

**Report for January 2013 R-NRUF – NPAs 226/519, 236/250/604/778, 289/365/905,
403/587/780 and 416/437/647 to the
Canadian Steering Committee on Numbering (CSCN)**

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1. Purpose of R-NRUF

The purpose of the General Numbering Resource Utilization Forecast (G–NRUF) is to provide an annual forecast to aid in projecting Numbering Plan Area (NPA) and North American Numbering Plan (NANP) exhaust. The G–NRUF requires current and prospective Code Holders to submit actual and forecast annual data regarding their current and prospective future use of Central Office (CO) Codes to the Canadian Numbering Administrator (CNA) on an annual basis.

In accordance with the Canadian Numbering Resource Utilization Forecast (C-NRUF) Guideline (the Guideline), approved by the Canadian Radio-television and Telecommunications Commission (CRTC) in Telecom Decision CRTC 2012-524 dated 28 September 2012:

When an NPA is entering the timeframe for NPA Relief Planning (e.g., within or about 72 months before the Projected Exhaust Date), an initial R-NRUF is conducted to obtain actual and forecast annual data at the Exchange Area level of detail. The purpose of the initial R-NRUF is to validate the Projected Exhaust Date for an exhausting NPA, and to provide the CNA with detailed information to be used to identify a potential Relief Date and to prepare the Initial Planning Document as outlined in the Canadian NPA Relief Planning Guideline. Typically, the initial R-NRUF will utilize Format 2 in Appendix A. In general, the CNA will conduct the initial R-NRUF when needed; however, the CNA should attempt to choose dates for the initial and subsequent R-NRUFs that will coincide with the annual G-NRUF and mid-year R/S-NRUF dates (e.g., as of January 1 and July 1 each year).

Subsequent R-NRUFs will be conducted semi-annually in order to monitor CO Code forecast changes prior to implementing relief. These R-NRUFs shall be conducted until three months of when relief is implemented, or until they are replaced by S-NRUFs or J-NRUFs. ...

Based on the January 2012 NRUF results, the CNA determined that NPAs 226/519, 236/250/604/778, 289/365/905, 403/587/780 and 416/437/647 had entered or were within the 6-year window for NPA relief planning. On 14 December 2012 the CNA requested R-NRUFs from current and prospective Canadian CO Code (NXX) Holders in those NPAs.

2. High Level Summary

The results from the January 2013 R-NRUF are different from the January 2012 and July 2012 R-NRUF results due to various Telecommunications Service

Providers (TSPs) submitting a set of data to the CNA that is different from the January 2012 G- and July 2012 R-NRUF data. The CNA has verified the input from various TSPs and the variance from previous inputs can be rationalized.

Specific changes are listed below:

- NPA 226/519 Projected Exhaust Date is now forecast for October 2017, which moves the Projected Exhaust Date out by eight (8) months from the July 2012 R-NRUF result of January 2017.
- NPA 236/250/604/778 Projected Exhaust Date is now forecast for April 2014, which moves the Projected Exhaust Date out by one (1) month from the July 2012 R-NRUF result of March 2014.
- NPA 289/365/905 Projected Exhaust Date is now forecast for March 2025, which moves the Projected Exhaust Date out by two (2) years and one (1) month from the July 2012 R-NRUF result of February 2023.
- NPA 403/587/780 Projected Exhaust Date is now forecast for August 2017, which moves the Projected Exhaust Date out by two (2) months from the July 2012 R-NRUF result of June 2017.
- NPA 416/437/647 Projected Exhaust Date is now forecast for December 2021, which moves the Projected Exhaust Date out by two years and four (4) months from the July 2012 R-NRUF result of August 2019.

NPA 226/519

NPA 226-519 - January 2013 R-NRUF Aggregate Results						
Actual	Forecast					
Total quantity of existing CO Codes assigned & reserved as of	Total quantity of existing and future CO Codes forecast to be assigned & reserved as of					
2013-01-01	2014-01-01	2015-01-01	2016-01-01	2017-01-01	2018-01-01	2019-01-01
1181	1334	1417	1490	1547	1639	1683
Projected Exhaust Date				October 2017		

NRUF data, including the most recent results, is summarized in the following chart.

NPA 226/519 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
226/519	January 2011 G-NRUF	5 April 2011	September 2022
226/519	January 2012 G-NRUF	10 April 2012	November 2017
226/519	July 2012 R-NRUF	5 October 2012	January 2017
226/519	January 2013 R-NRUF	10 April 2013	October 2017

NPA 236/250/604/778

NPA 236-250-604-778 - January 2013 R-NRUF Aggregate Results						
Actual	Forecast					
Total quantity of existing CO Codes assigned & reserved as of	Total quantity of existing and future CO Codes forecast to be assigned & reserved as of					
2013-01-01	2014-01-01	2015-01-01	2016-01-01	2017-01-01	2018-01-01	2019-01-01
2152	2383	2527	2616	2713	2797	2866
Projected Exhaust Date	April 2014					
Note - Telecom Decision CRTC 2011-451 new NPA 236 in-service date of 1 June 2013.						

NRUF data, including the most recent results, is summarized in the following chart.

