the uniqueness of the Ottawa-Hull area telephone-calling pattern, the CNA did consider this a viable option.

6. DIALING CHANGES FOR LOCAL CALLS

In addition to the dialing patterns that exist for local calls between NPA 613 and NPA 819, the following tables reflect the dialing arrangement for each alternative for Local calls only.

The Toll call dialing arrangement is not impacted due to the NPA relief.

Geographic Split	Today	October 2004	After Relief
Landline to Wireless within NPA	7-digits	10-digits	10-digits
Landline to Wireless between NPAs	10-digits	10-digits	10-digits
Landline to Landline within NPA	7-digits	10-digits	10-digits
Landline to Landline between NPAs	10-digits	10-digits	10-digits
Wireless to Wireless within NPA	7-digits	10-digits	10-digits
Wireless to Wireless between NPAs	10-digits	10-digits	10-digits

Overlay (Concentrated & Distributed)	Today	October 2004	After Relief
Landline to Wireless within NPA	7-digits	10-digits	10-digits
Landline to Wireless between NPAs	10-digits	10-digits	10-digits
Landline to Landline within NPA	7-digits	10-digits	10-digits
Landline to Landline between NPAs	10-digits	10-digits	10-digits
Wireless to Wireless within NPA	7-digits	10-digits	10-digits
Wireless to Wireless between NPAs	10-digits	10-digits	10-digits

7. PROPOSED SCHEDULE

No.	NPA 613 Relief Planning Proposed Time Line* Task or Event	Time (mths)	Cum. Time	Start date	End date (est.)	Depen-dency
1	CNA identifies NPA Exhaust		0		2-May-00	
2	CNA notifies CRTC, CSCN, & NANP-A of NPA exhaust	¼	0		9-May-00	**1**
3	CNA conducts NPA R-COCUS	3	3¼		**15-Aug-00**	**2**
4	CNA prepares and distributes IPD to Affected Parties.	2½	5¾		**31-Oct-00**	**3**
5	Affected parties review IPD and provide comments to the CNA	1¼	7		7-Dec-00	**4**
6	CNA modifies IPD per comments received and reissues	1	8		7-Jan-00	**5**
7	CNA arranges for NPA Relief Planning Meeting					
8	Affected Parties review revised IPD prior to meeting	1¼	9¼			**6**
9	CNA Chairs NPA Relief Planning meeting to finalize IPD and to develop a TIF Report recommending that a CISC Ad Hoc NPA Relief Planning Working Group (RPWG) be formed	0	9¼		**15-Feb-01**	**7**
10	CNA revises and forwards IPD and TIF Reports to the CISC/CRTC	½	9¾		2-Mar-01	**9**
11	CNA creates and issues media release	¼	10		9-Mar-01	
12	CISC review of IPD and forwarding to CRTC for Approval*	½	10½		23-Mar-01	**10**
13	CRTC issues Public Notice and solicits Interested Parties	2	12½		23-May-01	**12**
14	Interested Parties Comment & Reply	4½	17		10-Oct-01	**13**
15	CRTC issues Decision & directs Ad Hoc NPA RPWG to develop and execute NPA Relief Implementation Plan (RIP)	4½	21½		27-Feb-02	**14**
16	CNA obtains assignment of Relief NPA(s) from the NANP-A	½	22		14-Mar-02	**15**
17	CNA announces Meeting of RPWG to Develop Consensus RIP, Planning Letter and JCP	0	22			**15 + 16**
18	RPWG Develops Consensus RIP, Planning Letter & JCP (A Series of Meetings/Conference Calls Might Be Required)	4	26		15-Jul-02	**17**
19	CNA Forwards Consensus RIP and JCP to CISC	½	26½		30-Jul-02	**18**
20	CISC reviews and forwards RIP and JCP to the CRTC for approval	1	27½		30-Aug-02	**19**
21	CRTC Approves RIP and JCP (a public process may be initiated)	2	29½		30-Oct-02	**20**
22	CNA submits Planning Letter to the NANP-A	½	30		15-Nov-02	**16**
23	CNA Issues Media Release and informs NANP-A, Telcordia TRA, LNP Consortium, Affected Parties and Interested Parties	1	31		15-Dec-02	**21 + 22**
24	7- to 10- digit Dialing Transition Period	9	45	**Feb-2004**	**Oct-2004**	
25	Mandatory 10 digit Dialing & Code Protection Removed	0			**Oct-2004**	
26	Task Forces, Service Providers and Users Execute the RIP.					**21**
27	Relief Date	0				**21**
28	CNA Submits Completion Reports to CISC one month after Relief	1				

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

Notes:

NPA 613 Exhaust Date With Protected Codes **Jan-2006**
NPA 613 Exhaust Date Without Protected Codes **Apr-2008**
NPA 819 Exhaust Date With Protected Codes **Jan-2005**

