

**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Numbering Resource Optimization)	
)	CC Docket No. 99-200
Petition of the California Public Utilities)	
Commission and of the People of the State)	
Of California for Authority to Implement)	
Specialized Overlay Area Codes)	

**COMMENTS OF
SBC COMMUNICATIONS INC.**

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November 17, 2003

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SUMMARY

Petitioner's request for authority to implement two specialized overlays in California should be denied.

First, Petitioner has failed to meet its burden under *NRO III* to justify this request for authority. Indeed, Petitioner shows in most cases that its scheme violates both the letter and the spirit behind the factors the FCC established for judging whether a state commission should be granted this extraordinary authority. Among its many short-comings, Petitioner's plan seeks to include pooling and geographic-based services (*i.e.*, plain, every-day business lines) in the SOs.

Second, Petitioner has not shown that its plan is workable or that it results in any net gains in numbering resources. Absent from the Petition is any evidence as to the scope of the alleged benefits to those who will be asked to sacrifice much — the consumers, businesses, and carriers of the State of California. Much of the benefit will be illusory, as little if any real numbering resources will be created to help carriers serve their customers. What's more, nothing in Petitioner's plan will eliminate the need to provide area code relief to the area codes most in need of relief. Consequently, the consumers in those codes will be asked to pay twice for this single plan.

Third, Petitioner's plan is overly complex, expensive, and risky. The complexity alone renders this plan practically worthless. It will take years to just plan implementation and years after that to try to implement it. By the time the plan is implemented, if ever, the numbering resource situation in California could look very different from today. Moreover, SOs of this magnitude have not been implemented before. Carriers recognize that it will take massive adjustments to existing systems in order to achieve anything like what Petitioner claims it envisions. Such a massive undertaking is expensive and jeopardizes the reliability of the public switched telephone network. The cost-benefit analysis is clear: a massive restructuring of the PSTN and associated systems, with its attendant costs and risks, significantly outweighs possible marginal benefits in the distant future.

SBC believes Petitioner's plan violates the tenets of *NRO III*, is unworkable and needlessly expensive and risky, and shuns simpler and safer mechanisms that have already been successfully implemented in other jurisdictions. SBC urges the FCC to deny this Petition.

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SBC Communications Inc. (SBC), on behalf of its telecommunications carrier affiliates, files these comments in response to the Wireline Competition Bureau’s Public Notice of October 16, 2003.¹

Introduction

After even the most cursory reading of the FCC’s numbering orders, one must acknowledge that the FCC considers Specialized Overlays (SOs) as the least favorable way of achieving number resource optimization and area code relief. Indeed, the FCC has held that state commissions “seeking to implement a SO should discuss why numbering resource optimization benefits of the proposed SO would be superior to implementation of an all-services overlay.”² In its Petition, the California Commission (Petitioner) has not even attempted to explain how its overly complicated and expensive proposed SOs are superior to simple all-services overlays. It has not done this, because it cannot. The whole point of California’s elaborate and expensive Rube Goldberg scheme is not area code relief or number optimization, but rather it is to avoid ten-digit dialing, which an all-services overlay would require. Rather than address the issues of area code exhaustion and number optimization in a simple, direct, and straight-forward manner, Petitioner asks that the FCC force consumers and carriers alike to be twisted like pretzels to

¹ *Numbering Resource Optimization*, CC Docket No. 99-200, Public Notice, DA 03-3262 (rel. Oct. 16, 2003) (Public Notice).

² *Numbering Resource Optimization; etc.*, CC Docket No. 99-200, Third Report and Order and Second Order on Reconsideration in CC Docket no. 96-98 and CC Docket No. 99-200, 17 FCC Red 252 ¶ 81 (2001) (*NRO III*).

accommodate this scheme and to incur needless expense and trouble simply to avoid ten-digit dialing.

In addition to being an unnecessarily complex and expensive mechanism for avoiding ten-digit dialing, Petitioner has not shown that its plan will result in any real number resource optimization. Approval of such a plan ought to include the balancing of the known costs with the known benefits. Here, as Petitioner cannot show any real net gain in numbering resources, the known costs are even more unbearable.

By memorandum dated September 30, 2003, Petitioner's staff sought to compare the benefits of the SO proposal with its costs. *See* Attachment A. In the memorandum, staff identified two advantages and over 17 disadvantages. These disadvantages included:

- The monetary costs to carriers to implement the plan would be “substantial.”
- The proposal “pose[s] a number of significant technical difficulties.”
- The proposal will not eliminate the need to provide area code relief for NPAs 310 and 909.
- The proposal will increase costs to businesses with 50 or more lines.
- The proposal creates the potential for many numbers to be stranded.
- There is no incentive for business customers to volunteer information needed to implement the plan.
- There may be problems associated with telephone number porting and associated systems.
- Unanticipated technical constraints may arise.

In brief, the “cons” significantly outweigh the “pros” for this plan. It amounts to an enormous, expensive, and dangerous crap shoot with the numbering resources of the State of California.

For these reasons, and for the reasons stated below, the FCC should deny this petition.

Argument and Authorities

In *NRO III*, the FCC reconsidered its ban on SOs. The FCC decided to entertain state-commission requests for authority to implement SOs on a case-by-case basis.³ As part of its decision, the FCC set out specific factors it asked applying state commissions to address in any

³ *Id.* at ¶ 79.

such requests.⁴ SBC will examine Petitioner’s attempts to address these factors individually and in detail below. In sum, however, Petitioner has failed to adequately address the FCC’s concerns — raising more questions than it has answered — and failed to meet its burden of proof to justify granting this extraordinary request for authority.