NPA 236/250/604/778 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
250/604/778	January 2009 G-NRUF	29 May 2009	December 2019
250/604/778	January 2010 G-NRUF	1 April 2010	July 2016
250/604/778	July 2010 R-NRUF	13 September 2010	August 2016
250/604/778	January 2011 R-NRUF	5 April 2011	November 2014
250/604/778	July 2011 R-NRUF	7 October 2011	September 2014
250/604/778	January 2012 R-NRUF	10 April 2012	February 2014
236/250/604/778	July 2012 R-NRUF	5 October 2012	March 2014
236/250/604/778	January 2013 R-NRUF	10 April 2013	April 2014

NPA 289/365/905

NPA 289-365-905 - January 2013 R-NRUF Aggregate Results						
Actual	Forecast					
Total quantity of existing CO Codes assigned & reserved as of	Total quantity of existing and future CO Codes forecast to be assigned & reserved as of					
2013-01-01	2014-01-01	2015-01-01	2016-01-01	2017-01-01	2018-01-01	2019-01-01
1426	1602	1650	1729	1798	1885	1950
Projected Exhaust Date						March 2025
New NPA 365 placed in-service - 25 March 2013						

NRUF data, including the most recent results, is summarized in the following chart.

NPA 289/365/905 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
289/905	January 2007 G-NRUF	5 April 2007	March 2017
289/905	January 2008 G-NRUF	25 March 2008	August 2014
289/905	July 2008 R-NRUF	5 April 2007	August 2024
289/905	January 2009 R-NRUF	15 May 2009	May 2015
289/905	G-NRUF (Updated January 2009 due to change in Carriers' forecasts)		February 2014
289/905	June 2009 R-NRUF	12 June 2009	October 2016
289/905	January 2010 R-NRUF	1 April 2010	April 2014
289/905	July 2010 R-NRUF	13 September 2010	March 2015
289/905	January 2011 R-NRUF	5 April 2011	April 2015
289/905	July 2011 R-NRUF	7 October 2011	April 2014
289/905	January 2012 R-NRUF	10 April 2012	July 2014
289/365/905	July 2012 R-NRUF	5 October 2012	November 2013
289/365/905	January 2013 R-NRUF	28 March 2013	March 2025

NPA 403/587/780

NPA 403-587-780 - January 2013 R-NRUF Aggregate Results						
Actual	Forecast					
Total quantity of existing CO Codes assigned & reserved as of	Total quantity of existing and future CO Codes forecast to be assigned & reserved as of					
2013-01-01	2014-01-01	2015-01-01	2016-01-01	2017-01-01	2018-01-01	2019-01-01
1940	2106	2201	2283	2363	2448	2509
Projected Exhaust Date				August 2017		

NRUF data, including the most recent results, is summarized in the following chart.

NPA 403/587/780 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
403/587/780	January 2011 G-NRUF	5 April 2012	August 2020
403/587/780	January 2012 G-NRUF	10 April 2012	June 2018
403/587/780	July 2012 R-NRUF	5 October 2012	June 2017
403/587/780	January 2013 R-NRUF	10 April 2013	August 2017

NPA 416/437/647

NPA 416-437-647 - January 2013 R-NRUF Aggregate Results						
Actual	Forecast					
Total quantity of existing CO Codes assigned & reserved as of	Total quantity of existing and future CO Codes forecast to be assigned & reserved as of					
2013-01-01	2014-01-01	2015-01-01	2016-01-01	2017-01-01	2018-01-01	2019-01-01
1379	1517	1643	1738	1853	1963	2070
Projected Exhaust Date						December 2021
New NPA 437 placed in-service - 25 March 2013						

NRUF data, including the most recent results, is summarized in the following chart.

NPA 416/437/647 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
416/647	January 2009 G-NRUF	15 May 2009	October 2021
416/647	January 2010 G-NRUF	1 April 2010	July 2015
416/647	July 2010 R-NRUF	13 September 2010	October 2015
416/647	January 2011 R-NRUF	5 April 2011	May 2015
416/647	July 2011 R-NRUF	7 October 2011	April 2014
416/647	January 2012 R-NRUF	10 April 2012	July 2013
416/437/647	July 2012 R-NRUF	5 October 2012	December 2013
416/437/647	R-NRUF January 2013	10 April 2013	December 2021

3. Schedule of Future R- NRUF Activities in this Year

Due Date	NRUF Type	NRUF Format	NPAs
6 August 2013	R-NRUF	Format 2 – proposed by CNA	226/519, 403/587/780

4. R-NRUF Assumptions

The assumptions used for the January 2013 R-NRUF for NPAs 226/519, 250/604/778, 289/365/905, 403/587/780 and 416/437/647 are the assumptions that were provided on 10 October 2012 to the CNA by the Canadian Steering Committee on Numbering (CSCN) for conducting the 2013 G-NRUF.

5. Summary of Challenges Encountered During the R-NRUF Process

One TSP continues to remain unaware of the significance and schedule for completing R-NRUFs. The CNA started contacting companies on 26 January 2013 to remind them of the 1 February 2013 due date.

6. Conclusion

In accordance with Section 4 of the Canadian Numbering Resource Utilization Forecast (C-NRUF) Guideline, the CNA has conducted an assessment, at a total aggregate level, to determine whether the January 2013 R-NRUF results are reasonable and the Projected Exhaust Dates for NPAs 226/519, 236/250/604/778, 289/365/905, 403/587/780 and 416/437/647 are realistic.

Numbering resource requirements for some Carriers in both the wireless and CLEC services have been volatile over the last few years resulting in only moderately accurate short term and long term NRUF submissions. LTE/4G and CLEC growth has been responsible for a good part of the demand however there is also the issue of machine-to-machine market demand. With machine-to-machine's potential to touch so many areas of life, including health care, transportation, security and energy, the potential for increased demand in CO Codes is not easy to quantify. Given the accuracy of some of the submissions, in the CNA's opinion the January 2013 R-NRUF results for NPAs 226/519, 236/250/604/778, 289/365/905, 403/587/780 and 416/437/647 are as reasonable as they can be and, therefore, the Projected Exhaust Dates for the NPAs are generally realistic, based on the information provided by those current and prospective CO Code Holders that submitted data.