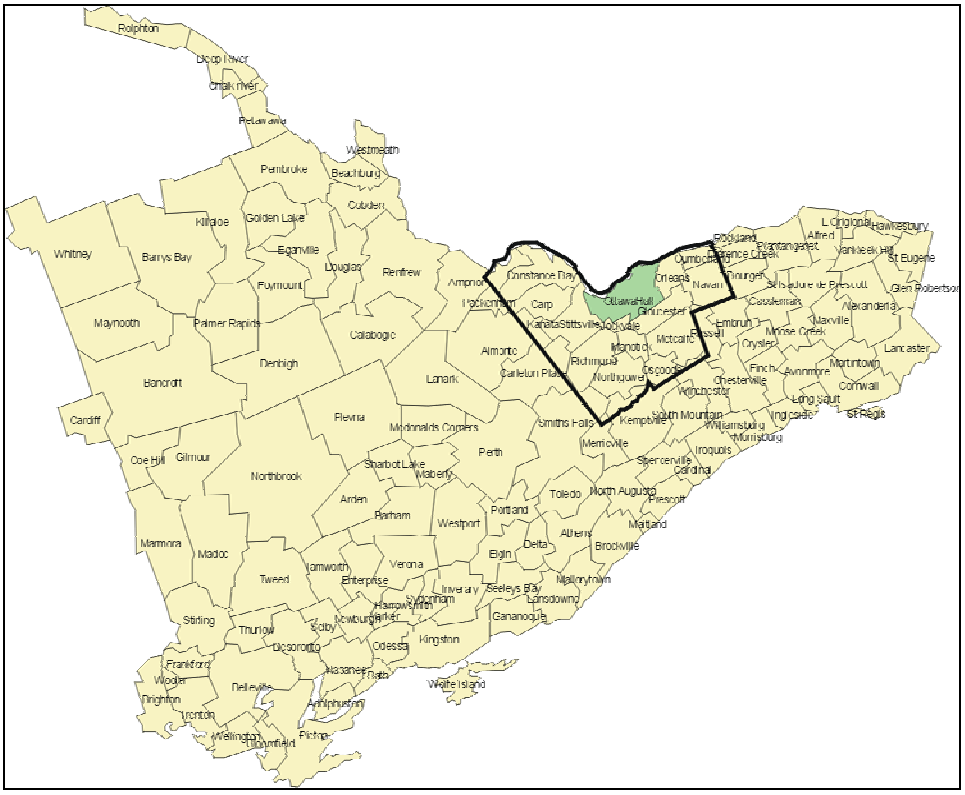


Figure 4 NPA 613 Ottawa–Hull Exchange Split

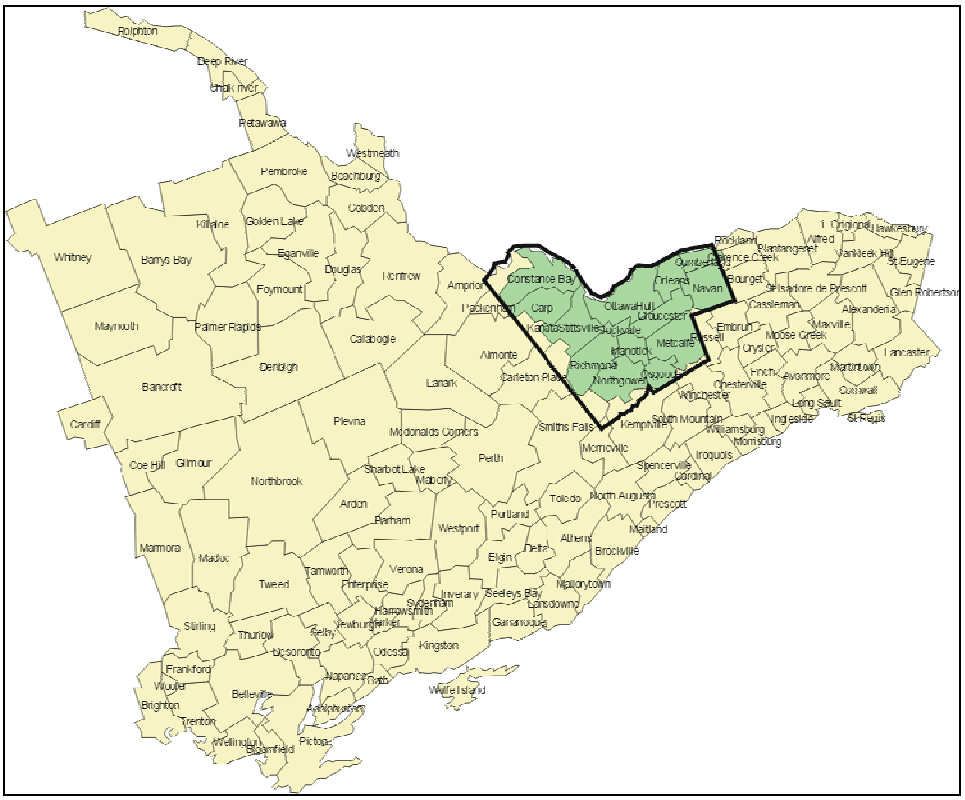


Figure 5 NPA 613 RMOC (Regional Municipality of Ottawa-Carleton) Exchange Split

