

**Final Report of NANC Paragraph 165 IMG**  
**September 15, 1999**

**I. Executive Summary**

The NANC Paragraph 165 IMG has completed its work effort to address paragraph 165 in CC Docket No. 99-200 (FCC 99-122) and offers to the NANC their agreed to findings and recommendations. This document is organized into two sections: IMG Recommendations for an FCC Ex Parte and IMG Recommendations for NANC Action. However, both sections are relevant and responsive to paragraph 165 and thus, the IMG recommends that the entire document be considered by the NANC and forwarded to the FCC. The IMG has provided consensus-based, general findings on the efficacy of thousand block pooling and specific findings on CMRS participation in thousand block pooling given the FCC's current rules on LNP implementation.

**II. Agreements of the NANC Paragraph 165 IMG**

**A. IMG Recommendations for an FCC Ex Parte**

1. NANC previously stated in a November, 1997, letter to the Common Carrier Bureau (CCB) and reaffirmed in a follow-up letter to the CCB in December, 1997, "...the adoption of number pooling is in the public interest" and "...number pooling can significantly improve number utilization and enhance local service competition." The IMG supports these statements.
2. The effect of thousand block pooling using the NANP Exhaust Study Review Team Input Assumptions sets, which are contained in the May 3, 1999 NANP Exhaust Review Team Report to the NANC, would be to extend the life of the NANP, perhaps as far as mid-21<sup>st</sup> century.
3. The effect of thousand block pooling, as predicted by the Lockheed Martin ("LM") model, would be to extend the life of the NANP, perhaps as far as the late 21<sup>st</sup> century.
4. In general, thousand block pooling appears to be more effective as an optimization technique in an NPA with a substantial inventory of available NXXs and less so when an NPA is nearing exhaust and number relief is necessary.
5. Advancing CMRS participation in thousand block pooling from 2003 to an earlier year does not appreciably defer the exhaust of the NANP in any documented variation of the NANP Exhaust Model. The IMG found that the same is true for any industry segment, i.e., a delay in participation by any industry segment as isolated from the others produces a similar result.
6. Neither of the NANP Exhaust Study Review Team Input Assumptions sets yield an appreciable extension of NANP exhaust from CMRS participation in thousand block pooling, while the LM Input Assumption set, contained in the April 22, 1999 NANP Exhaust Report, predicts a benefit of over 20 years.
7. Despite the limited impact of advancing an industry segment's participation in thousand block pooling by two-three years on the overall exhaust of the NANP, the LM model predicts, by varying the dates of each segment's participation, that the quantity of NPAs required through 2005 is as few as 47 and as many as 162.

## **B. IMG Recommendations for NANC Action**

(This section was developed in light of the May 3, 1999, NANP Exhaust Review Team Report and the April 22, 1999, NANP Exhaust Report. The reader may refer to those public documents for more specific information than what is provided herein.)

1. The IMG has concerns specific to the assumptions that were used in the LM study and the NANP exhaust projections that LM obtained. Those concerns include the following:
  - a) The assumption by LM that all industry segments would participate in thousand block pooling regardless of what is currently known, e.g. the Paging Segment has not been ordered to implement LNP at any point in time and the remainder of the CMRS industry segment has until November 24, 2002 to implement LNP.
  - b) The assumption by LM that all segments would implement thousand block pooling at the same time (2000) even though pooling is predicated on LNP and not all segments would be LNP capable as presented in item a) above.
  - c) The assumption by LM of the number of thousand blocks which would be contributed to the pool, by segment, from NXX codes obtained by carriers to expand their footprint.
  - d) The assumptions by LM of the number of carriers in each segment that will be operating in a rate center. There was concern that LM's estimates of the number of carriers were too high, e.g. 7-12 PCS carriers.
  - e) The assumptions used by LM of the maximum number of rate centers in which the CMRS and CLEC segments would be obtaining numbering resources.
  - f) The assumption used by LM that CMRS/paging growth footprints are 2.0% per annum. The NANP Exhaust Review Team changed this assumption to 0.5% per annum.
  - g) The assumption used by LM that an industry segment uses the incremental CO code per NPA/switch is incorrect and should be removed from the model.

### Recommendation

*The NANC should ask LM to review their input assumptions. LM should report the results of this effort to the NANC in 1Q00 and annually afterwards until the data proves or disproves the validity of the assumptions, to the satisfaction of the NANC.*

2. The IMG has concerns specific to the design and inflexibility of the models and modules used in the LM study. Those concerns include the following:
  - a) The LM NANP Exhaust Model only permits a segment beginning participation in 1KB Pooling in the years 2000, 2001, 2002 and 2003.

### Recommendation

*LM should be requested to enhance the model to cover other years. If there is great difficulty in offering a choice of more than four years, an additional copy of the model should be modified to offer choices of the years 2004, 2005, 2010 and 2015. Then the two models together will cover the critical years.*

- b) The LM NANP Exhaust Model only permits study of the implementation of thousand block pooling in all NPAs.

Recommendation

*LM be requested to enhance the model to allow the user to specify, by NPA, where the likelihood of thousand block pooling is to be applied and to yield the resultant impact on NANP exhaust.*

- c) The LM model operates at an NPA level and does not attempt to accommodate the rate center details.
- 3) Neither the IMG nor the NANP Exhaust Review Team evaluated other number conservation methods including rate center consolidation. The industry should continue to periodically evaluate the NANP Exhaust Study, and its various modules, and work with LM to assess the effects of other optimization methods such as rate center consolidation.
- 4) The industry and LM should work together to revise, as necessary, the current LM models based on the issues summarized herein. The new models produced by this activity would be used to provide future NANP exhaust projections that would have the sanction of the industry and LM, thus avoiding future disputes over the dates provided.