

**January 2017 R-NRUF Report – NPAs 236/250/604/778 and 506 to the  
Canadian Steering Committee on Numbering (CSCN)**

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## 1. Purpose of R-NRUF

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 2015-166 dated 29 April 2015:

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 2016 G-NRUF results, the CNA determined that NPA 236/250/604/778 and NPA 506 were within the 6-year window for NPA relief planning. On 15 December 2016 the CNA requested January 2017 R-NRUFs from current and prospective Canadian CO Code (NXX) Holders in those NPAs.

## 2. High Level Summary

The results from the January 2017 R-NRUF are slightly different from the July 2016 R-NRUF results due to various Telecommunications Service Providers (TSPs) submitting updated 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 236/250/604/778 Projected Exhaust Date is now forecast for May 2020, which moves the Projected Exhaust Date in by nine (9) months from the July 2016 R-NRUF result of February 2021.

- NPA 506 Projected Exhaust Date is now forecast for December 2021, which moves the Projected Exhaust Date out by nineteen (19) months from the July 2016 R-NRUF result of May 2020.

**NPA 236/250/604/778**

NPA 236/250/604/778 - January 2017 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					
2017-01-01	2018-01-01	2019-01-01	2020-01-01	2021-01-01	2022-01-01	2023-01-01
2673	2911	3058	3161	3282	3359	3441
<b>Projected Exhaust Date - May 2020</b>						

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
236/250/604/778	January 2015 G-NRUF	27 March 2015	February 2024
236/250/604/778	January 2016 G-NRUF	21 March 2016	April 2021
236/250/604/778	July 2016 R-NRUF	12 October 2016	February 2021
236/250/604/778	January 2017 R-NRUF	29 March 2017	May 2020

**NPA 506**

<b>NPA 506 - January 2017 R-NRUF Aggregate Results</b>						
<b>Actual</b>	<b>Forecast</b>					
<b>Total quantity of existing CO Codes assigned &amp; reserved as of</b>	<b>Total quantity of existing and future CO Codes forecast to be assigned &amp; reserved as of</b>					
<b>2017-01-01</b>	<b>2018-01-01</b>	<b>2019-01-01</b>	<b>2020-01-01</b>	<b>2021-01-01</b>	<b>2022-01-01</b>	<b>2023-01-01</b>
<b>564</b>	<b>618</b>	<b>658</b>	<b>719</b>	<b>774</b>	<b>824</b>	<b>841</b>
<b>Projected Exhaust Date - December 2021</b>						

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

<b>NPA 506 Summary of Projected Exhaust Dates</b>			
<b>NPA</b>	<b>Type of C-NRUF</b>	<b>Date of Publication</b>	<b>Projected Exhaust Date</b>
506	January 2015 G-NRUF	27 March 2015	April 2025
506	January 2016 G-NRUF	21 March 2016	February 2021
506	July 2016 R-NRUF	12 October 2016	May 2020
506	January 2017 R-NRUF	29 March 2017	December 2021

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

<b>Due Date</b>	<b>NRUF Type</b>	<b>NRUF Format</b>	<b>NPA's</b>
August 10, 2017	R-NRUF	Format 2	236/250/604/778
August 10, 2017	R-NRUF	Format 2	506

**4. R-NRUF Assumptions**

The assumptions used for the January 2017 R-NRUF for NPA 236/250/604/778 and NPA 506 are the assumptions that were provided on 25 October 2016 to the CNA by the Canadian Steering Committee on Numbering (CSCN) for conducting the January 2017 NRUF.

Item 4 of the 25 October 2016 letter states, in part:

Where the CNA believes, based on its analysis of past growth and NRUF forecast data for an NPA, that the six-year forecast average annual growth may not be the best methodology for that NPA for projecting growth beyond the six-year forecast period, the CNA shall advise the CSCN as to the alternative method it proposes to use.

In this instance, the CNA compared the average forecast growth for the next five years, the median forecast growth for the next five years and the median and average historical growth for the past five years. The lowest number resulting from these calculations was the one used to identify future Projected Exhaust Dates. In the case of NPA 236/250/604/778, the historical median was used and in NPA 506 the historical average was used.

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

The CNA started contacting companies on 27 January 2017 to remind them of the 1 February 2017 due date. Some R-NRUF submissions were a few days late.

## **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 2017 R-NRUF results are reasonable.

Numbering resource requirements for some Carriers in both the wireless and LEC services have been volatile over the last few years resulting in only moderately accurate short term and long term NRUF submissions. The CNA believes that emerging technology growth has been responsible for a good part of the demand. With the introduction of the Non-Geographic Code Assignment Guideline, this should alleviate some of the issues associated with Machine-to-Machine demand but it is difficult to quantify at this point.

At this time based on the data and supporting justifications provided by the various TSPs the January 2017 R-NRUF results for NPA 236/250/604/778 and NPA 506 are as realistic as they can be.