A. Technologies and Services

In *NRO III*, the FCC advised state commissions proposing SOs to provide “specific information on which technologies and services will be placed in any proposed SO.”⁵ The FCC’s stated preference for any such SO is to include both non-pooling and non-geographic-based service providers. By “non-geographic-based services” the FCC meant services like “unified messaging services and automobile-based services such as OnStar [whose c]ustomers . . . are likely unaware of, or have no preference for, where their number comes from.”⁶

The FCC’s preference for placing non-pooling and non-geographic-based service providers in SOs addresses the FCC’s concerns about the competitive effects of banishing certain providers to the equivalent of numbering Siberia.⁷ Any reluctance on the part of the FCC to embrace SOs was originally overcome by a crisis in numbering resources and by the “proliferation of new telecommunications services that use vast amounts of numbering resources *but do not necessarily need numbering resources from a particular geographic area.*”⁸ SBC believes that, due to the FCC’s efforts to address number resource optimization, the crisis in numbering resources no longer exists as it did in the 1999-2000 time frame.⁹ Regardless, even if there were “exigent numbering shortages,” it would no more justify today running rough-shod over the competitive concerns the FCC articulated in 2000 than it did back then.

⁴ *Id.* at ¶ 81.

⁵ *Id.* at ¶ 82.

⁶ *Id.* at n.201.

⁷ *NRO III* at ¶ 71 (“Despite an apparent shift in views on the potential discriminatory effects of SOs, we continue to be concerned that placing specific services and technologies in SOs could have an adverse impact on the affected customers and service providers.”)

⁸ *Id.* at ¶ 72 (emphasis supplied).

⁹ By this SBC does not mean to suggest that certain area codes are not in need of exhaustion relief. Rather SBC means to suggest that the overall life of the NANP has been lengthened and numbering resources can be made available to service providers.

In this proceeding, Petitioner proposes to include in the new SOs “[numbers] used for services such as On-Star, E-fax, automatic teller machines (ATMs), point-of-sales, *as well as numbers that would be assigned to modems or fax machines.*”¹⁰ Putting aside whether Petitioner’s open-ended reference to “numbers such as” constitutes “specific information,” SBC notes that Petitioner seeks to include pooling and geographic-based service providers in its proposed SOs. Specifically, Petitioner seeks to include telephone numbers serving modems and fax machines of “businesses with fifty or more access lines for the serving carrier.”¹¹ By “serving carrier,” Petitioner means incumbent and competitive LECs. Incumbent and competitive LECs are pooling and geographic-based service providers. In short, Petitioner’s plan to include pooling and geographic-based service providers in the SOs alone makes the plan unacceptable.

Not only are the carriers that provide the modem and fax business lines pooling and geographic-based service providers, the provisioning of such lines itself is not a separate, segregative service. Such lines are sold to business customers as simple business lines. Carriers, like SBC Pacific, do not have any processes for distinguishing from among the ways that business customers can use these lines. At present, Customers are free to use a line for regular voice services one day and then use the same line for a fax machine or modem the next. Under Petitioner’s proposal, carriers will have an on-going obligation to account for these numbers on a number-by-number basis. The time and costs involved in trying to ferret out and distinguish these uses will be astronomical.

Petitioner also seeks to include “dial-up numbers for Internet service providers (ISPs) such as America OnLine into the SOs.” SBC submits that these numbers are also geographic. ISPs use the area code designation (NPA) to associate the dial-in number with the customer. Under the Petitioner’s plan, these dial-in numbers would all be in the SOs, meaning that

¹⁰ Petition, p. 2 (emphasis supplied).

¹¹ Petition, pp. 2-3.

customers would have no idea which dial-in number they ought to select to have local access to the ISPs router.¹²

California commission appears to recognize some of these facts and yet blithely dismisses them.¹³ As discussed below, Petitioner seeks not only to try to segregate business lines on a going-forward basis, but also to “take back” business lines already in use for fax machines and modems. On a going-forward basis, this would require carriers to change their marketing and provisioning systems and forms in an effort to get businesses to cooperate in identifying the uses to which they will put individual telephone lines. For existing business lines, this will require polling business customers to have them self-identify the telephone numbers that will have to be reassigned to the SOs. Even if carriers going forward spent the money and re-directed their resources to adequately “modify their billing, provisioning and ordering data bases and systems in order to track these services,”¹⁴ there is simply no way for the carriers to police this proposal. Customers will be ordering business lines and using them as they see fit, and, because they use geographically sensitive numbers, they may seek to circumvent the proposed SOs by misrepresenting how lines will be used or by simply not reporting their usage at all.

The question of enforcement is critical to the alleged effectiveness of the proposal. SBC notes that Petitioner has no jurisdiction to compel compliance on the part of customers. Consequently, Petitioner would have to look to carriers to “enforce” the distribution of these numbers. Yet, as discussed above, given the nature of these services (plain, every-day business lines), the carriers are themselves unable to police this proposal. Carriers would be justified in fearing enforcement actions by Petitioner even though carriers would be powerless to ensure customer compliance.

¹² Even if ISPs were to reduce the number of dial-in numbers to two (one for each SO), there would still be issues. Would the same number be a local call for the ISP’s customers in Eureka as it might be for its customers in San Francisco? Would there be capacity problems with routing all the dial-in Internet access calls, with their long hold times, to one switch?

¹³ Petition, pp. 3-4.

¹⁴ Petition, p. 3. Petitioner’s use of the word “services” is misleading. SBC asserts that these are not separate services. The lines are merely business lines that the customer may use for voice or fax or modems.

Petitioner’s impliedly admits that both customer and carriers will be hit with costs above and beyond those incurred in creating a simple all-services overlay. This is proof that Petitioner cannot “demonstrate that the benefits will outweigh the costs of implementing the SO.”¹⁵ Indeed, the benefits are hard to measure when Petitioner cannot even represent the extent to which the segregation of these “services” will free up numbering resources.¹⁶ In brief, this Commission should reject this proposed request because, among other things, Petitioner seeks to include in the SOs pooling and geographic-based carriers and numbers.

