

Potential Assignment Methods for the Remaining 8YY numbers that Remain Unassigned from the 2019 Auction

Management of Available 833 Toll-Free Resources

Background

In an August 14, 2023 letter from Trent Harkrader, Chief of the FCC's (Commission) Wireline Competition Bureau to the Honorable Karen Charles, Chairwoman of the North American Numbering Council, the FCC established the new Toll Free: Utilization of Numbers (T-FUN) Working Group (WG) to further consider number assignment, auction, and valuation issues for certain toll-free resources.

On December 16, 2019, the Commission held an auction of 833 numbers. Of the 17,638 numbers included, 1,660¹ numbers received bids, and 15,978 numbers received no bids. The latter remained unassigned and held in unavailable status by Somos, the Toll-Free Number Administrator, at the request of the FCC.

Assignment

The Bureau directed the NANC, via its T-FUN WG, to assist in assessing the valuation and numbering assignments for the remaining selected NPA (numbering plan area) 833 toll-free numbers, and to submit a report addressing the remaining 15,978 numbers in the 833 toll-free NPA that were not assigned in the auction. The report is due by March 6, 2024.

The NANC T-FUN WG was tasked with the following actions in its report:

1. Review the 833 auction conclusions of the TFAM Working Group in its June 15, 2020 Report and the Wireline Competition Bureau's January 15, 2021 Auction Report in light of future numbering auctions; and
2. Consider and recommend potential assignment methods, including whether a first-come, first-served method of number distribution would be preferable to a numbering auction, for the remaining 833 numbers.²

Review History of NANC Toll-free Number Assignment work

This current assignment is the third time the FCC has assigned a NANC WG the task of analyzing the assignment of 8YY numbers (in this case, specifically 833 numbers) via a market-based (auction) mechanism. In a June 2018 Report by NANC to the Commission, the TFAM (Toll-Free Number Assignment) WG expressed the opinion that the rules and processes in place for 8YY number assignment

¹ 1,660 cited from the TFAM report; the Charge letter incorrectly cites the quantity as 1,659.

² FCC Charge Letter, August 14, 2023, retrieved from

https://www.fcc.gov/sites/default/files/TFUN%20WG%20Referral%20Letter%208%2014%2023%20PDF_0.pdf

prior to the introduction of the auction mechanism were working well and needed minimal adjustments. Nonetheless the TFAM WG proposed rule changes that would be necessary to make a market-based assignment mechanism (like the auction) work and identified potentially damaging implications from adopting a market-based mechanism. A second TFAM WG was later (2020) tasked with offering perspectives on the initial attempt at a market-based mechanism for 8YY number assignment (the December 2019 833 Auction) from the perspective of those parties desiring the numbers that were slated for assignment outside of the historic ‘first-come, first-served’ mechanism of the past.³ The results of that second analysis were the subject of the 2020 TFAM Report that this TFUN WG has been asked to review.

The queries to the 2020 TFAM WG were not directly aligned with the current inquiries. The second TFAM WG was assigned with evaluating the aftermath of the 2019 833 auction in terms of both the public/participant facing mechanics (i.e., auction education and outreach, the Application process, and up-front payments) and auction design⁴. Specifically, the 2020 TFAM WG was *not* tasked with making broader recommendations related to the future assignments of numbers – those remaining unassigned after the 833 auction or others – nor did it do so. Nonetheless, many of the findings, opinions and recommendations of that 2020 Report are pertinent to this 2023 assignment.

[Review of Perspectives on the December 2019 Auction of Numbers in the 833 Numbering Plan Area by NANC TFAM, dated June 15, 2020](#)

The 2020 TFAM WG documented that the 2019 833 auction yielded only \$285,075 in receipts⁵ and that no bids were received for more than 90% of the 833 numbers in the auction - meaning that no party valued any of those numbers enough to even bid \$1 (or to incur the costs associated with participating in an auction) to obtain it over any other number available for free from the traditional first-come, first-served assignment mechanism. It is these 15,978 toll-free numbers in the 833 NPA, for which no bids were received, that are the subject of this 2024 report. Following review of the results of the auction, the 2020 TFAM WG concluded that there was a “lack of demand for the toll-free numbers made available in the recent 833 Auction” and that the lack of bids for more than 90% of the numbers was not the result of the chosen auction mechanism, stating that “no auction type would have yielded an optimal pricing solution similar to what would have been achieved under competitive conditions with established demand.”⁶

³ Dec 16, 2019 Letter from Kris Monteith, Chief, Wireline Competition Bureau (WCB), FCC to Jennifer McKee, Chair, North American Numbering Council (NANC), (“TFAM working group Charge Letter”).

