Line-Based Taxation

Telecommunications Providers Address a Complex Legacy

January 2017

Dale Varga, Telecommunications
Tax Research Analyst

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"Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius—and a lot of courage—to move in the opposite direction." —Ernst F. Schumacher

Given the dramatic transformation of telecommunications taxes and technology in recent decades, it will take extensive knowledge to manage the extreme complexity of line-based taxation requirements confronting telecommunications providers. While a handful of U.S. jurisdictions have shown a willingness to attempt to simplify its line-based taxation process, the demand for more telecommunications technology and services, shrinking state revenues, and the likelihood of new telecommunications-tax legislation are considerably more likely to intensify line-based taxation in the short term.

This complexity poses tax data management challenges, tax compliance risks, and customer relationship risks. In this environment, providers can easily and unintentionally subject customers to inapplicable taxes or may charge customers too little due to improper taxation processes. These risks can and must be identified, mitigated and managed.

This effort requires an understanding of the current line-based taxation environment and an appreciation of the historical forces that shaped the present. It also helps to understand the numerous variables that affect taxation and the key competitive and customer-related issues that telecommunications providers grapple with when complying with taxation requirements. These issues are examined in the discussions and line-based taxation examples that follow in this paper.

From POTS to VoIP: Complexity in Context

Since the invention of the telephone by Alexander Graham Bell in the late 19th century and throughout most of the 20th century, telecommunications providers enjoyed the relatively straightforward dynamics of the Plain Old Telephone Service (POTS) Era.

The emergence of the 911 standard (and the need to fund the service's operational costs) in the 1960s and the deregulation overhaul in the mid-1990s brought with them significant changes. However, the changes sparked by the rapid advancement of telecommunications technology—beginning in the 1980s with new voice services, and greatly accelerating with the advent of the Internet—would have far deeper and longer-lasting impacts on the complexity of industry taxation.

In the POTS Era, the revenue needed to operate 911 systems, along with some other fees, was generated via a relatively simple calculation: a per-line use charge. As Internet technology took hold however, this simple, one-to-one ratio became impossible to sustain. As the use of voice over Internet protocol (VoIP) and wireless exploded, legislative bodies and taxation jurisdictions began grappling with some fundamental questions as they sought to sustain their revenue streams:

- What is a line?
- What lines (or channels, networks, connections, etc.) should we tax?
- What rates should we apply to these lines?

As telecommunications and Internet technology transformed in the 1990s and 2000s, federal and state legislative bodies struggled to keep pace. "It's not something that legislators did intentionally, but the laws and related tax rules that they did enact were usually created quickly in reaction to new technological and economic developments," notes Michael Fink, CFE, accountant for TekLinks, a cloud services, managed services, and value-added resale company. "A lot of these tax-related rules were created without a complete understanding of the new technology."

In some cases, states also adopted new taxation rules in response to a sudden need to address declining revenues during difficult economic periods. As a result, many of the rules contained significant amounts of grey area and uncertainty regarding tax rates and calculations. "Today, we have 50 states with 50 different sets of telecommunications tax rules," Fink continues. "Each state is different. Some of these rules are straightforward and relatively easy to follow. Others, however, are extremely difficult to follow."

For example, Alabama uses a per-line basis and a statewide flat rate of $1.75 per line. Next door, things are different: Mississippi has a state rate, but many areas within the state also apply their own municipal rates in addition to the state rate. "A service provider entering a new state, or even a new region within that state, needs to be vigilant in understanding all of the relevant tax rates," Fink says.

This complexity exists, in part, due to the large number of different types of lines that are in use. Different states and taxing jurisdictions treat network access registers (NARs), access line, channels, connections, phone numbers, exchange access facilities, and trunks differently from a taxation-rate perspective. Many states have separate rates for channels and trunks, as well as individual rates for different line types. Voice and data may be treated differently, which creates additional complications for providers that bundle these telecommunications services together.

Additionally, states vary in how they apply government exemptions. While most states exempt governmental entities from 911 fees and surcharges, there are exceptions.

Assessment Factors and Compliance Issues

In fact, exceptions tend to be the rule when it comes to line-based taxation. Providers should address this uncertainty and confusion by understanding the major types of technology they use that influence the taxation process (see "Telecom Tech Rundown" side bar). This marks a sound first step in developing a better understanding of the key factors states and municipalities use. Equipped with that understanding, providers can then focus on two crucial assessment factors: the type of line and the use of each line.

