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December 1, 2016

Via Electronic Delivery

EX PARTE NOTICE

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: *Numbering Resource Optimization*, CC Docket No. 99-200; *Numbering Policies for Modern Communications*, WC Docket No. 13-97

Dear Ms. Dortch:

On November 29, 2016, William Reidway, Amy Putnam, Jon Peterson, Bruce Armstrong, and the undersigned of Neustar, Inc. spoke with Henning Schulzrinne, Office of Strategic Planning and Policy Analysis, and Kris Monteith, Ann Stevens, Sanford Williams, Marilyn Jones, Craig Stroup, and Myrva Freeman, all of the Wireline Competition Bureau, regarding Neustar's Just-in-Time number assignment proposal prepared as part of the Alliance for Telecommunications Industry Solutions ("ATIS") Testbeds Landscape Team.

The attached presentation, which was provided to the Federal Communications Commission ("Commission") participants, formed the basis of Neustar's presentation. This *ex parte* notification is being filed electronically with your office pursuant to Section 1.1206 of the Commission's Rules.

Sincerely,

Aaron N. Goldberger
Associate General Counsel
Neustar, Inc.

Attachment

INTRODUCTION:
JUST-IN-TIME NUMBERING INITIATIVE

Road to Maximizing Efficiency in Numbering

29 November 2016

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AGENDA: NEUSTAR JIT NUMBERING SOLUTION

- High Level Introduction
  - Introduce JIT Numbering proposal in ATIS Testbeds Working Group
  - Review industry landscape and why this solution is relevant
- Solution Overview
  - Architecture
- Considerations
- Next Steps…

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INTRODUCTION

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NPA EXHAUST + IP ENTRANTS = SOLVABLE PROBLEM

- Problem:
  - Need to meet demands of next gen IP providers
  - Increasing demand for TNs projected to cause an even greater strain on NANP resources
    - IP entrants poised to start demanding numbers
    - TN growth has increased by 50% in past 2 years at the block level
  - Increased NPA Relief is causing concern among state regulators
- Trial Solution:
  - Allow service providers to get individual TNs in near real-time fashion, versus the existing 30-day block acquisition process
    - The PA would assign or allow transfer of blocks to trial administrator, and then the trial administrator would use the TNs in these blocks to satisfy JIT TN requests
- Industry and Regulatory Benefits:
  - Significantly improve utilization of numbering resources
  - Better forecasting/management of NANP due to first-hand knowledge of utilization
  - SPs have > 500M unused TNs in contaminated blocks that cannot be donated to the PA
  - Opens previously unavailable TNs in exhausted NPAs for use
  - More expeditious assignment of TNs when needed, in conjunction with existing processes

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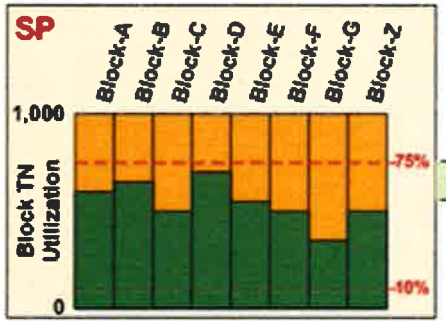
ITN/JIT OVERVIEW

Donation of block to the JIT Pool

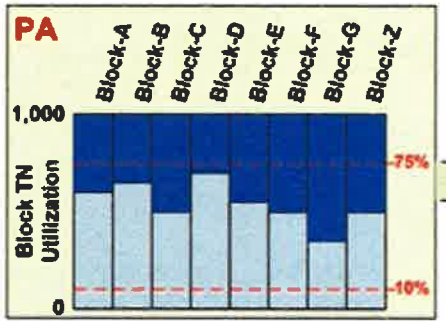
JIT Numbering Portal

Current SP Utilization Profile



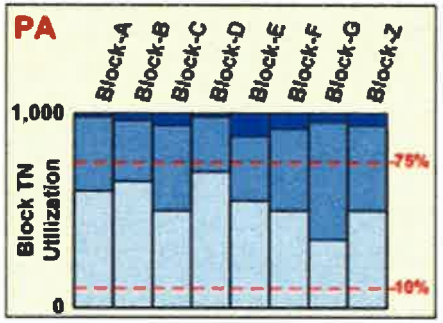
- SPs unable to donate to administrator blocks >10% contaminated
- SP low utilization affects getting new blocks
- Unusable TNs contribute to NPA and NANP exhaust

