

February 4, 2015

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, NW
Washington, DC 20554

Re: *Telephone Number Portability, et al.*, CC Docket No. 95-116, WC Docket Nos. 07-149 & 09-109

Dear Ms. Dortch:

Telcordia Technologies, Inc., d/b/a iconectiv (“Telcordia”) hereby responds to the “updated” report of Hal Singer filed by Neustar, Inc. (“Neustar”).¹ Dr. Singer’s “updated” analysis suffers from exactly the same problems as his prior reports.² His conclusions amount to little more than *ipse dixit* because Singer continues to fail to disclose the details of his methodology and calculations; thus, it is difficult to analyze his “model” or fully respond to his assertions. Nevertheless, his “model” appears to consist of little more than unsupported and unsupportable assumptions—including the incorrect assumption that Telcordia will make numerous errors because of a supposed lack of experience with the NPAC. Moreover, in performing his calculations, Dr. Singer repeatedly relies on assumed “error rates” that continue to appear to have been pulled from thin air.

The vast majority of the costs that Singer attributes to the transition—about 75% of his “updated” total—relate to “early-stage operations errors.” These are the errors that Singer assumes that Telcordia will make because of its supposed “inexperience with porting requests, particularly mass updates.”³ As Telcordia pointed out previously, there is no basis for such an assumption: given Telcordia’s long experience with number portability, which includes an understanding of mass updates, it may well be that Telcordia would have a *lower* error rate,

¹ Hal J. Singer, Economists Incorporated, *Addendum to “Estimating the Costs Associated with a Change in Local Number Portability Administration”* (Jan. 26, 2015) (“Singer Update”), attached to Letter from Aaron Panner, Counsel for Neustar, Inc., to Marlene Dortch, Secretary, FCC, CC Docket No. 95-116, WC Docket No. 09-109 (filed Jan. 26, 2015).

² See, e.g., Letter from John T. Nakahata, Counsel for Telcordia Technologies, Inc., d/b/a iconectiv, to Marlene Dortch, Secretary, FCC, CC Docket No. 95-116, WC Docket Nos. 07-149 & 09-109 (filed Oct. 27, 2014) (“Telcordia Oct. 27, 2014 *Ex Parte*”).

³ Singer Update at 2.

which, by Singer's logic, would save the industry hundreds of millions lost because of Neustar's handling of the transactions.⁴

The assumed error rates that Singer used in calculating the costs of these supposed errors are also unsupported. In his initial paper, Singer explained that to calculate the costs of early-stage operation errors, he had simply assumed that Telcordia would make mistakes at a rate 0.81% higher than Neustar's rate—apparently based solely on Neustar's unsupported assertion that it made more errors when the NPAC was new than it makes today. But even if Neustar makes fewer errors today than when the NPAC was new, that does not suggest that these errors were due to inexperience, nor does it imply that Telcordia would repeat those same errors: when Neustar first began operating the NPAC, the requirements were not well defined and were quickly evolving, and no one had experience with the requirements. Today, by contrast, the requirements are well defined, and Telcordia has vast experience with them. Moreover, even if Telcordia did make additional errors, Singer provided no justification for the magnitude of his assumed rate.

In his "update," Dr. Singer merely confirms the lack of a foundation for these assumptions. In attempting to justify his assumed 0.81% error rate, Singer admits that he relied on Neustar for the assumption, stating that the rate "was developed in conjunction with systems experts inside of Neustar." In a further attempt to justify this assumption, he asserts that Neustar's current error rates range from 0.25% to 1.5% for certain categories of transaction with an unspecified base and without any indication of how or why these data points can be generalized to extrapolate a system-wide error rate. But Neustar's *current* error rates are irrelevant to the question of whether Telcordia's error rates will be higher than Neustar's current error rate. Moreover, Singer continues to provide no justification for assuming that 63% of Telcordia's purported "extra" errors will affect customers.

An additional 20% of Singer's cost estimate relates to supposed "[d]atabase transition" errors, which he previously described as "errors introduced during transition when NPAC records are propagated to the carriers,"⁵ including "the misinterpretation of database fields and database structure by software or personnel."⁶ As Telcordia already pointed out, this assumption is unrealistic because Telcordia *already* interacts with the data in the NPAC through its Service Order Activation and Local Service Management System services. If Telcordia did not understand the data in the NPAC database, this would result in errors today which no one claims are occurring.