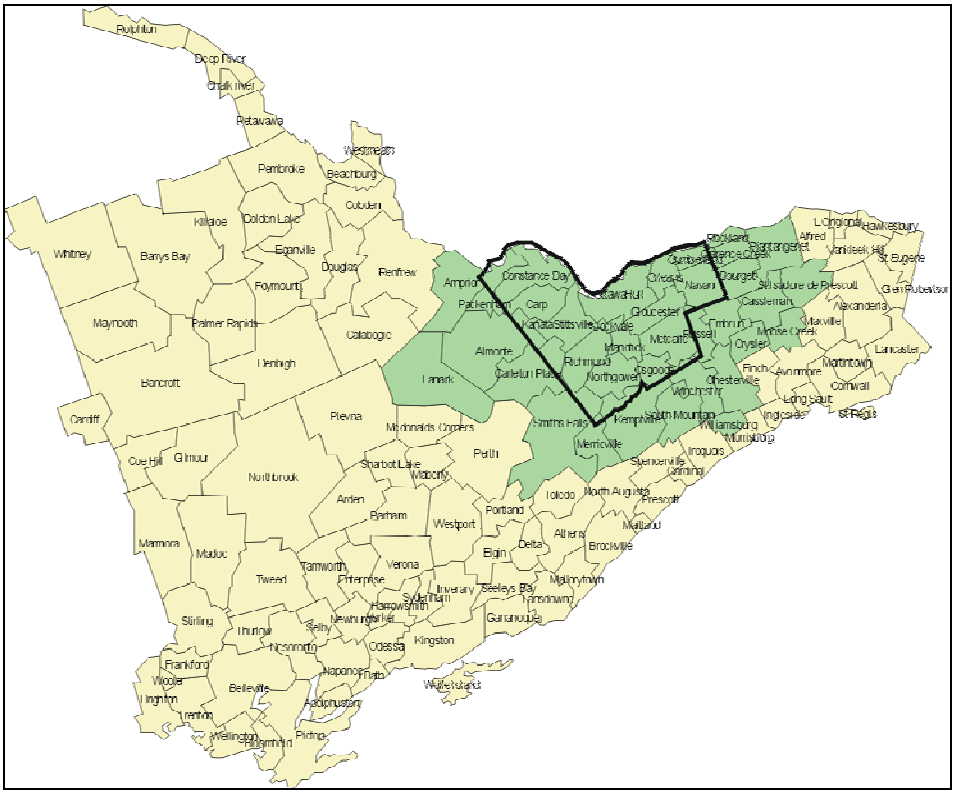


Figure 6 NPA 613 Ottawa-Hull EAS Exchange Split

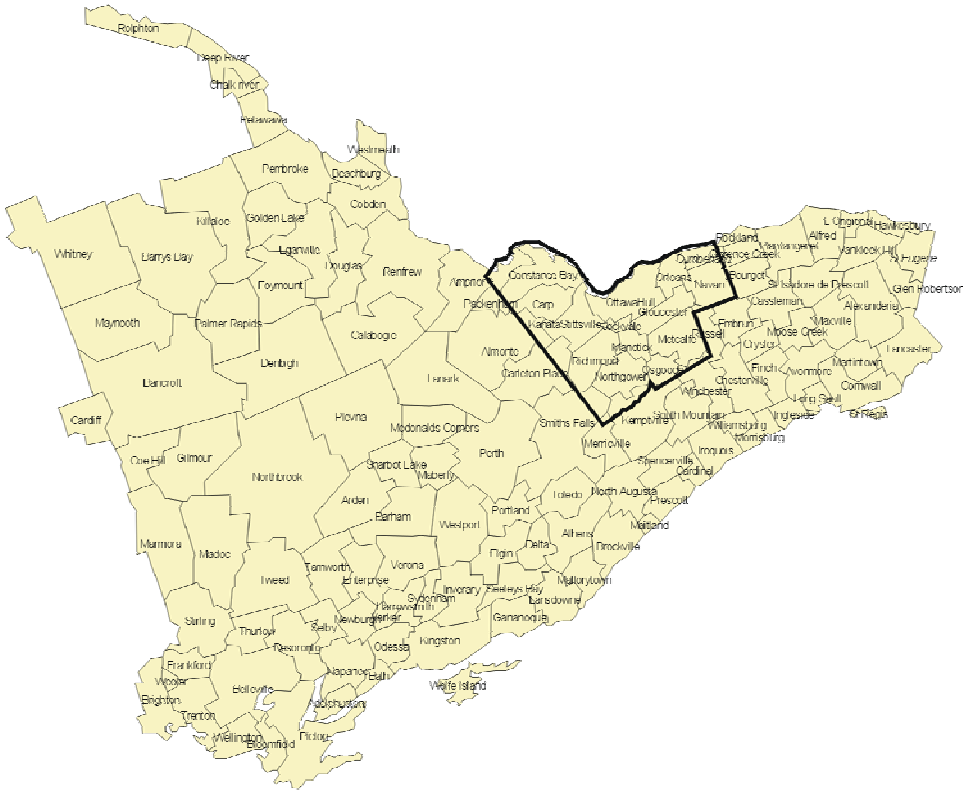


Figure 7 NPA 613 Ottawa-Hull Exchange Concentrated Overlay

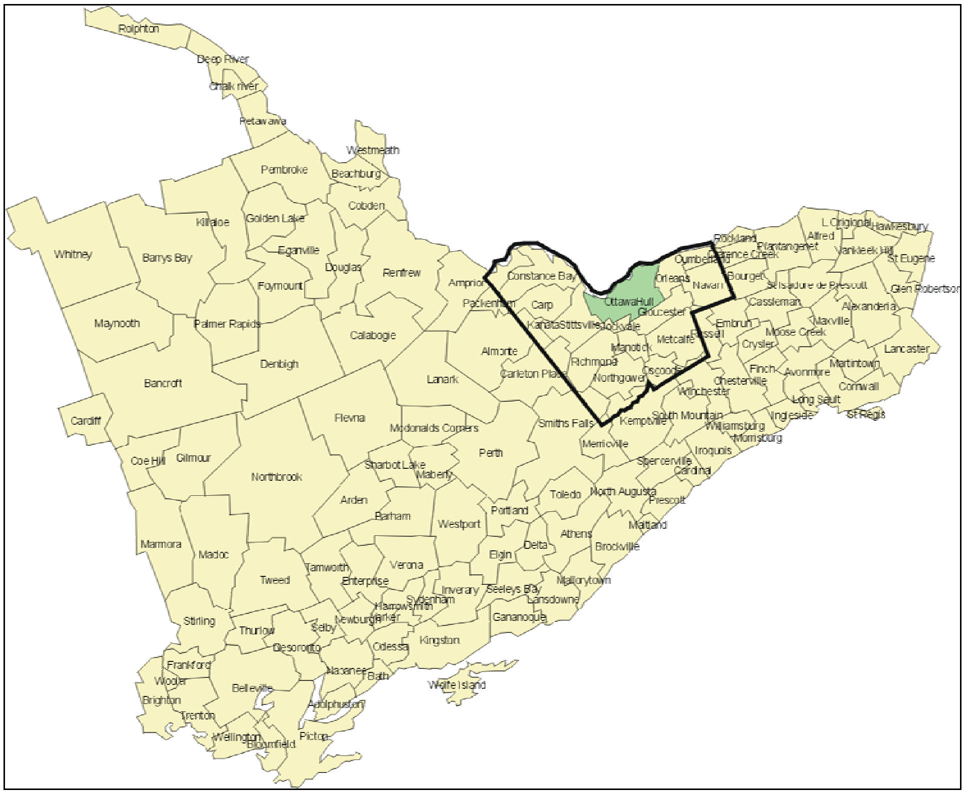