B. Geographic Area

In its pleading, Petitioner requests permission to create two super SOs, which would cover the entire state (*i.e.*, all 25 of California’s NPAs). Admittedly, the FCC has opined that “SOs that cover more than one area code are superior from a numbering resource optimization perspective because they would reduce the demand for numbers in multiple area codes, and the increased number of subscribers included in the SO would lead to better utilization of numbering resources in the SO NPA.”¹⁷ Assuming for the sake of argument that this would be the case here — which SBC does in fact dispute — SBC notes that there is a serious countervailing factor that, if taken into consideration, would militate against granting this request; that is, the complexity of the proposal.

Given the scale of the two overlays — the entire State of California — it is unclear that carriers would be able to put it into effect any time soon. Overlays of this magnitude will require extensive network changes and associated testing. More than just time, this means additional, unnecessary expense. Such extreme changes may also imperil network reliability, including 911 services. What is more, the SOs would provide little or no area code relief to the NPAs in most risk of exhaustion and potentially provide additional, albeit unnecessary, relief to NPAs that are

¹⁵ *NRO III* at ¶ 80.

¹⁶ Petition, p. 3 (“At this time, the industry can neither estimate the current level nor the future demand of numbers used for these reasons [business faxes and modems]. Carriers assert that they would need to individually survey their customers to determine the extent of usage and identify the individual numbers assigned to specialized overlay type services.”).

¹⁷ *NRO III* at ¶ 83.

not at risk at all. The end result could be an inefficient use of numbering resources, including the unintentional stranding of numbering resources.

SBC notes that the California plan provides no relief where it is needed most — in the 310 and 909 area codes.¹⁸ Both of these NPAs are projected to exhaust reasonably soon. Indeed, Petitioner’s plan is so complicated and convoluted that it may take two or more years to provide just a timeline for implementation. Based on SBC’s experience in implementing past area code relief plans in California, SBC notes that it normally takes the industry on the average 12 months to complete one relief project. It is only reasonable to presume that Petitioner’s proposal, which involves many unique and untested technical challenges and the addition of new facilities and operating procedures, would take almost a year for each underlying area code affected. What’s more, given each carrier’s human resource limitations, especially expert resource limitations, it is doubtful that planning and implementation of the two proposed SOs could be undertaken simultaneously. Today, affected carriers cannot even guarantee that such a proposal can ever be implemented, much less implemented within a particular time frame.

C. Transitional SOs/Permanent SOs

The FCC has stated that it prefers permanent SOs that include non-geographic-based services because “they tend to preserve geographic identity.”¹⁹ Petitioner’s contention that its proposed SOs would be “comprise[d] primarily of transparent or non-geographic based *numbers*,

¹⁸ Last August, Petitioner received permission to increase the number pooling contamination threshold to 25 percent in those two NPAs. *Numbering Resource Optimization*, CC Docket No. 99-200, Order, 18 FCC Rcd 16860 (2003). In granting this waiver, the FCC emphasized that the FCC was not retreating from its long-held position that “numbering resource optimization measures should not be used as a substitute for area code relief.” *Id.* at ¶ 11. And the FCC noted its expectation “that the California Commission will, concurrent with this limited waiver, undertake the requisite proceedings or otherwise proceed with adopting an area code relief plan where it has held such proceedings.” *Id.* at ¶ 18. On October 16, 2003, the California Commission postponed area code relief for NPA 310 after it “determined that instead of splitting the area code, it should closely monitor the additional need for telephone numbers in the 310 area codes during the next six months to assure adequate telephone number supplies.” NEWS RELEASE, California Public Utilities Commission, Docket No. R.95-04-043 (Oct. 16, 2003).

¹⁹ *NRO III* at ¶ 84.

with the exception of cellular service” is incorrect.²⁰ As shown above, Petitioner wants to include regular business lines in the SOs. These lines are neither transparent or non-geographic-based. What’s more, they do not constitute separate services. Petitioner is proposing a scheme that is unnecessarily expensive, complicated, time-consuming, and impossible to manage. SBC opposes trying to segregate regular business lines into any sort of overlay — permanent or transitional, technology-specific or “non-geographic-based.”

D. Take-Backs

Petitioner’s discussion of the take-back issue is indicative of the problems with the proposal. While Petitioner’s proposal on take-backs is vague, it is clear enough to reveal that the proposal is unnecessarily complex, time consuming, and expensive. Moreover, Petitioner continues to try to hide the fact that its intent is to include geographically-based numbers, *i.e.*, regular business lines.

To be blunt, the FCC is dubious at best about the wisdom of take-backs involving geographically-based numbers:

[T]ake-backs result in significant cost and inconvenience to those customers and their service providers that are required to relinquish their existing numbers and use numbering resources in the SO NPA. If take-backs were imposed in the context of a wireless services technology-specific overlay, for example, the costs would be particularly significant due to the large and rapidly growing number of wireless subscribers, particularly in major markets. We acknowledge, therefore, that take-backs have significant drawbacks and costs, which need to be considered in determining whether a SO should include take-backs.²¹

The costs imposed in the take-back of wireless numbers would pale in comparison to the costs and inconvenience imposed by taking back regular, wireline business numbers. Yet, this is what the Petitioner is proposing. The FCC has stated that it would in all likelihood oppose such a request.²²

²⁰ Petition, p. 5 (emphasis supplied). The Petitioner keeps referring to “numbers” to hide the fact that the services it wants to include in the proposed SOs are regular, run-of-the-mill business lines.