⁴ Success of the single round, sealed-bid Vickrey auction method used, suggested changes to that mechanism as well as alternative market-based mechanisms that might be used in the future.

⁵ *2020 Report* at 3. This may be an under-representation of the market value of the numbers that were awarded through the 2019 auction as a result of the peculiarities of the Vickrey auction mechanism. Had the “highest” bid price been used the total receipts for those same numbers would have been \$6,819,035 (a number that likely over-represents the market value of the numbers due to the same auction peculiarities).

⁶ *2020 Report* at 17-18

Table 1 - Count of results from the December 2019 Auction

	Quantity of numbers ⁷
Total 833 numbers available in Dec 2019 auction	17,638
Total 833 numbers receiving bids	1,660
833 numbers receiving a single bid	1,406
833 numbers receiving more than a single bid	254

The 2020 WG reported general satisfaction from both the staff of the Commission auction group and auction participants⁸ (and parties that registered for the auction and didn't end up participating) in terms of education, outreach, ease of the application process, and the up-front per number payment charge.⁹ The WG also found that the auction mechanism was "equitable"¹⁰. When it came to the important (and relevant to the current investigation) issue of the "utility" of the auction, it concluded that the utility was limited or non-existent for the vast majority of numbers auctioned.

Looking at "utility" to bidders using that word to mean "useful" and limiting that evaluation only to those that actually submitted bids in the December 2019 Vickrey auction, that auction resulted in the assignment of all numbers for which there was a bid to the highest bidder for that number – so it was a "useful" mechanism to those *winning* bidders.⁷ [footnote omitted] If the evaluation is expanded to include parties that did not bid on set-aside numbers (and therefore have not been awarded any of those numbers) the auction was not a "useful" assignment mechanism. Per input from those that participated in or considered participating in the auction, it appears that there were instances of customers that desired set-aside numbers that were unable to obtain them through the auction process and there were also parties that did not participate because the process of participating required more effort than the value that obtaining the numbers would have brought. For these parties there was no utility derived from the auction.

Evaluating utility within its meaning of the fitness for the purpose or worth of the approach to bidders it is even less clear that the chosen mechanism provided utility. Bidders were unable to obtain the bid-upon numbers or gain access for assignment to

⁷ 2020 Report at 20

⁸ 2020 Report at 7 – 15

⁹ 2020 Report at 14 – 15. While the up-front payment was not identified as having negatively impacted auction participation, changes to the up-front payment requirement of the 2019 auction were included as part of the final report recommendations. [id at 15] Should the Commission choose to implement an auction for the remainder 833 numbers – or any other toll-free numbers – this and other recommended changes would be pertinent.

¹⁰ 2020 Report at 21

any of the large grouping of 833 numbers held for the auction until after the auction was completed (more than 2 and ½ years after they first requested assignment).¹¹

Three recommendations for changes to the auction mechanism used in 2019 were made¹²:

- Use a more traditional first price single round, sealed-bid auction;
- Adopt principles to avoid zero price or unreasonably low-price assignments; and
- Return numbers with only a single bid back to the normal pool of available numbers.

Recommendations were also made for changes to the 2019 auction process¹³:

- Communicate to potential bidders when their application is sufficient or insufficient to be a qualified bidder;
- Allow parties requesting numbers to understand throughout the registration process who potentially approved bidders are so that they could move their request to a bidder that they know has been authorized; and
- Ensure that entire process – not just the auction mechanism itself – is efficient and timely.

While the 2020 Report made no recommendation pro or con relative to continued use of a market-based mechanism for the assignment of numbers,¹⁴ its conclusion that there was a “lack of demand for the toll-free numbers made available in the recent 833 Auction¹⁵” is pertinent to any evaluation of the use of a market-based mechanism for the assignment of *those* numbers.