The first assessment factor is the type of line in terms of its capacity, technology and provisioning. For example, if a T-1 line is used, the provider should determine its capacity (i.e., is the line 23 channels or 24 channels?). From a provisioning perspective, providers should determine, for example, the underlying technology of a point-to-point network (i.e., is it software- or hardware-based?). Virtual private networks (VPNs), a commonly used form of point-to-point network, create a software tunnel that can travel across numerous different channels at the time of the connectivity. The point of assessing the line type is for the provider to understand exactly what it is selling and how that sale is described in contracts and on invoices so that the client's usage aligns with the provider's taxation method.

The second assessment factor centers on the intended use of each line. Is the line used for voice, for data, or for a combination of voice and data? Is the line used for two-way communications, or only inbound (or outbound) communications? Is the line active or inactive?

These issues should be investigated, understood and then laid out in contracts to help ensure clarity around taxation.

From a tax jurisdictional perspective, rates are generally set based on an initial set of three controlling factors: the number of lines, the number of channels or the size of the bandwidth. The specific tax-calculation methodologies within a single state can be extremely complex. Additionally, some laws place the assessment on the provider; others place it on the customer. A provider or customer may be subject to rate X for, say, one to 25 lines, and a slightly lower rate for 26-50 lines, and so on. Multiply this individual complexity across 50 states and it quickly becomes clear that tax compliance marks a massive data management challenge.

For carriers, this complexity can lead to taxability errors on client invoices. Correcting these errors can result in higher bills – and drive customers to question why competitors do not appear to be charging the same taxes. Legacy clients may also balk at the result of carriers becoming tax compliant: *We never paid these taxes before, why should we start doing so now*?

"Some carriers have long-term clients that they were taxing incorrectly for years and years," notes Joe Solana, president and COO of GSA, a full-service telecommunications regulatory and compliance firm. "When these carriers realize that they have to change how they calculate taxes, they have to figure out how they explain the shift to their clients and ease them into the transition. A similar dynamic arises when a tax rules change. This is a real challenge, and one that many providers face frequently."

Pre-paid providers face unique challenges as a result of inserting an all-inclusive tax calculation into the single fee they charge clients.

All carriers confront a difficult set of decisions after realizing that they need to remit more taxes to be compliant. "That can be a huge problem," Solano adds, "and it makes carriers concerned that the sudden change may raise an audit flag."

Telecom Tech Rundown

SIP Trunks: An initiative protocol used to deliver telephone services and unified communications, primarily for enterprise-type virtual private branch exchange (PBX) systems. The channelization of SIP trunks influences how line-based taxation is determined.

Multiprotocol Label Switching (MPLS): MPLS circuits are primarily used for high-performance data transmissions. Data packets travel faster and more reliably over MPLS than via traditional types of circuits. That said MPLS can also be used for voice services (i.e., VoIP).

POTS: Plain old telephone services still exists today, and these copper-line-based communications are primarily used in residential services.

Private Lines: Established through software or hardware connectivity, this direct connection between two points remains constant and can be used for data and voice communications.

Toll Free/WATS Lines: Toll free and wide area telephone systems (WATS) often provide direct access to enterprise operations and call centers.

Dedicated Access: Similar to private lines, dedicated access uses a dedicated circuit for direct, inbound communications.

Local Access: A local access line can be used for all of the types of current communication scenarios ranging from a VoIP connection to traditional POTS.

Data T1s: Primarily set up for data, T1s can be classified as private line. T1s can also be used for voice communications.

Three States of Line-Based Taxation

When taking a close look at the ways surcharges, fees and taxes are calculated by states and other jurisdictions, it is easy to understand why providers have concerns about audits. The following three examples show how differently three states approach line-based taxation:

Minnesota

The Minnesota Public Utilities Commission takes an extremely detailed approach to lined-based taxation. The commission's 2009 ruling contains little, if any, gray area; instead, the lengthy ruling identifies the surcharge for each line type, with one notable exception:

Line Type	Commission Conclusion
Single & Multiple Lines	1 surcharge per access line
ISDN-BRI	2 surcharges per access line
ISDN-PRI	24 surcharges per ISDN-BRI
T1/DS1	24 surcharges per T1/DS1
Partial T1s	1 surcharge per activated channel
Blocked Centrex	1 charge per NAR
Unblocked Centrex	Use "Centrex Line/Trunk Equivalency Table"

Single and Multiple Lines	# of Channels	# of Surcharges
Single Lines	1	1
Wireless	2	2
VoIP	3	3
Partial T1	4	4
Blocked Centrex	4	4

Multiple Channels	# of Trunks	# of Surcharges
ISDN-BRI	X	2X
ISDN-PRI	X	24X
T1/DS1	X	24X

The notable exception concerns unblocked Centrex, which uses lengthy equivalency table to identify how the number of Centrex lines correlates to equivalent lines for surcharge purposes. Under this correlation, for example, 50 Centrex lines correlate to 11 equivalent line; 100 Centrex lines to 16 equivalent lines; 400 Centrex lines to 32 equivalent lines, and so on. If a provider operates more than 300 Centrex lines (which correlate to 27 equivalent lines), each additional 18 Centrex lines correlate to one equivalent line.