²¹ *NRO III* at ¶ 88.

²² *Id.* at ¶ 90 (“Specifically, we would likely favor service-specific overlays that include take-backs of non-geographic-based numbers, but we would likely oppose technology-specific overlays that would include take-backs of numbers that are geographically sensitive.”)

In a surprising moment of candor (albeit muted), Petitioner admits that the industry has expressed grave reservations about this scheme, in general, and the idea of take-backs, specifically:

The industry has informed the CPUC staff that take-backs pose a number of technical challenges. For instance, they state that they would first need to identify which of their numbers are transparent or non-geographic-based numbers. They would then need to reprogram and change each of their customers' phone numbers. They also state that take-backs may be very costly. Given these challenges, if granted authority, the CPUC plans to work closely with the industry to determine if and how take-backs should be implemented.²³

Presumably, Petitioner made this frank confession because it knew that, if it did not, the industry would. At the end of the day, however, Petitioner is merely seeking a blank check on take-backs and has provided none of the details the FCC has insisted it would need to perform the costs-benefits analysis of the proposal:

In their petitions, state commissions seeking to use take-backs would have to specifically demonstrate that the negative effects of take-backs will be mitigated by the benefits in the particular area by showing, for example, that: (1) consumers, particularly subscribers that would be required to relinquish their telephone numbers, support such a measure; (2) the state will provide incentives for providers and their current customers to relinquish their numbers in the underlying area code; and (3) a phased-in approach will help ease the cost burden on customers and service providers.²⁴

Petition has not even tried to make this showing. Consequently, this request should be denied.

E. Ten-Digit Dialing

Petitioner seeks authority to implement a permanent seven-digit dialing requirement in the proposed SOs.²⁵ Calls between the SOs and the other NPAs — including the underlying NPAs — would involve 11-digit dialing (1+NPA+NXX-XXXX).²⁶ Petitioner argues that its request is in accordance with California Public Utilities Code § 7943(b), which states in part:

²³ Petition, p. 6. SBC notes that “the industry” would not have referred to the numbers in question as being “transparent or non-geographic-based.” That is Petitioner’s particular spin on what the industry told Petitioner’s staff. Being regular business lines, these numbers are geographic-based.

²⁴ *NRO III* at ¶ 90.

²⁵ Petition, p. 7.

²⁶ Petition, p. 9.

(b) On or before March 31, 2001, the commission shall request that the Federal Communications Commission grant authority for the commission to order telephone corporations to assign telephone numbers *dedicated to wireless and data usage* to a separate area code and to permit seven digit dialing within that technology-specific area code and the underlying preexisting area code or codes.²⁷

Petitioner also argues that the FCC's reasons for favoring ten-digit dialing in overlay situations are not applicable to this proposal.²⁸

The FCC has made it clear that it "favor[s] SO proposals that include ten-digit dialing in the SO NPA as well as the underlying area code, in the same manner that ten-digit dialing is required when all-services overlays are implemented . . . [and that m]andatory ten-digit dialing, . . . , minimizes anti-competitive effects due to dialing disparities, which, in turn, avoids customer confusion."²⁹ These concerns are still applicable to Petitioner's request for a permanent waiver of the ten-digit dialing requirement.

Under the proposal, customer confusion will reign, because customers dialing a business's voice line in the underlying NPA would dial seven digits (NXX-XXXX); yet, the same customers sending the same business a fax would need to dial 11 digits (1+NPA-NXX-XXXX). Said another way, SBC's business customers will have business lines used for voice in one area code and business lines used for fax machines in another, and customers will be befuddled about the dialing pattern needed to reach these business customers. Customers will be totally confused, not knowing when an 11-digit number is a toll call and when it is not. What is more, business customers wanting to change a business line from modem or fax use to voice will not be free to do so without either direct carrier involvement or facing 11-digit dialing for that voice line.

In spite of Petitioner's arguments, section 7943(b) of the Public Utilities Code does not appear to require placing fax and modem lines into the separate SOs. This is so, because these

²⁷ Cal. Pub. Util. Code § 7943(b) (emphasis supplied).

²⁸ Petition, p. 9. ("California telecommunications market has changed substantially since the Commission adopted its ten-digit dialing requirement. Most of the carriers in California have been in business for some years and hold many numbers in existing NPAs. The FCC's concern that only new competitors would be required to take numbers in an overlay, . . . , has been mitigated just by the passage of time and competitor acquisition of number holding.")

²⁹ *NRO III* at ¶ 92.

business lines are not “dedicated to . . . data usage.” These are merely regular business lines that customers can use for various purposes, including data. They are in no sense dedicated to data as opposed to voice. Clearly the California legislature had segregative services in minds when drafting this section. The way that a business customer may use a regular business line will not create a segregative service. Moreover, Petitioner’s proposal runs afoul of other Public Utility Code’s directions, such as “consider[ing] the cost effectiveness” of the plan³⁰ and “creat[ing] a new area code. . . in a way that creates the least inconvenience for customers.”³¹

F. Rationing

Petitioner proposes to continue rationing.³² SBC speculates that Petitioner is choosing to continue rationing because it has no faith that its overly expensive and complex plan will actually result in any net gains in numbering resources. Petitioner’s plan to continue rationing is contrary to the FCC’s direction that “any SO that achieves the purposes for which it is implemented (that is, the availability of numbering resources is increased for all carriers), should not need to be subject to rationing . . . [consequently] neither the SO NPA nor the underlying area code(s) should be subject to rationing.”³³ SBC sees no reason to approve a SO plan that will not alleviate the underlying cause of rationing.

G. Thousands-Block Number Pooling

While SBC disagrees with Petitioner’s assessment that the establishment of the proposed SOs will prolong the lives of existing NPAs, SBC does not see thousands-block number pooling as a barrier to the creation of SOs generally.