T-FUN WG other research and considerations

The T-FUN WG considered several alternatives before reaching a consensus recommendation. The group explored and discussed such options as:

1. Spare all at once, no limits¹⁶
2. Spare all at once, with a 100 number limitation
3. Spare all at once, but charge Resp Org a fee for reserving one or more of the 15,978 833-NPA (numbering plan area) numbers
4. Hold an auction for the 15,978 numbers, with the following considerations and/or methodologies¹⁷
 - a. Stay with single-round sealed bid auction (i.e.; a straight auction, not Vickrey style)
 - b. Implement a minimum bid
 - c. Introduce rules in case of a tie

¹¹ 2020 Report at 19

¹² 2020 Report at 22 - 23

¹³ 2020 Report at 24 - 25

¹⁴ 2020 Report at 2 and 26

¹⁵ 2020 Report at 17

¹⁶ Release all of the 15,978 unassigned NPA-833 toll-free numbers at a designated date/time, with no additional restrictions or limitations (beyond the existing rules) on how many of the numbers a Resp Org may reserve.

¹⁷ Highest bidder pays their offered bid price instead of the second bid price

- d. Determine auction eligibility
- e. Require an auction deposit for participation
5. Preference ranking, with or without a fee to participate
6. Draft methodology (e.g.; fantasy football-like draft), with or without a fee to participate

The T-FUN WG also estimated the relative level of effort that each of these options would require, including such factors as estimated cost, difficulty to administer, etc.

Recommendation

The NANC T-FUN working group took into consideration the 2020 TFAM WG's Report and the Wireline Competition Bureau's Auction Report and its recommendation for the potential assignment method of the remaining 833-NPA numbers is described within this report.

The preferred recommendation of the T-FUN WG is to open assignment availability for the remaining 15,978 unassigned 833 NPA toll-free numbers based on a first-come, first-served method of number distribution, with no reservation restrictions. These TFNs would be released at the usual toll-free sparing hour (midnight) on a pre-determined date. The Toll-Free Numbering Administrator (TFNA) would publicize the date in advance.

The T-FUN WG is aware that, by not having reservation restrictions, it will be possible for one or more Resp Orgs to create a process by which they could possibly reserve most or all of the remaining toll-free numbers, thereby creating the perception that the number distribution method recommendation was not fair and equitable. However, the T-FUN WG considered and recognized that these remaining toll-free numbers have already been made available to the general public through the previous auction event held in 2019, thus there has already been a fair and equitable opportunity for subscribers to attempt to reserve these numbers.

Alternative Acceptable Action

An alternative recommendation is to open assignment availability for the remaining 15,978 unassigned 833 NPA toll-free numbers based on a first-come, first-served method of number distribution, but implementing reservation quantity restrictions.

An acceptable alternative proposal would place a 100 toll-free number limitation per Resp Org, with all affiliates counted as a single Resp Org, for the first four (4) hours of the release event of the numbers. It is preferable to have such events at a time when there is less activity in the Toll-Free Numbering Registry, such as starting at 12:00 pm US-Eastern time on a Saturday (exact date to be determined), and from noon until 4:00 pm US-Eastern time, each entity would be limited to the reservation of a maximum of 100 toll-free numbers. It was also noted that there will be no method for the TFNA to enforce the 100 number limit for just the 15,978 numbers in question; the limitation would apply to all numbers that an entity attempts to reserve in the 833 NPA during the event. After 4:00pm US-Eastern time, the limitation would be lifted, and any unreserved numbers from the list of 15,978 numbers will become available on a first-come, first served basis using the TFNA's normal processes and rules.

This alternative is acknowledged to have more overhead, leading to a slightly higher cost when compared to the preferred T-FUN WG's recommendation. The TFNA would be required to expend more personnel labor costs in order to manage and execute the 4-hour event, beyond their normal expenditure. This special event may also delay legitimate new toll-free subscribers from being able to reserve a new toll-free number in the 833 NPA that is not one of the 15,978 numbers, if a Resp Org Entity reaches their 100 number limitation early in the 4-hour event window.

The T-FUN WG does not recommend any of the other options described in the previous section titled "T-FUN WG other research and considerations".

Conclusion

The members of the T-FUN WG are very appreciative for the opportunity to evaluate and recommend a course of action for the NANC committee. The T-FUN WG is grateful for the opportunity to share its insights regarding the remaining 833 toll-free numbers with the NANC. We remain committed to offering clarity and addressing any additional inquiries that may arise. We aim to contribute valuable perspectives and foster an informed dialogue.