NPA Relief – Reclaimed TNs



- Donation of over-contaminated blocks increases overall SP utilization
- SP is no longer responsible for administrative aspects of blocks after donation
- Potentially make over 500 million TNs available for other SPs

Ability to Assign at TN Level



- Ability for SPs to receive TNs as needed instead of normal waiting time of 30 days for pooled blocks
- TNs from previously exhausted NPAs can be made available

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SOLUTION OVERVIEW

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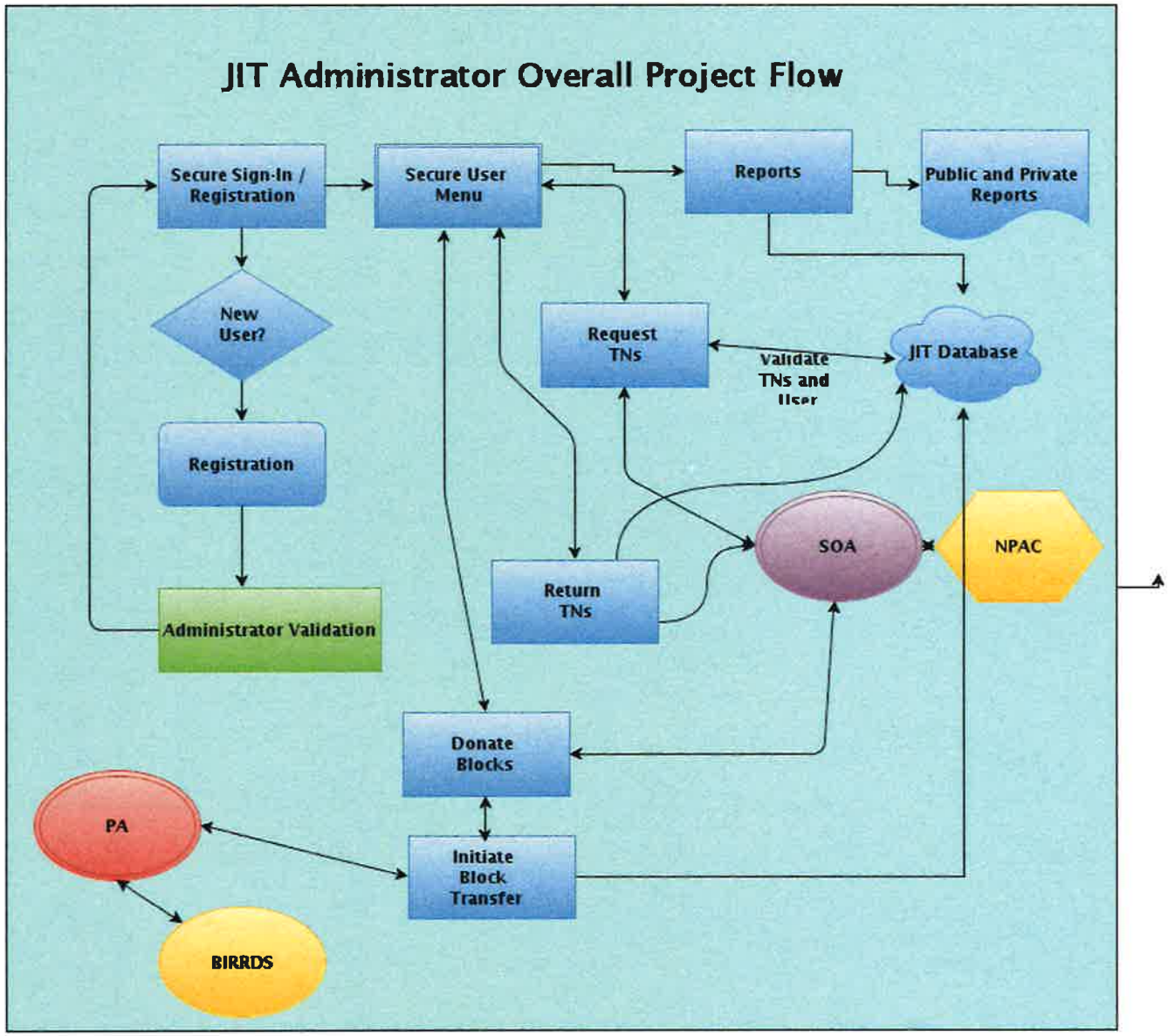