Conclusion

Petitioner’s request ought to be denied because Petitioner has not sufficiently addressed the factors set out by the FCC in *NRO III* for granting authority to implement SOs and has not

³⁰ Cal. Pub. Util. Code § 7935(a).

³¹ Cal. Pub. Util. Code § 7943(a).

³² Petition, p. 9.

³³ *NRO III* at ¶ 93.

shown that its proposal will in fact create any net gains in numbering resources. What's more, Petitioner's plan is hopelessly expensive, complex, and unreliable.

Beyond not satisfying all the factors set out in *NRO III*, in certain respects, Petitioner has shown that its proposed SOs are in fact contrary to the FCC standards enunciated in *NRO III*. In almost every category, Petitioner's proposed plan runs afoul of the FCC's limitations on the use of SOs:

- Petitioner seeks to place pooling/geographic-based service providers in the SOs.
- It seeks to permanently ostracize those service providers in the SOs.
- It failed to demonstrate that the negative effects of take-backs would be mitigated by any benefits.
- It has proposed a consumer-confusing dialing plan.
- It wants to maintain number rationing.

These deficiencies would be enough to scuttle the proposal, but far worse than these short-comings, Petitioner has failed to show that there would be any real net gains in number resources. Petitioner makes no projections of how many numbers will be placed in the SOs and how that number transfer will actually impact numbering resources in the underlying NPAs. What is more, Petitioner's proposal appears to reflect a certain naiveté about the way in which number resources are used. For example, medium to large business customers are interested in acquiring blocks of sequential numbers (*e.g.*, NPA-NXX-0000 through NPA-NXX-0500). Numbers presently associated with modems or fax machines now may fall anywhere along the sequence of numbers. Extracting those numbers and putting them in the SOs will not free up a block of sequential numbers for assignment to other business customers, but will only theoretically free up numbers here and there within the block.

Petitioner's proposal may actually result in increased numbering resource consumption. For example, Petitioner's plan fails to take into consideration that fact that once numbers are "disconnected," they will be aged for one year. These business numbers will be out in the public domain, and customers will be used to dialing them to send faxes. These numbers will not be suitable for re-assignment until after the aging period, otherwise the new assignee will receive a

great number of “fax” calls on his or her new line. Where once there was one telephone number for the fax or modem line, there are now two — the aging number in the underlying code and the new number in the SO.

Moreover, it is unlikely that Petitioner’s proposal will free up thousands-blocks for pooling. Today, numbers are assigned to carriers in blocks of one thousand. A block is available to pooling only if 90 percent of the numbers in the block are unassigned.³⁴ Considering a hypothetical block with a contamination level of 50 percent, Petitioner’s proposal would have to free up 400 additional numbers in the block for it to become eligible for pooling. This is highly unlikely because the vast majority of those numbers will be geographic-based, even if you consider lines used for modems and faxes as “non-geographic-based,” which they are not.³⁵

Petitioner’s plan is needlessly complex, expensive, and unreliable. It is overly complex because Petitioner seeks to create two mega-SOs, covering the entire state. There are simpler ways of achieving Petitioner’s goal, including implementing new all-services overlays.

It is overly expensive because it will require businesses to change advertising, business cards, and stationery, and restrict businesses use of simple business lines. Where once a business could use a business line one day for voice and use it for a fax machine the next, the business will no longer have that flexibility. Moreover, the proposed plan requires carriers to try to distinguish how their business customers are using and planning to use those simple business lines, as well as track down how customers are presently using their business lines. This will require carriers to develop new systems and amend existing systems to market, provision, and track the use of these business lines. Petitioner is not seeking to move just non-pooling, non-geographic-based services into the proposed SOs; rather it is seeking to move regular business lines, which are pooling and geographic-based, as well.

³⁴ In area codes 310 and 909, the contamination level was raised to 25 percent.

³⁵ In fact, SBC believes that it would be practically a mathematical certainty that the proposal would not free up any additional thousands-blocks for pooling.

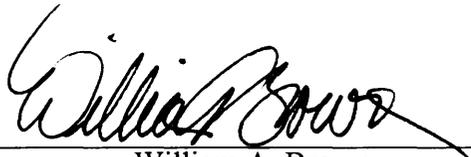
It is overly unreliable because it is an enormous undertaking involving facilities and databases that will be asked to try to achieve what has never been achieved before. The proposal not only puts in jeopardy plain old telephone service, but also E911 and other emergency systems. The planning for this proposal may take two or three years and the implementation even longer. At the end of that process, there is no guarantee that the systems will work properly or that customers can be properly billed for the services they order.

The foundation of the Petitioner's plan is the belief that number resource optimization and area code relief schemes can be concocted in such a fashion that the costs will be borne solely by carriers and certain service providers and without adverse impacts to consumers. This is a false belief. The costs Petitioner seeks to impose on carriers, service providers, and businesses under the proposed plan will ultimately be borne by consumers. First, the monetary costs imposed on carriers and on businesses with 50 or more lines will be passed on to consumers. Second, resources that might have otherwise gone to maintaining and improving the network will be redirected to a project of minimal or no benefit. Third, the reliability of the public switched telephone network and related facilities will be jeopardized, as well as emergency services. In short, the burdens of a simple, direct, and straight-forward plan — such as an all-services overlay — will pale in comparison to the costs imposed on consumers by Petitioner's proposal.

For these reasons, the FCC should deny Petitioner's request for authority to implement its specialized-overlay proposal.