Connecticut

Connecticut's line-based taxation scheme features a sliding scale that charges less per line as the number of lines increases. The state's Public Utilities Regulatory Authority assesses an amount ranging from $0.10 to $0.51 depending on the number of lines or telephone numbers subscribed. The approach has two parts: the first establishes the rate per channel (depending on the number of channels); the second establishes the assessment factor (the percentage of the rate to be charged):

Access Lines	Assessment Factor
1	1.00%
2	0.75%
3	0.67%
4 or 5	0.60%
6 to 10	0.50%
11 to 25	0.40%
26 to 50	0.33%
51 to 99	0.25%
100+	0.20%

Current Rate
$0.51

Connecticut also has individual sets of assessment clarifications for wireline, VoIP and wireless.

Florida

Florida also strives to reduce fees for providers that operate a large number of access lines:

Access Lines	Line Rate	Line Fee	Wireless Fee	Trunks	Trunk Rate	Trunk Fee
1	$0.40	$0.40	$0.40	1	$2.00	$2.00
3	$0.40	$1.20	$1.20			
5	$0.40	$2.00	$2.00			
6	$0.40	$2.40	$2.00			
10	$0.40	$4.00	$4.00	2	$2.00	$4.00
15	$0.40	$6.00	$6.00	3	$2.00	$6.00
20	$0.40	$8.00	$8.00	4	$2.00	$8.00
25	$0.40	$10.00	$10.00	5	$2.00	$10.00
26	$0.40	$10.00	$10.40	6	$2.00	$10.00
35	$0.40	$10.00	$12.00	7	$2.00	$10.00

In Florida, each wireless phone number is assessed a $0.40 fee, whereas wireline and VoIP are capped at 25 of these $0.40 charges. A trunk, which is usually 24 lines, is assessed five of the $0.40 fee with the same cap of 25. For example, if a company has its employees on trunks with a PBX system, and then subsequently decides to instead provide all employees with cell phones, the company's bill for 911 fees would increase dramatically.

Looking Ahead

The line-based taxation approaches summarized above illustrate the scope of the data-management complexity that telecommunications providers wrestle with to operate in a compliant fashion. The problem with this complexity is that it remains fluid.

Providers can count on cash-strapped states and municipalities reconfiguring existing taxation approaches or introducing new telecommunications legislation to generate more revenue. "Depending on your services offerings," Fink notes, "those kinds of changes can create a lot more work—or, in some cases, a new level of chaos."

Other ongoing changes also generate additional tax compliance challenges. For their part, customers continually demand new services. Technology advancements also give rise to new services—and new taxation complexity. Next-generation 911 represents an emerging telecommunications advancement that could require taxation and surcharge adjustments in the near term.

As providers plan for likely taxation changes coming down the pike, it is helpful to consider two possible futures.

- The first, maintaining the status quo, consists of states and municipalities generally sticking to current surcharge and tax approaches while supplementing budgeting gaps with other forms of taxes.
- The second, more optimistic future would consist of a more equitable (for all providers), efficient, simplified and unified approach to line-based taxation across all states.

There are some initial signs that this type of future is at least possible. For example, Fink notes that Alabama is attempting to consolidate the collection of line-based fees and taxes into a single, statewide fund, as opposed to the previous multi-jurisdictional approach.

"There are signs that there is a shift toward simplification," Fink adds. "Unfortunately, this does not mean that rates will be lower. It does mean that there is an awareness that reporting needs to be simplified."

Until that simplification materializes, telecommunications providers will need to apply their knowledge to making tax compliance and tax data management less complex.

Author's Note

Dale Varga is a Senior Tax Research Analyst at Vertex, focusing on the area of Communications tax. For the past decade, Varga has worked with government taxing authorities to maintain the latest Communications tax rules and rates for Vertex technology solutions. In his role Varga has also shared his subject matter expertise with individual Vertex clients as they address the complexities of Communications taxation. Varga appreciates the insights contributed to this paper by the following experts:

Joe Solana is the President/COO and a founding partner of GSA, a leading telecommunications consulting services and solutions firm.

Michael Fink is a Certified Fraud Examiner and currently serves as an Accountant for TekLinks where he focuses on telecommunications taxation issues.

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