Figure 8 NPA 613 RMOC Exchange Concentrated Overlay

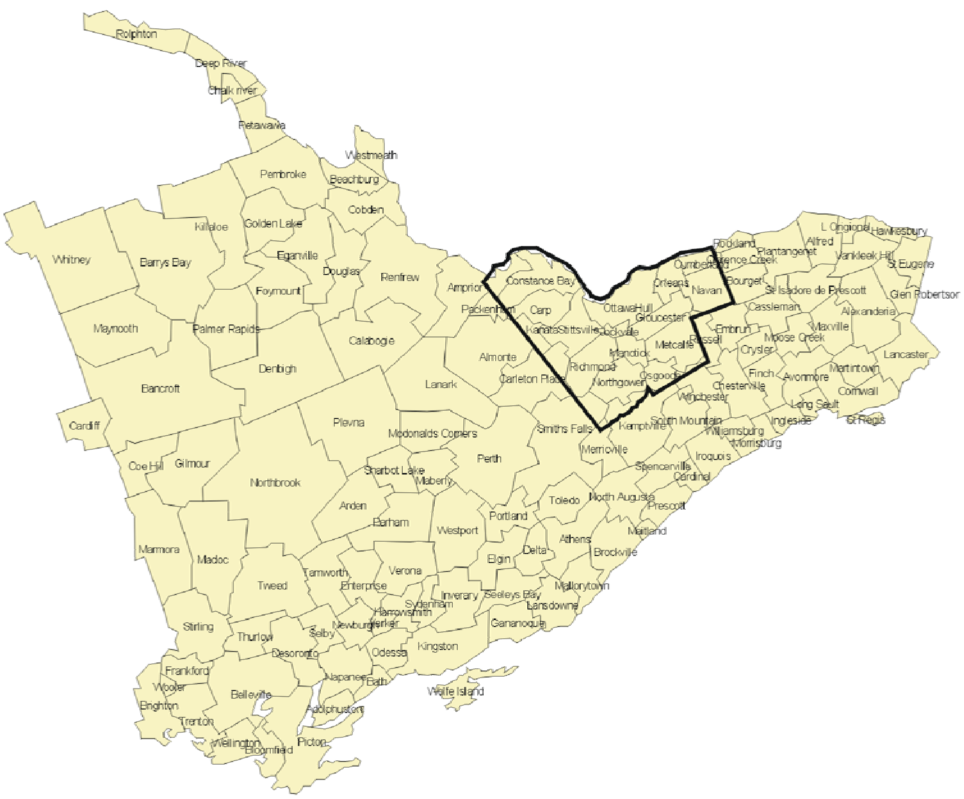


Figure 9 NPA 613 Distributed Overlay

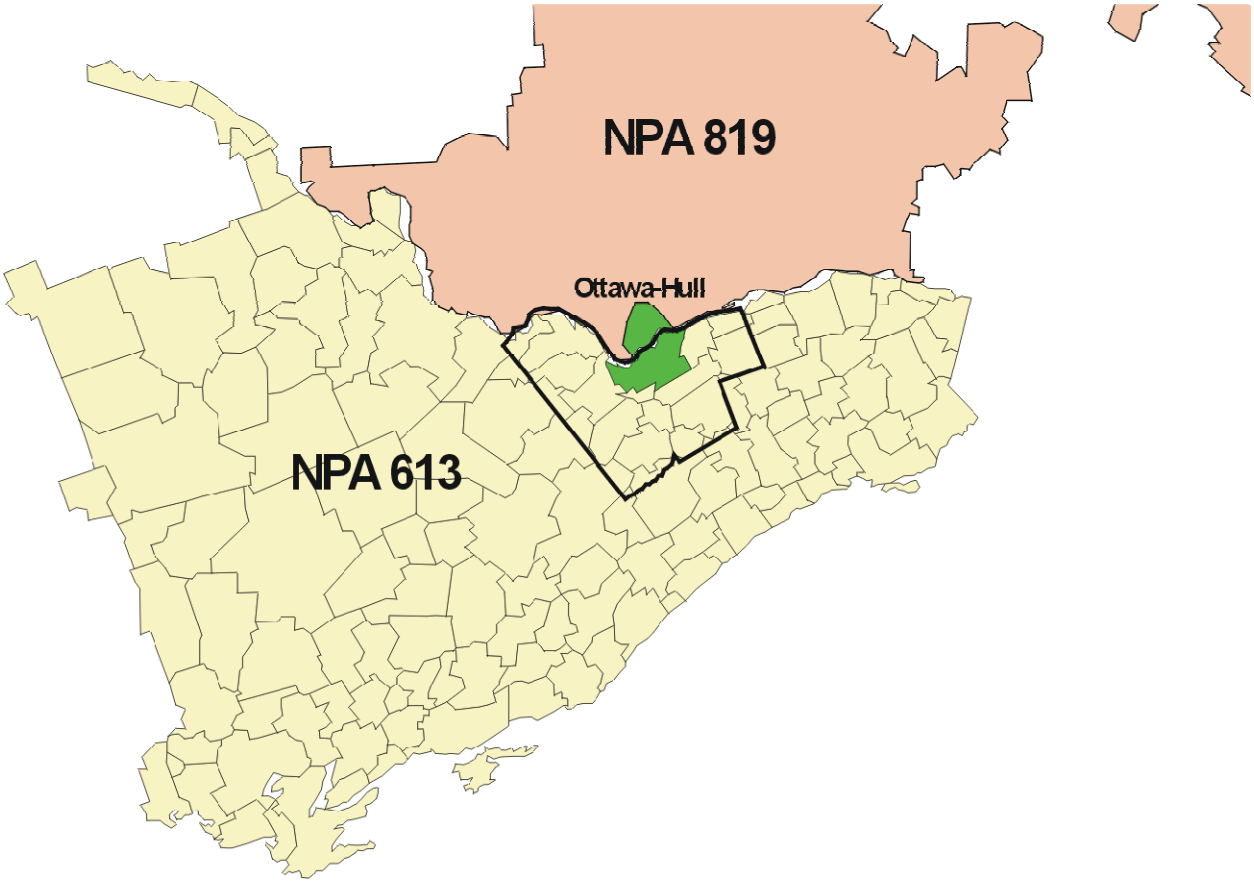
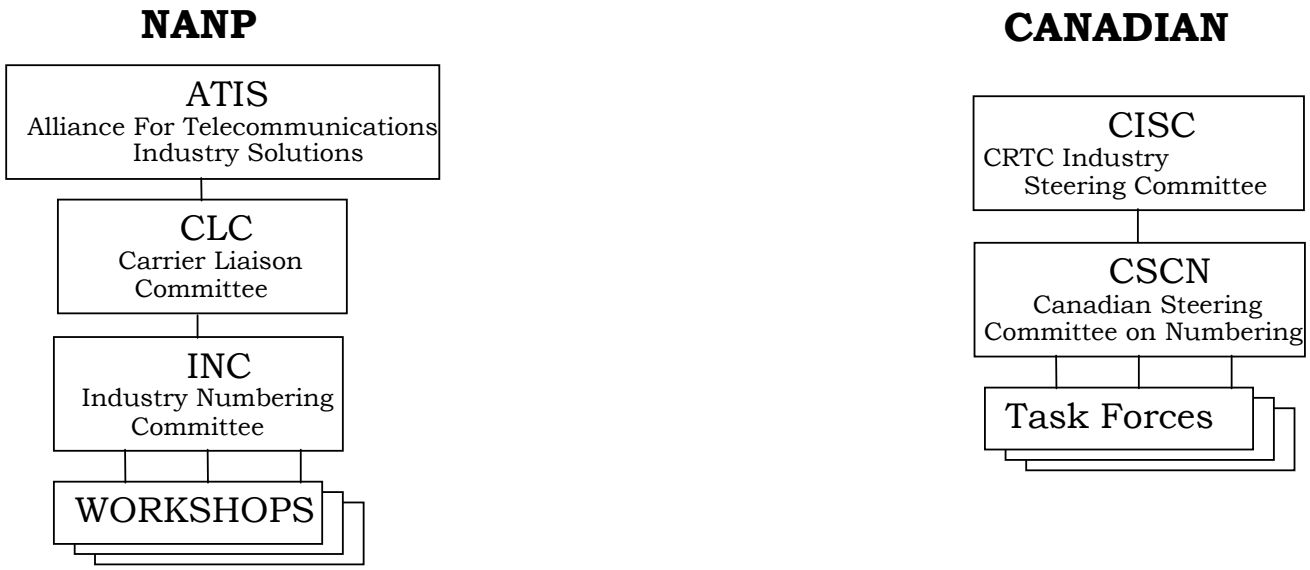