Respectfully submitted,

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November 17, 2003

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State of California

Public Utilities Commission
San Francisco

MEMORANDUM

Date : September 30, 2003

To : The Commission
(Meeting of October 2, 2003)

From : Helen Mickiewicz, Deputy General Counsel
Sindy Yun, P. U. Counsel III 434 | sm

Subject : Specialized Overlay Proposal Prepared by the Telecommunications
Division and the Legal Division

Exactly one year ago, on September 26, 2002, the CPUC filed with the Federal Communications Commission (FCC) a proposal to establish two specialized overlays (SOs) covering the 310 and the 909 area codes, as well as other area codes. In March of this year, the CPUC decided to withdraw that SO proposal. The President's office has requested that staff prepare a new SO proposal. This memo provides a summary of the new proposal prepared by the Telecommunications Division and the Legal Division. Discussed below are the types of services that would be included in the SOs, the geographic demarcation of the SOs, take-back of numbers, ten-digit dialing and the advantages and the disadvantages of the proposal. The memo also provides a summary of the SO petition that the CPUC previously filed with the FCC in September, 2002, as well as the current status of the 310 and the 909 area codes.

Background:

In March 2002, the FCC issued the *Third Report and Order* in its ongoing Numbering Resources Optimization docket, CC Docket 99-200. In the *Third R&O*, the FCC eliminated its blanket prohibition against state implementation of a specialized overlay (SO), and instead, elected to address state requests to implement an SO on a case-by-case basis. The FCC's order also set forth the criteria a state seeking such authority must address in a petition for such authority.

The CPUC's Numbering Team spent many months in discussions with industry representatives, attempting to craft an SO proposal that would comply with state law and CPUC precedents, which favor splits, but also would meet industry concerns, the public's

concerns, and the FCC's criteria. On September 27, 2002, the CPUC filed a petition with the FCC seeking authority to implement two specialized overlays in Southern California. The provisions of the two proposals were identical, except that they addressed different area codes. The provisions were as follows:

- The proposal for the 310 would create an SO that would cover the 213, the 310, the 323, and the 562 area codes;
- The proposal for the 909 would create an SO that would cover the 714, 909, and 949 area codes;
- Each of the SOs would include on a prospective basis numbers assigned to wireless carriers, numbers assigned for data purposes, and numbers assigned on a "non-geographic basis".
- Each of the SOs would last for a period of two years from the date each is created.
- Each of the SOs would require 10-digit dialing between the SO and the underlying existing area codes, but customers would retain 7-digit dialing within each of the affected area codes, including the SOs.
- Existing wireless customers in only the 310 and the 909 area codes would be required to take a change of area code but would retain their existing 7-digit telephone numbers.

In the meantime, the wireless industry launched a sizeable public campaign, in California, before the FCC, and on Capitol Hill, intended to discredit the CPUC's SO petition because of the proposal to require an area code change for existing wireless customers in the 310 and 909 area codes. For a number of reasons, including the wireless industry's outcry against the SO petition as well as the existing number situation in the 310 and the 909 area codes, the CPUC withdrew its petition on March 14, 2003.

Statutory Requirements:

As furor over the proliferation of area codes in California mounted, the Legislature enacted several new provisions of the relevant statute governing the opening of new area codes. (See Section 7930 et seq of the Public Utilities Code.) Among the provisions was a requirement that the CPUC seek from the FCC authority "to order telephone corporations to assign telephone numbers dedicated to wireless and data usage to a separate area code and to permit seven digit dialing within that technology-specific area code and the underlying preexisting area code or codes." (P.U. Code § 7943(b).) The CPUC has made such a request twice: first, in April 1999, before the statute was enacted, the CPUC filed a petition with the FCC for authority to implement technology-specific

overlay, and second, in September 2002, the CPUC filed the SO petition, discussed above. The FCC's response to the first petition was to seek additional comment on the question and ultimately, to issue the *Third R&O*, again, discussed above.

Section 7943 explains what the CPUC should do if the FCC grants the authority requested. The statute, however, is silent on what the CPUC should do if the FCC fails to act or denies the requested authority.

Recommendation:

In order to determine whether the CPUC should file a petition to the FCC for authority to implement the SOs in California, the Telecommunications Division and the Legal Division recommend that the Commission consider the following key factors:

- 1) The SO proposal would provide long-term benefits, such as more efficient use of numbers and extending the life of an area code, if the SOs include all or a majority of the transparent or non-geographic based numbers described below;
- 2) Costs to implement the SOs would be substantial;
- 3) The industry has informed TD staff informally that implementation of the SOs pose a number of significant technical difficulties; and
- 4) The industry recommends that the Commission institute a formal proceeding to look into the SO proposal more closely. Carriers recommend that the CPUC obtain input from the industry on technical feasibility, costs, and other challenges associated with the implementation of the SOs before filing the SO petition with the FCC.

Discussion of the SO Proposal:

A specialized overlay (SO) is a new area code with specific types of numbers, which is implemented over the same geographic area as one or more area codes. An overlay offers the advantage that existing customers need not take an area code change. However, pursuant to both an FCC rule and a CPUC rule, all customers in the geographic area covered by the overlay must dial 10 digits for every call.

1. Types of Services:

The proposed overlay would include numbers assigned for data purposes, numbers assigned on a "non-geographic basis" (except for cellular services) and transparent numbers. The SO may also include Internet Telephony/Voice Over Internet Protocol, Global Positioning Service for Vehicles such as OnStar, Fax over the Internet such as E-Fax, and Dial – Up Numbers for Internet Service Providers (ISPs) such as America On

Line (AOL), paging services, fax machines and modems. For fax machines and modems, only those business customers with 50 or more access lines would be included in the SOs. Residential customers' fax machines and modems would not be included in the SOs.