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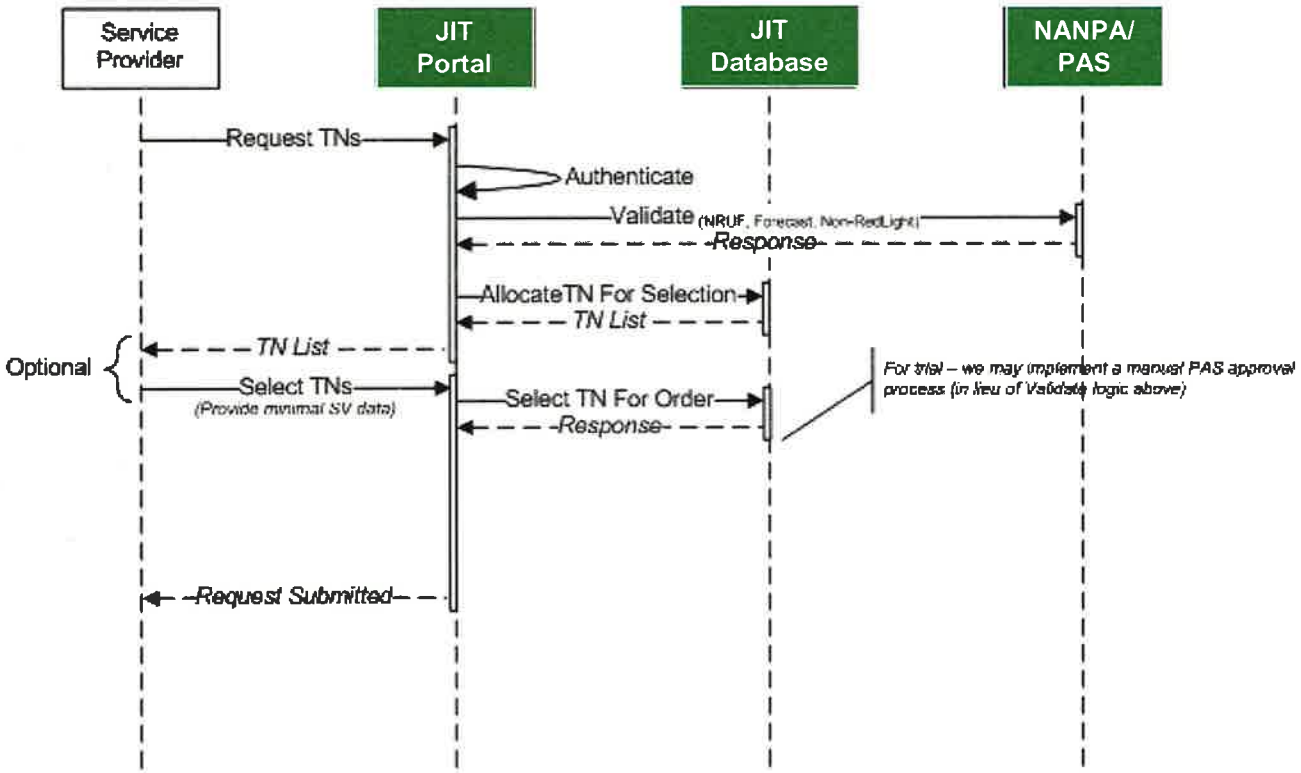
SAMPLE USE CASE: SERVICE PROVIDER REQUEST TNS



- Sample Use Case shows ITN-JIT Solution creating the ports on behalf of the Service Provider