In calculating the supposed costs of database-transition errors, Singer continues to offer no credible support for his assertions that database-transition errors will occur at a rate of 0.25%

⁴ Telcordia Oct. 27, 2014 *Ex Parte* at 7.

⁵ Singer Update at 3; Hal J. Singer, *Estimating the Costs Associated with a Change in Local Number Portability Administration* at 2, available at <http://www.ei.com/downloadables/SingerCarrierTransition.pdf>. ("Singer First Report").

⁶ Singer First Report at 2.

and that 19% of those errors would affect customers. In his initial report, Dr. Singer attempted to justify the 0.25% assumption because it was “similar to those indicated by Alcatel and Lucent in their recent study.”⁷ But after Telcordia’s expert pointed out that the study referenced by Dr. Singer involved errors *latent in a database* rather than errors caused by a transition, Dr. Singer disclaimed *any* reliance on the Alcatel study for this assumption.⁸ As a result, Dr. Singer had provided *no basis* for that assumption.

In his update, Dr. Singer now proffers new justifications for his assumed numbers, but these *post hoc* rationalizations do not support his assumptions:

- Dr. Singer first claims that his assumed 0.25% error rate was based “in part” on a study by “the University of Michigan” that Dr. Singer failed to identify.⁹ This is more *ipse dixit*, and the Commission should disregard it.
- Dr. Singer next relies on an uncited blog post¹⁰ by a person who identifies himself only as “Martin,”¹¹ but who appears to be a project manager in the Netherlands.¹² The blog post describes a data-migration project in which the goal was to transfer “at least 92% of the” records without fault, but the team performing the migration exceeded this goal and achieved 99.2% accuracy.¹³ Of course, this does not suggest that 99.2% accuracy is the maximum that could have been achieved if higher accuracy were important. Moreover, the data migration in the blog post was nothing like the transition at issue here: it involved a transition from one application to a completely new application that used different data structures; the new application had not even been finished; it was difficult to check for errors because the new application and old application were designed to work differently because of new regulations; and the client “obviously had no understanding of table structures and

⁷ *Id.*

⁸ Hal J. Singer, Economists Incorporated, *Analysis of Technical Report by Professor Burger* (Sep. 16, 2014) at 2, *attached to* Letter from Aaron Panner, Counsel for Neustar, Inc., to Marlene Dortch, Secretary, FCC, CC Docket No. 95-116, WC Docket No. 09-109 (filed Sept. 23, 2014) (“Singer Analysis of Burger”).

⁹ Singer Update at 2 n.2.

¹⁰ *Id.* (apparently referencing Martin, *Better IT Results with Lean Six Sigma DMAIC, a Data Migration Example*, (Nov. 17, 2011), <http://www.borselaer.org/index.php/2011/11/better-it-results-with-lean-six-sigma-dmaic-a-data-migration-example/> (“Martin Blog Post”).

¹¹ Martin, *About*, <http://www.borselaer.org/index.php/about/> (last visited Feb. 4, 2015).

¹² LinkedIn, *Martin van Borselaer*, <https://nl.linkedin.com/in/martinvanborselaer> (last visited Feb. 4, 2015).

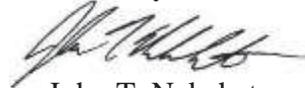
¹³ Martin Blog Post.

data types,” and many errors occurred because “the data in the old application was wrong.”¹⁴

- Dr. Singer also claims to have “vetted” his assumption with “experts inside and outside of Neustar,” but the Commission ought not to accept secondhand *ipse dixit* from unidentified purported “systems experts.”¹⁵
- Contrary to his prior statement, Dr. Singer now asserts that he actually *does* rely on the Alcatel-Lucent study for a “qualitative description of errors relating to telephony database migrations.”¹⁶ But as Telcordia previously pointed out, the Alcatel-Lucent study involves errors latent in the database,¹⁷ and in any case, its “qualitative description of errors” does not support Dr. Singer’s *quantitative* assumption of an error rate of 0.25%.

Finally, Dr. Singer’s “update” includes estimates related to “[i]mpacted customers.”¹⁸ Although Dr. Singer has provided no explanation for how he calculated these numbers, they appear to rely on the same assumptions discussed above, and the Commission should disregard them for the same reasons.

Sincerely,



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¹⁴ *Id.*

¹⁵ Singer Update at 2 n.2.

¹⁶ *Id.*

¹⁷ Telcordia Oct. 27, 2014 *Ex Parte* at 7.

¹⁸ Singer Update at 3.