2. Location/Geographic Demarcation:

Based on technical feasibility, TD recommends that two SOs be implemented in California as follows:

One overlay area code for Northern CA (such as 530, 707, 415, 510, 925, 650, 408, 831, 209, 916) and one overlay area code for Southern CA (such as 760, 559, 661, 805, 619, 858, 818, 213, 310, 323, 562, 626, 714, 949, 909)

The SO will mimic the rate centers of the underlying area codes. CA has 738 rate centers in its 25 area codes. Each competitive local carriers (CLECs) and incumbent local carrier (ILECs) which has business customers in a particular rate center will need a thousands block in each rate center where IT operates. Some cellular carriers which provide global positioning services for vehicles will also need a thousands block in rate centers in which they operate. Assuming all CLECs, all ILECs and 50% of the cellular carriers need a block in each rate center in which they operate, staff has determined that two overlay codes over all of California are needed.

3. Take-back of Numbers:

The FCC has never defined a "take-back" of telephone numbers, although historically, the industry and the FCC have considered a "take-back" to refer to a required 7-digit number change for a customer or group of customers. In the SO proposal, we will ask for authority to be able to assign all numbers on a prospective basis as well as take back numbers on a retroactive basis. If authority is granted from the FCC, prospective only or retroactive take-backs, will be determined after determination of technical feasibility.

4. Ten-Digit Dialing:

The SO petition will request a waiver of the FCC's 10-digit dialing requirement. We propose that there be no mandatory 10-digit dialing within the SO and the underlying area codes.

5. Advantages of the Proposed SOs:

1. Over the long-term, the SOs should extend the lives of all area codes in California. As we have seen with the cellular industry, these non-geographic services are to a great extent responsible for speeding up area code exhaust. By placing these other numbers for non-voice services, non-geographic services and transparent numbers into an SO, these

numbers will not contribute to the exhaust of current area codes.

2. Assuming that the SOs help to stave off area code exhaust, the typical customer disruption which occurs with an area code change will also be delayed.

6. Disadvantages of the proposed SOs:

1. The SOs will not save the 310 or 909 area codes from an area code change because
 - No numbers will be reclaimed from these two area codes for the SO;
 - The FCC may not rule on the petition before these area codes exhaust.
2. The proposal will result in increased cost for carriers
 - The network cannot distinguish the nature of any calls going over a voice-grade circuit. The network does not distinguish between a voice call using the regular Network or a call only passing data such as internet telephony or fax machines;
 - Therefore this proposal would require carriers to implement new number assignment protocols;
 - Increased costs to the carriers would result from their having to ask additional questions when a business customer signs up for service to determine how many numbers are needed for faxes and modems and how many numbers are used for regular telephone service; and
 - The carriers will have to hire new work force.
3. The proposal will increase costs to businesses with 50 or more lines to track and set aside certain numbers to be used for specific purposes.
4. We expect that Voice Over IP providers will claim that the proposal discriminates against them as voice service providers. We expect heavy lobbying at the FCC from businesses anticipating that they will be adversely affected by this proposal.
5. The FCC may not approve of our proposal to continue with 7-digit dialing. The FCC requires 10-digit dialing for overlays. We would be asking for a waiver of this requirement, which the FCC has successfully defended in the Second Circuit Court of Appeals and is reluctant to waive.
6. The proposal creates the potential for many numbers to be stranded. .
7. The FCC generally requires that an SO be transitional, although it has indicated that it would entertain a proposal for a permanent SO dedicated to non-geographic numbers. We would be asking for a waiver of this requirement.
8. OnStar claims that it is geographically based and thus, opposes being included in the SOs. If a vehicle is only serviced for emergency services, then OnStar uses a 500 number, not a single telephone number. However, for their other services, they include cellular phone capabilities, and thus they are identical to traditional cellular services.

9. There are many types of VoIP, and the petition may need to differentiate the various types of VoIP. For example, third generation cellular technology is based on internet protocol.
10. Carriers currently do not track their numbers by the types of uses such as these proposed in the petition. There is no incentive for business customers to volunteer the information.
11. There may be porting issues. For example, if a VoIP customer wants to port his/her VOIP telephone number to regular telephone service, there may be technical problems associated with the porting effort.
12. For each new NPA, there need to be three trunk groups (911, TOPs, AIS). These trunk groups are needed at each switch, which would require additional equipment. There may be capacity issues when talking about 12 NPAs in one switch.*
13. Implementation of the SOs would be a huge undertaking. Carriers with whom TD staff discussed the proposal could not even give a timeline for the implementation. It may take up to six months just to flesh out all the technicalities. Then it would take over a year to implement the SO, and implementation would involve a considerable amount of 911 testing.
14. An overlay of 12+ area codes has not been done. There has not been an overlay crossing LATA boundaries, so unanticipated technical constraints may arise as well.*
15. A whole host of databases would be affected: STP, billing, provisioning, and ordering. It would be a massive information technology process.
16. Pooling is done on the Local Number Portability (LNP) platform. There could be capacity issues on the LNP database.*
17. Carriers stress that there are a lot of questions about feasibility of such an undertaking. They also stress that since this SO will not alleviate the need for a split or overlay of the 310 and 909 area codes, there should not be a sense of urgency.

* Having more than two overlays may alleviate issues regarding capacity constraints. However, we would have to balance that against accelerating exhaust of the North American Numbering Plan.

What is the current status of the 310 area code?

In April 1999, 10-digit dialing began in the 310 area code in preparation for opening the new overlay. The subsequent uproar persuaded the CPUC to suspend the 310 overlay and to pursue number conservation measures both through CPUC decisions and through efforts to obtain additional regulatory authority from the FCC, which has plenary jurisdiction over numbering pursuant to the 1996 Federal Telecommunications Act. Those efforts have produced a significant public policy success story, with California able to forestall opening any new area codes since 1999. Unfortunately, the industry's need

for telephone numbers, while reduced by current economic conditions and consolidations among industry players, remains strong, particularly among wireless service providers.

