

## What Do These Terms Mean?

### Local Exchange Telephone Service

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Local exchange or exchange access services allow end users to originate and/or terminate local telephone calls on the public switched telephone network, whether used by the end user for voice telephone calls or for other types of calls carried over the public switched telephone network (for example, lines connected to facsimile equipment or lines used occasionally or exclusively for dial-up connection to the Internet). Local exchange telephone service uses Time Division Multiplexing (TDM) format to transmit voice calls *between* the end-user customer's ordinary wired or cordless telephone and the telecommunications network—and *within-network* conversion of voice calls into IP packet format for transport ("IP-in-the-middle") is not relevant. Note that a single end-user customer service *cannot be both* local exchange telephone service and interconnected VoIP service.

How to count end-user customer lines: Local exchange telephone service lines that you (including your sales agents) sell to your end-user customers must be counted up by census tract (see "How to locate end-user customer lines," below). Count these lines in voice-grade equivalents (VGEs) based on the service that the end-user customer has bought. Count as one voice-grade equivalent line: traditional analog POTS lines, Centrex-CO extensions, and Centrex-CU trunks. When the end-user customer has bought channelized service, report VGEs of the activated, charged-for channels and do not report the theoretical capacity of the underlying circuit. Examples: Count Basic Rate Integrated (BRI) Services Digital Network (ISDN) lines as two voice-grade equivalent lines. Count fully-channelized PRI circuits (including PRIs that are used exclusively to provide local connectivity to dial-up ISPs) as 23 voice-grade equivalent lines. But report, for example, 8 voice-grade equivalent lines if a customer is charged for 8 trunks that happen to be provisioned over a DS1 circuit. If a customer is charged for a fully-channelized DS1 circuit, however, report 24 voice-grade equivalent lines.

How to locate end-user customer lines: Assign a local exchange line to the census tract where the line terminates at your end-user customer's premises (home, office, or other building)—that is, locate the line by using the service address and not the billing address, if the two addresses differ.

How to count local exchange lines provided to unaffiliated carriers for resale. Local exchange carriers that sell local exchange service lines to unaffiliated local exchange carriers for resale under the unaffiliated carrier's own brand name must count these up at the state level. (Your sales agents, if you have any, are not unaffiliated carriers.) These service lines must be counted in VGEs based on the service that the unaffiliated carrier has bought for resale (see the examples of counting end-user customer lines, above). Also, some incumbent LECs lease unbundled network element loops (UNE-L) to unaffiliated competitive LECs. (UNE-L are provided at special regulated prices.) These incumbent LECs must count up the leased UNE-L by state. The UNE-L must be counted as the number of UNE-L circuits sold, irrespective of the circuit's capacity, and not converted to VGEs. Example: Both a DS0 (single "POTS" line) UNE-L and a DS1 ("T1" capacity UNE-L) count as 1 UNE-L.

### Interconnected VoIP Service

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Interconnected VoIP service is a service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet-protocol compatible customer premises equipment; and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network. See [47 C.F.R. § 9.3](#). Interconnected VoIP service uses IP packet format to transmit voice calls *between* the end-

user customer's specialized equipment (such as an IP telephone or TDM-to-IP converter device) and the telecommunications network. As noted above, a single end-user customer service *cannot be both* interconnected VoIP service and local exchange telephone service.

How to count end-user interconnected VoIP subscriptions: Interconnected VoIP subscriptions that you (including your sales agents) sell to your end-user customers must be counted up by census tract (see "How to locate interconnected VoIP service subscriptions," below). Count the maximum number of interconnected VoIP calls that the end-user customer may have active—at the same time (that is, simultaneously)—between the customer's physical location and the public switched telephone network. The maximum number of such calls may be set out under the terms of service agreements with business, institutional, or government customers, or it may be determined by some other method that best reflects customer needs and requirements. For example, providers that market against traditional business telephone systems should be able reliably to estimate what their customer's requirements would be for trunks between traditional PBX and the telephone company. In the Explanation and Comments section of the form, filers must describe the method used to determine the maximum number of simultaneous interconnected VoIP calls.

How to locate end-user interconnected VoIP subscriptions: If you (including affiliates and sales agents) sell interconnected VoIP service to an end-user customer and also supply that customer with (that is, *sell to* that customer) the high-capacity connection that delivers the interconnected VoIP service, then assign the interconnected VoIP subscription to the census tract where the high-capacity connection terminates at the end user's premises. However, if you (including affiliates and sales agents) sell interconnected VoIP to an end-user customer on an over-the-top (bring-your-own-broadband) basis, assign that interconnected VoIP subscription to a census tract according to the subscriber's Registered Location on the as-of date associated with the form (either June 30 or December 31). Registered Location is the most recent information obtained by the Interconnected VoIP provider that identifies the physical location of the end user. See [47 C.F.R. § 9.3](#).

Interconnected VoIP sold on a wholesale basis to other interconnected VoIP providers. There is no question on the current Form 477 about interconnected VoIP service that is sold to unaffiliated VoIP service providers for rebranding and resale under those service providers' own brand names.

## Census Tract

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Census tracts are "small, relatively permanent statistical subdivisions of a county or equivalent entity" with a target population of 4,000 and a range of between 1,200 and 8,000 people.<sup>1</sup> Because population is targeted, the area of census tracts varies widely. While there are 236 counties that contain a single tract, Los Angeles County, CA is divided into over 2,300 tracts. For more information see, [How Should I Format My Fixed Voice Subscription Data?](#) and [More About Census Tracts](#).

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<sup>1</sup> See *2010 Census Summary File 1 Urban/Rural Update Technical Documentation* prepared by the U.S. Census Bureau, 2012 at A-12, <http://www.census.gov/prod/cen2010/doc/sf1.pdf>.