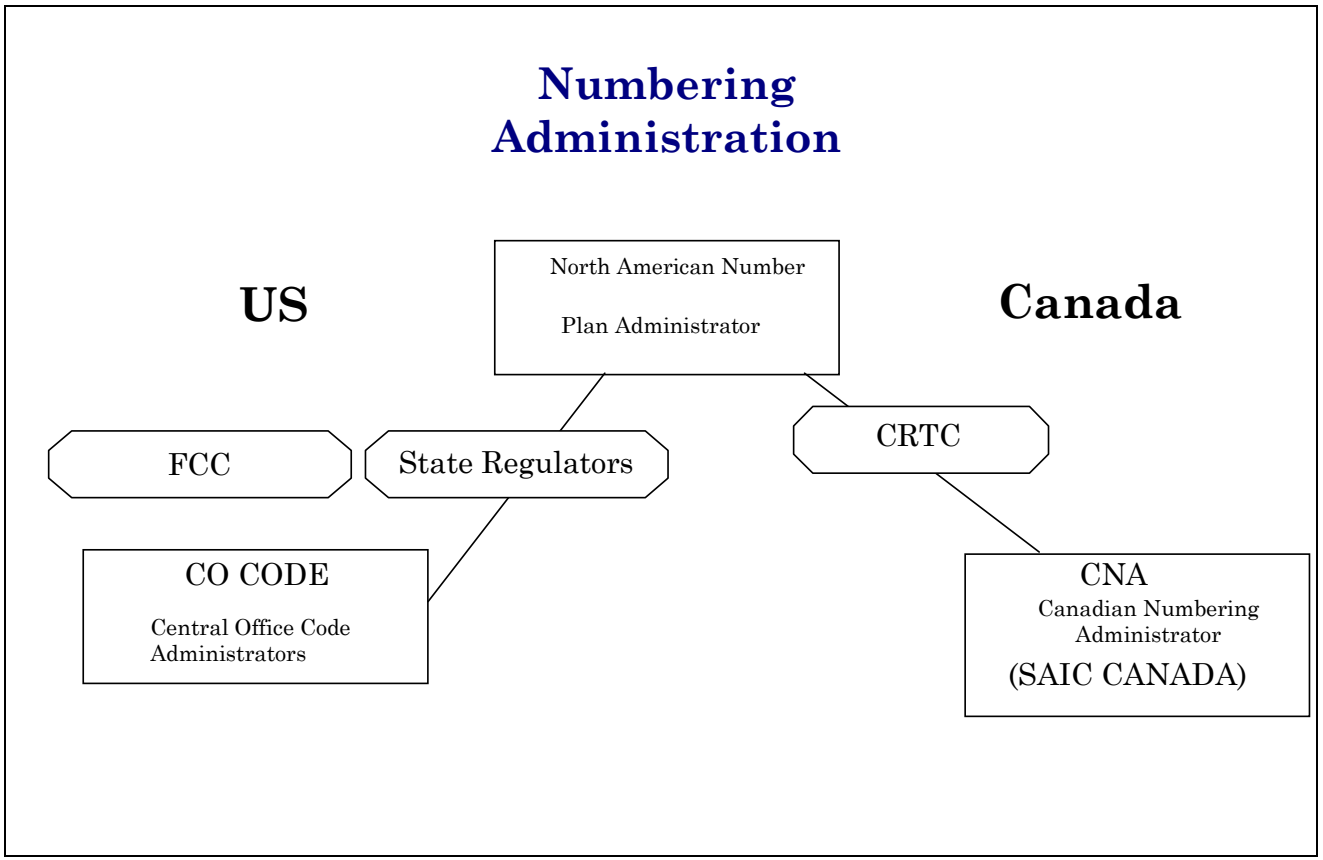
Figure 10 NPA 613/819 Ottawa-Hull Exchange Concentrated Overlay

[Appendix 1 Canadian Geographic NPAs]

Industry Fora



[Appendix 2 Industry Fora]



Appendix 3 Numbering Administration

The *NPA Code Relief Planning & Notification Guidelines* may be obtained from the CNA website at http://www.cnac.ca/numres/npa_relief/97040416.doc. **Double-click on the object below to open and view this document.**

Alliance for Telecommunications
Industry Solutions

Sponsor of

Industry Numbering
Committee

A forum of the Carrier Liaison Committee

1200 G Street NW
Suite 500
Washington DC 20005
www.atis.org

NPA CODE RELIEF PLANNING & NOTIFICATION GUIDELINES

These guidelines are reissued in connection with the resolution of INC Issue 105

Appendix 4 NPA Code Relief Planning & Notification Guidelines

Appendix 5 Distribution List

Regulatory Email
AT & T Canada
Canada
iworkstation@attcanada.com

Ian Angus
President
Angus TeleManagement Group
Telephone:
ianangus@angustel.ca

John Arakelian
Senior Project Manager, NPA Relief
Bell Canada
3570 Mavis Rd.
Mississauga, ON
L5C 1T8
Canada
Telephone:905-819-0467
Fax: 905-819-8247
john.arakelian@bell.ca

J. Francois Audet
Director, Business Development and Special Projects
Cogeco Cable Inc.
1 Place Ville Marie, Suite 3636
Montréal, QC
H3B 3P2
Canada
Telephone:514-874-0761
Fax: 514-874-2625
faudet@cogeco.com

Tim Beach
Roxborough Telephone Company Limited
PO BOX 190, 1745 McLead Road
Moose Creek, ON
K0C 1W0
Canada
Telephone:613-538-2800
Fax: 613-538-2700
roxboro@ontarioeast.net

Amedeo Bernardi
VP Regulatory Affairs
Gateway Telephone Limited
1164 Devonshire Avenue
North Bay, ON
P1B 6X7
Canada
Telephone:705-472-6300
Fax: 705-472-3403
abernardi@gatewaytel.com

Doug Birdwise
Supervisor Numbering
Bell Canada
160 Elgin St., Floor 6, Room 640
Ottawa, ON
K1G 3J4
Canada
Telephone:613-781-4366
Fax: 613-781-8260
doug.birdwise@bell.ca

