

**July 2016 R-NRUF Report – NPAs 236/250/604/778 and 506 to the
Canadian Steering Committee on Numbering (CSCN)**

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Canadian Numbering Administrator
Leidos Canada Inc.

Suresh Khare
1516 – 60 Queen St.
Ottawa, ON K1P 5Y7

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 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 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 24 June 2016 the CNA requested July 2016 R-NRUFs from current and prospective Canadian CO Code (NXX) Holders in those NPAs.

2. High Level Summary

The results from the July 2016 R-NRUF are slightly different from the January 2016 G-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 February 2021, which moves the Projected Exhaust Date in by two (2) months from the January 2016 G-NRUF result of April 2021.
- NPA 506 Projected Exhaust Date is now forecast for May 2020, which moves the Projected Exhaust Date in by nine (9) months from the January 2016 G-NRUF result of February 2021.

NPA 236/250/604/778

NPA 236/250/604/778 - July 2016 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					
2016-01-01	2016-07-01	2017-01-01	2018-01-01	2019-01-01	2020-01-01	2021-01-01	2022-01-01
2342	2611	2802	2936	3055	3131	3193	3273
Projected Exhaust Date						February 2021	

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

NPA 506

NPA 506 - July 2016 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					
2016-01-01	2016-07-01	2017-01-01	2018-01-01	2019-01-01	2020-01-01	2021-01-01	2022-01-01
534	561	605	660	729	788	847	862
Projected Exhaust Date						May 2020	

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

NPA 506 Summary of Projected Exhaust Dates			
NPA	Type of C-NRUF	Date of Publication	Projected Exhaust Date
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

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

Due Date	NRUF Type	NRUF Format	NPA's
N/A			

4. R-NRUF Assumptions

The assumptions used for the July 2016 R-NRUF for NPA 236/250/604/778 and NPA 506 are the assumptions that were provided on 14 October 2015 to the CNA by the Canadian Steering Committee on Numbering (CSCN) for conducting the January 2016 G-NRUF.

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

The CNA started contacting companies on 27 July 2016 to remind them of the 1 August 2016 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 July 2016 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. 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 July 2016 R-NRUF results for NPA 236/250/604/778 and NPA 506 are as realistic as they can be.