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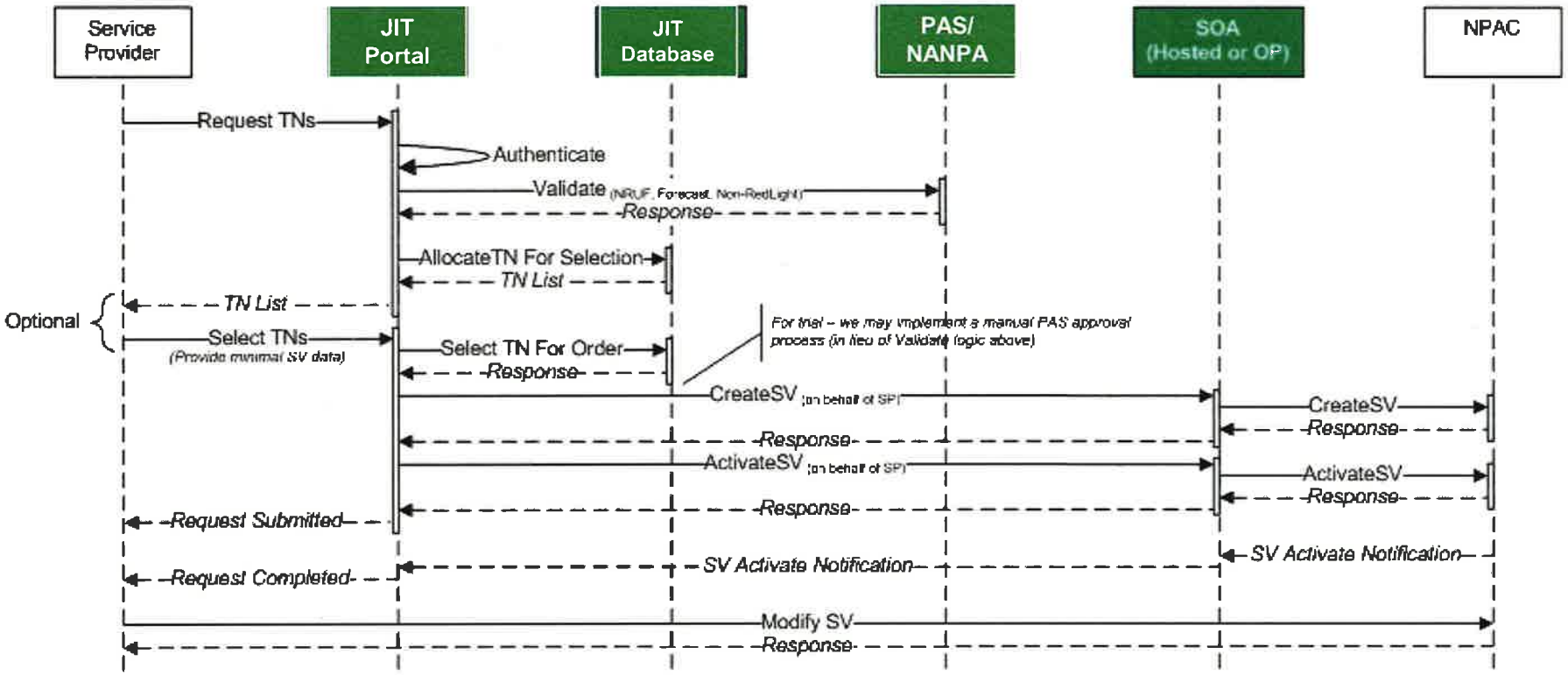

- Sample Use Case shows ITN-JIT Solution creating the ports on behalf of the Service Provider

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COSTS/CONSIDERATIONS ASSOCIATED WITH A TRIAL

- Regulatory Approvals
  - Requirements
  - Necessary waivers
  - Rollback plan
- Portal Development
  - GUI only
  - Trial not integrated with PAS
- Environment
  - Portal, JIT System, SOA
  - High Availability/Disaster Recovery capability
  - Backups
- Trial Participants' Documentation/Training

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CONSIDERATIONS

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QUESTIONS / CONCERNS

- For pooling trials, we had an FCC order (Pennsylvania Order) allowing them. What is going to allow this?
- For JIT we are not anticipating having MTE or forecast or utilization. What can we institute for checks for arbitrage between JIT and PAS?
  - Suggestion: JIT does not allow SP to maintain inventory. SP receives TNs when they certify number will be assigned to live customer within 5 days of assignment by JIT administrator.
- Does any part of this solution affect neutrality? No
- What guidelines changes will we need from INC for trial?
  - None
- Potential guideline waivers for trial
  - Trial administrator being block holder as non-TSP (in PAS, NAS, BIRRDS, NPAC)
  - Allow pseudo-LRN in NPAC to ensure no routing of misdialed calls to available TNs
  - Approval of JIT concept (assigning individual TNs)
  - Process for donating blocks >10% contaminated
  - Allow administrator to act on behalf of SPs for NPAC ports and for block transfers in the PA
  - Allow administrator's NPAC SOA to receive updates on any TNs in blocks assigned to the administrator from NPAC
  - Waive existing pooling rules that require forecasts and MTE for JIT numbers
  - Allow the JIT administrator to produce all NRUF utilization reports to the FCC and NANPA through a new process for JIT donated blocks

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NEXT STEPS

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