Gerry Bralten
Carrier Services
Bell Canada
2 Fieldway Road, Floor 11
Etobicoke, ON
M8Z 3L2
Canada
Telephone:416-237-5781
Fax: 416-234-9383
gerry.bralten@bell.ca

Alexander Brock
Rogers Cablesystems Limited
333 Bloor Street East, 9th Floor
Toronto, ON
M4W 1G9
Canada
Telephone:416-935-3530
abrock@rci.rogers.com

Sheehan Carter
Analyst - Numbering
CRTC - Telecom.
1 Promenade du Portage
Hull, QC
K1A 0N2
Canada
Telephone:819-997-4555
Fax: 819-997-4550
sheehan.carter@crtc.gc.ca

Francis Catedral
Director, Carrier Services & CLEC Affairs
Cannect Communications
Suite 1750 - 701 West Georgia Street
Vancouver, BC
V7Y 1C6
Canada
Telephone:604-642-0177
Fax: 604-642-0178
fcatedral@cannect.com

Michael Charendoff
Director, Regulatory Affairs & Carrier Relations
C1 Communications
7111 Syntex Drive
Mississauga, ON
L5N 8C3
Canada
Telephone:905-814-3287
Fax: 905-814-3131
mcharendoff@c1communications.com

Peter Chaves
Director Inter-Carrier Operations
Riptide Networks Inc.
40 West Wilmot Street
Richmond Hill, ON
L4B 1H8
Canada
Telephone:905-882-3577
Fax: 905-882-3599
pchaves@riptide.ca

Fiona Clegg
CO Code Administration
SAIC Canada
60 Queen Street, Suite 1516
Ottawa, ON
K1P 5Y7
Canada
Telephone:613-563-7242 Ext. 310
Fax: 613-563-3399
fiona.clegg@cnac.ca

Jean-Marc D'Aoust
Cogeco Cable Inc.
1720 Route 200
Limoges, ON
K0A 2M0
Canada
Telephone:613-443-1635
Fax: 613-443-4884
jmdaoust@comnet.ca

Parke Davis
Director, Intercarrier Standards
Clearnet Communications Inc.
c/o The Corporate Centre, 255 Albert Street
Suite 600
Ottawa, ON
K1P 6A9
Canada
Telephone:613-566-7079
Fax: 613-566-7063
pdavis@clearnet.com

Fadilla Day
Business Analyst
Call-Net Communications Inc.
105 Gordon Baker Rd. Suite 700
Willowdale, ON
M2H3S1
Canada
Telephone:416-718-5693
Fax: 416-718-5662
fday@sprint-canada.com

Pamela J. Dinsmore
Vice President, Regulatory
Rogers Cablesystems Limited
333 Bloor Street East, 9th Floor
Toronto, ON
M4W 1G9
Canada
Telephone:416-935-6666
Fax: 416-935-4875
pdinsmor@rci.rogers.com

Shannon Donovan
Regulatory Affairs Coordinator
Gateway Telephone Limited
1164 Devonshire Avenue
North Bay, ON
P1B 6X7
Canada
Telephone:705-472-6300
Fax: 705-472-3403
sdonovan@gatewaytel.com

Ron Douglas, CET, RCDD
Manager - TN/LEN Administration
AT & T Canada
Suite 600, 205 - 5th Avenue S.W.
Calgary, AB
T2P 2V7
Canada
Telephone:403-705-6018
Fax: 403-705-6283
ron.douglas@attcanada.com

Gordon Duesburry
Globalstar Canada Co
50 Burnhamthorpe Road West, Suite 1000
Mississauga, ON
L5B 3C2
Canada
Telephone:905-403-2121
Fax:
gduesbur@cancom.ca

Yves Duval
Sogetel inc.
111, rue du 12-novembre
Nicolet, QC
J3T 1S3
Canada
Telephone:819-293-1266
Fax: 819-293-4224
yves.duval@sogetel.com

Simon Edgett
GT Group Telcom Inc.
3rd Floor, 840 Howe Street, PO Box. 40
Vancouver, BC
V6Z 2L2
Canada
Telephone:604-688-3011
Fax: 604-688-3010
sedgett@gt.ca

Jonathan Elkas
Regulatory Affairs
Microcell Telecom
1250 Rene-Levesque Blvd. West, Suite 400
Montreal, QC
H3B 4W8
Canada
Telephone:514-937-0102 ext. 7652
Fax: 514-813-5504
jonathan.elkas@microcell.ca

John E. Fagg
President
Packet-Tel Corp.
20 Hanson Avenue, Suite 5
Kitchener, ON
N2C 2E2
Canada
Telephone:519-579-4507
Fax: 519-579-8475
johnf@packet-tel.ca

J. David Farnes
Vice President, Regulatory Affairs
Canadian Wireless Telecommunications Association (CWTA)
275 Slater Street, Suite 500
Ottawa, ON
K1P 5H9
Canada
Telephone:613-233-4888 ext. 106
Fax: 613-233-2032
dfarnes@cwta.ca

Patrick Fernet
Vice President Engineering
Wispra Networks
100 Alexis-Nihon, Suite 593
St-Laurent, QC
H4M 2P1
Canada
Telephone:514-748-0875
Fax: 514-748-9346
pfernet@wispra.com

Paul Frappier
Téléphone Milot Inc.
2653, Laflèche
St. Paulin, QC
J0K 3G0
Canada
Telephone:819-268-2050
Fax: 819-268-2951
paul.frappiertmi@sympatico.ca

Suzanne Gagnon
La Compagnie de Téléphone Nantes Inc.
178, Rang St-Michel
Lambton, QC
GOM 1H0
Canada
Telephone:819-547-3422
Fax: 418-486-7380
nantel@minfo.net

Michael Garbe
Northgrove Communications inc.
400 North Rivermede Road, Suite 100
Concord, ON
L4K 3R5
Canada
Telephone:905-660-8796
Fax: 905-660-8768
mgarbe@northgrove.com

Mylene Grenier
Manager Switched Network Design
Bell Canada
1050 Beaver Hall 170-07
Montreal, QC
Canada
Telephone:514-870-2262
Fax: 514-870-5659
mylene.grenier@bell.ca

William Grier
General Manager
Lansdowne Rural Telephone Co. Ltd.
42 King St. West, PO BOX 9
Landsdowne, ON
K0E 1L0
Canada
Telephone:613-659-2221
Fax: 613-659-2226
Wagrier@1000island.net

Dan Hammond
WizTel Inc.
80 Bloor St. West, Suite 1100
Toronto, ON
M5S 2V1
Canada
Telephone:416-460-5758
Fax: 416-967-5955
hammond@wiztel.ca