The proposed "back-up" plan for the 310 NPA, which would split the 310 into two area codes upon implementation, is on the agenda for the Commission's October 16, 2003 meeting.

What is the current status of the 909 area code?

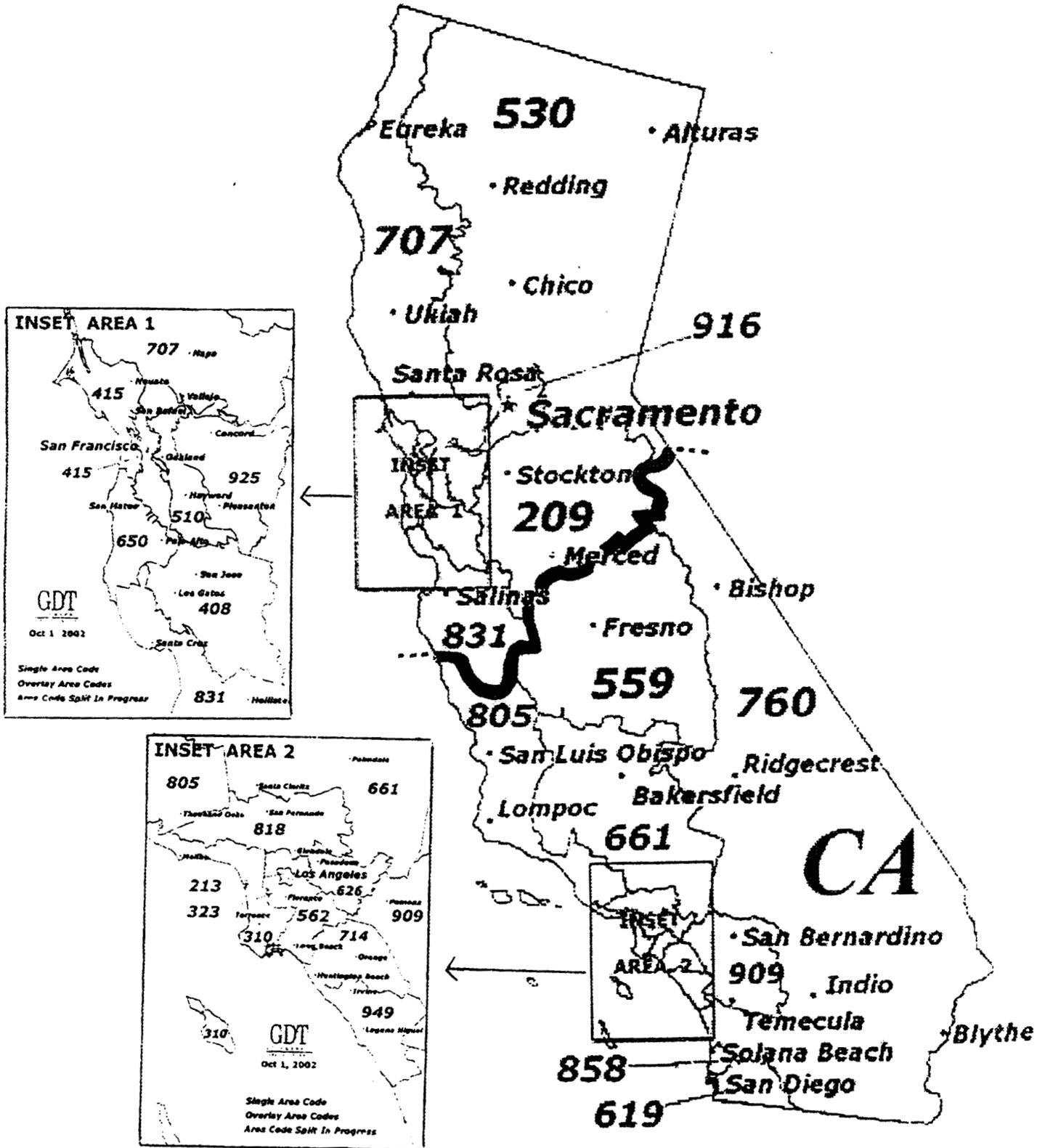
On a separate track, the 909 area code was slated to be split and then receive an overlay in a two-step plan to provide additional numbers in that area code. Again, because the CPUC decided to hold off on implementing any new area codes until, a) the need for a new area code could clearly be demonstrated and b) all conservation measures had been implemented, the plan to open new area codes in 909 was suspended. The Commission has not yet adopted a back-up plan for the 909 area code.

Assigned staff: Helen Mickiewicz and Sindy Yun- Legal Division (HMM, 3-1319 and SJY 3-1999); Cherrie Conner, Sue Wong and Robert Benjamin - Telecommunications Division (CHR, 3-2767, SKW, 3-2308, and BKB, 3-1069).

SJY:sam

Attachment

California Area Codes



**Estimated NXXs Needed In
Each Specialized Overlay**

<u>NPA</u>	<u>North</u>	<u>South</u>
209 Total	70	0
213 Total	0	12
310 Total	0	39
323 Total	0	31
408 Total	23	0
415 Total	24	0
424 Total	0	0
510 Total	27	0
530 Total	137	0
559 Total	0	65
562 Total	0	27
619 Total	0	22
626 Total	0	25
650 Total	32	0
661 Total	0	37
707 Total	84	0
714 Total	0	29
760 Total	0	96
805 Total	0	54
818 Total	0	30
831 Total	28	0
858 Total	0	18
909 Total	0	58
916 Total	26	0
925 Total	50	0
Grand Total	501	543
		1044