Paul Hayes
Director General - Telecommunications
GTIS
Place de Portage Phase 3-GA1, 11 Laurier St.
Hull, QC
K1A 0S5
Canada
Telephone:819-956-9507
Paul.Hayes@pwgcs.gc.ca

Marian Hearn
Project Executive
Canadian LNP Consortium
2419 - 112A ST. NW
Edmonton, AB
T6J 4X4
Canada
Telephone:780-436-2630
Fax: 780-436-4075
clnpc@telusplanet.net

Paula Helby
Microcell Connexions
1601, 20 Bay Street
Toronto, ON
M5J 2N8
Canada
Telephone:416-216-1403
Fax: 416-601-1552
paula.helby@microcell.ca

Pamela Jones
Clearnet
200 Consilium, Suite 1600
Scarborough, ON
M1H 3J3
Canada
Telephone:514-977-1171
Fax: 514-977-1172
pjones@clearnet.com

Suresh Khare
CO Code Manager
SAIC Canada
60 Queen Street, Suite 1516
Ottawa, ON
K1P 5Y7
Canada
Telephone:613-563-7242 Ext. 315
Fax: 613-563-3399
suresh.khare@cnac.ca

Mark F. Kornak
Vice President
Suite Systems
c/o Boardwalk Equities Inc. Suite 200 1501 - 1 Street SW
Calgary, AB
T2R 0W1
Canada
Telephone:403-531-9255
Fax: 403-831-9565
mark@bwalk.com

Jean Lainesse
La Compagnie de Téléphone de Warwick
2, rue Baril, Case postale 728
Warwick, QC
J0A 1M0
Canada
Telephone:819-358-5730
Fax: 819-358-5758
jlainesse@telwarwick.qc.ca

Steve Lynn
General Manager
North Renfrew Telephone Co. Ltd.
PO Box 70, 4 Stewart Street
Beachburg, ON
K0J 1C0
Canada
Telephone:613-582-3600
Fax: 613-582-7039
slynn@rideau.net

Steve Lynn
General Manager
Westport Telephone Company Limited
PO Box 580, 28 Main Street
Westport, ON
K0G 1X0
Canada
Telephone:613-273-2121
Fax: 613-273-2323
slynn@rideau.net

Ken MacDonald
Vice President
Enercom Communication Inc.
1809 Barrington Street, Suite 802
Halifax, NS
B3J 3K8
Canada
Telephone:902-423-5014
Fax: 902-423-2136
ken.macdonald@enercom.ca

Rob MacKay
Manager, VoIP Planning
MaxLink Communications Inc.
1 Youge Street, Suite 2415
Toronto, ON
M5E 1E5
Canada
Telephone:416-775-5209
Fax: 416-775-5501
rmackay@maxlink.net

Stuart C. MacPherson
Vice President, Regulatory and Business Development
Combined Telecom Inc.
95 Wellington St. W., Suite 710
Toronto, ON
M5J 2N7
Canada
Telephone:416-216-6930
Fax: 416-216-0888
smacpherson@combinedtel.com

Sheilagh Malloy
Manager - Local Competition Implementation
Bell Canada
160 Elgin Street, Room 970
Ottawa, ON
K2P 2C4
Canada
Telephone:613-781-4346
Fax: 613-231-5200
sheilagh.malloy@bell.ca

Dilip Manucha
Manager Facilities Planning
Rogers AT&T Wireless
1 Mount Pleasant Road, 9th Floor
Toronto, ON
M4Y 2Y5
Canada
Telephone:416-935-6144
Fax: 416-935-7525
dmanucha@rci.rogers.com

Bill Mason
Director, Regulatory & Inter-Carrier Affairs
Norigen Communications Inc.
180 Dundas St. W. Suite 2500
Toronto, ON
M5G 1Z8
Canada
Telephone:416-979-9565 Ex 244
Fax: 416-979-0776
Bmason@norigen.com

Deirdre Massiah-Gomes
Clearnet
200 Consilium, Suite 1600
Scarborough, ON
M1H 3J3
Canada
Telephone:416-279-3070
Fax: 416-279-3949
dmgomes@clearnet.com

Jeff McDonald
Manager, Intercarrier Relations
Rogers AT&T Wireless
333 Bloor Street East
Toronto, ON
M4W 1G9
Canada
Telephone:416-935-3133
Fax: 416-935-7719
jmcdonal@rci.rogers.com

Keith McIntosh
Analyst, Regulatory Affairs
Canadian Wireless Telecommunications Association (CWTA)
275 Slater Street, Suite 500
Ottawa, ON
K1P 5H9
Canada
Telephone:613-233-4888 ext. 113
Fax: 613-233-2032
kmcintosh@cwta.ca

Okacha Merabet
Axxent Corp.
1080 Beaver Hall Hill, Suite 1110
Montreal, QC
H2Z1S8
Canada
Telephone:514-907-2234
Fax: 514-907-2891
Okacha.Merabet@corp.axxent.ca

Léo Mével
CRTC Telecom Branch
1 Promenade du Portage
Ottawa, ON
K1A 0N2
Canada
Telephone:819-997-4596
Fax: 819-953-0795
leo.mevel@crtc.gc.ca

Judy Ng
Clearnet
200 Consilium, Suite 1600
Scarborough, ON
M1H 3J3
Canada
Telephone:416-279-3304
Fax: 416-279-3949
jng@clearnet.com

Frank Norman
Numbering Administrator
Telus Integrated Communication
Floor 21, 3777 Kingsway
Burnaby, BC
V5H 3Z7
Canada
Telephone:604-432-8144
Fax: 604-432-2150
frank.norman@telus.com

Glenn Pilley
Canadian Numbering Administrator
SAIC Canada
60 Queen Street, Suite 1516
Ottawa, ON
K1P 5Y7
Canada
Telephone:613-563-7242 Ext. 317
Fax: 613-563-3399
Glenn.pilley@cnac.ca

Carolyn Pinsky
Legal Directorate
CRTC
1 Promenade du Portage
Ottawa, ON
K1A 0N2
Canada
Telephone:819-953-0634
Fax: 819-953-0795
carolyn.pinsky@crtc.gc.ca

Wendy Potts
Associate Director - Regulatory Matters
Bell Canada
F5, 105 Hotel de Ville
Hull, QC
J8X 4H7
Canada
Telephone:819-773-5983
Fax: 819-773-5579
wendy.potts@bell.ca

Dean Proctor
Vice President
Microcell Telecommunications Inc.
1250 René-Lévesque Blvd. West, 4th Floor
Montreal, QC
H3B 4W8
Canada
Telephone:514-937-2121
Fax: 514-937-2554
dproctor@microcell.ca

Robert Quance
President
ISP TELECOM Inc.
630 René-Lévesque blvd. West, Suite 2360
Montreal, QC
H3B 1S6
Canada
Telephone:514-726-1199
Fax: 514-484-3662
robert.quance@uunet.ca

Judith Racicot
Network Planning
Videotron (1998) Ltee
2000 Berri Street East
Montreal, QC
H2L 4V7
Canada
Telephone:514-380-4244
Fax: 514-380-7331
racicotj@videotron.com

Norm Rhora
CAS Communications Services ltd. (CAS)
503 Centennial Road
North Scarborough, ON
M1C 2A5
Canada
Telephone:416-724-8333
Fax: 416-282-3399
youranswer@followme.com

Guy Robert
Senior Analysts
Videotron Telecom 1998 Ltee
2155 Pie IX blvd.
Montreal, QC
H1V 2E4
Canada
Telephone:514-380-4076
Fax: 514-899-8315
grobert@videotron.com

Scott Roberts
Director Regulatory Affairs
MaxLink Communications Inc.
145 King Street West, Suite 202
Toronto, ON
M5K 1J5
Canada
Telephone:416-777-9192 ext. 226
Fax: 416-777-9011
sroberts@maxlink.net

Ericson Rojo
Senior Planner - Local Network Interconnect
C1 Communications
7111 Syntex Drive
Mississauga, ON
L5N 8C3
Canada
Telephone:905-814-3351
Fax: 905-814-6794
erojo@c1communications.com

Caroline Rombionti
Telebec Ltee
7151 Jean-talon Est 3ieme etage
Anjou, QC
H1M3N8
Canada
Telephone:514-493-5493
Fax: 514-493-5650
crombionti@telebec.qc.ca

Francois Rousseau
IC. Soutien - Planification de l'exploitation
Telebec
7151 Jean-talon est, B 300
Anjou, QC
H1M 3N8
Canada
Telephone:514-493-5440
Fax: 514-493-5650
frousseau@telebec.qc.ca

Leo Santoro
Network Analyst
Bell Mobility
2920 Matheson Blvd East
Mississauga, ON
L4W 4M7
Canada
Telephone:905-282-3021
Fax: 905-282-3106
lsantoro@mobility.com

Michael James Savage
Founder & CEO
Savage Corporation
P.O. Box 48481
Vancouver, BC
V7X 1A2
Canada
Telephone:604-925-2096
Fax: 604-255-3815
michael.savage@savagetele.com

Enid Schmidt
President
North Frontenac Telephone Company Limited
146 Foundry Street
Baden, ON
N0B 1G0
Canada
Telephone:519-634-5300
Fax: 519-634-5736
nfrontenac@kw.igs.net

Donna Sguigna
NXX Admin & TFC Resource Support
Bell Canada
100 Borough Dr. Floor 5 Blue
Scarborough, ON
M1P 4W2
Canada
Telephone:416-296-6172
Fax: 416-296-0685
donna.sguigna@bell.ca

Wayne Silver
Executive VP
Phonetime International Inc.
3035 Wharton Way
Mississauga, ON
L4X 2B4
Canada
Telephone:905-629-2606
Fax: 905-629-1982
waynes@pproducts.com

Brenda M. Stevens
Manager - Numbering
CRTC - Telecom.
1 Promenade du Portage
Hull, QC
K1A 0N2
Canada
Telephone:819-953-8882
Fax: 819-997-4550
brenda.stevens@crtc.gc.ca

Alastair Stewart
Legal Counsel
CRTC
1 Promenade du Portage
Hull, QC
K1A 0N2
Canada
Telephone:819-994-6336
Fax: 819-953-0589
alastair.stewart@crtc.gc.ca

Laurie Storm
Network Planning
Bell Canada
Floor 8D - 100 Dundas Street
London, ON
N6A 4L6
Canada
Telephone:519-663-7485
Fax: 519-679-5657
laurie.storm@bell.ca

Mahmood T. Tanvir
Sr. Network Planner
3620221 Canada Inc.
5343 Dundas Street West
Etobicoke, ON
M9B 6K5
Canada
Telephone:416-207-7048
Fax: 416-207-7125
mtanvir@primustel.ca

Isis Thiago
Téléphone Guèvremont Inc.
885 Marquette Street
Ste-Rosalie, QC
Canada
Telephone:450-799-2924
Fax: 450-799-0808
ithiago@guevremont.com

Isis Thiago
Maskatel
175 Principale
St-Thomas d'Aquin, QC
Canada
Telephone:450-799-2924
Fax: 450-799-0808
ithiago@guevremont.com

Joel Thorp
Director - Intercarrier Relations
Rogers AT&T Wireless
333 Bloor St. East, 9th Floor
Toronto, ON
M4W 1G9
Canada
Telephone:416-935-7211
Fax: 416-935-7719
Jthorp@rci.rogers.com

Nancy Tomlinson
Network Planning
Bell Canada
Floor 8D - 100 Dundas Street
London, ON
N6A 4L6
Canada
Telephone:519-663-7498
Fax: 519-679-5657
nancy.tomlinson@bell.ca

Richard Varsava
Norigen Communications Inc.
180 Dundas St. W. Suite 2500
Toronto, ON
M5G 1Z8
Canada
Telephone:416-628-0209
Fax:
rvarsava@norigen.com

Bruce Watson
Manager Regulatory Affairs
Call-Net Enterprises Inc.
2235 Sheppard Ave. East, Atria II, Suite 1800
North York, ON
M2J 5G1
Canada
Telephone:416-718-6165
Fax: 416-718-6487
bwatson@sprint-canada.com

Bohdan Zabawskyj
Network Standard Director
Clearnet Communications Inc.
200 Consilium, Suite 1600
Scarborough, ON
M1H 3J3
Canada
Telephone:416-684-3163
Fax: 416-684-0163
bzabawskyj@clearnet.com

Clayton Zekelman
Managed Network Systems Inc.
875 Ouellette Avenue
Windsor, ON
N9A 4J6
Canada
Telephone:519-985-8410
Fax: 519-258-3009
clayton@mnsi.net

Juo Zenkevicius
Manager, Switch Planning
C1 Communications
7111Syntex Drive
Mississauga, ON
L5N 8C3
Canada
Telephone:905-814-3138
Fax: 905-814-6794
jzenkevicius@c1communications.com