



## Quarterly Survey of Telecommunications, 2004

# Wireline Telecommunications Reporting Guide



### About the Survey

The *Quarterly Survey of Telecommunications* is sent to the largest wireline and wireless (switched mobile) service providers in Canada, representing over 93% of activity by revenue in the Telecommunications Industry (NAICS 5133). This survey is designed to provide comprehensive national measures to be released eight weeks after each quarter. The co-operation of each respondent is appreciated and valued in meeting these objectives.

The quarterly questionnaire consists of 12 questions: there are 3 (parallel) questions in each of the revenue and expenses sections (covering telecommunication operations, non-telecommunication operations, and non-operating activity), and one question each on employment, capital expenditures and traffic, and three questions on access lines (Public Switched Telephone Network - PSTN, high speed access and non-PSTN lines).

The result of this survey are published every quarter in the Statistics Canada bulletin: *Quarterly Telecommunications Statistics* (Catalogue No. 56-002-XIE) available from our internet site, [www.statcan.ca](http://www.statcan.ca) (\$23 per issue/\$43 for an annual subscription).

### General

- All activity occurring over the quarter (flows) should be reported in thousands, such as revenues, expenses, capital expenditures, salaries and wages (thousands of dollars), and traffic (thousands of minutes).
- All measures taken at a point of time (end of period stocks) should be reported in units or actual amounts, such as number of employees and PSTN and non-PSTN lines.
- Reporting should be in accord with generally accepted accounting principles (GAAP) as set out in the Canadian Institute of Chartered Accountants (C.I.C.A.) Handbook. Please report all accounts on an accrual basis.
- Revenue reported should exclude taxes collected for government (e.g., GST, HST) and should be net of discounts, promotional offers and rebates.

### 1. Telecommunications Operating Revenues

**Wholesale (carrier) services and transfers** - services provided to other telecommunication service providers (common carriers or resellers) as an input to their provision of telecommunications services, and transfers from carriers or the CFA (Central Fund Administration) to maintain the PSTN. Revenues from Internet service providers (ISP's) are not to be included here.

**Contribution** - consists of payments from long-distance telecommunications services to cover the provision of local/access services. Report the total amount received from the central fund or directly from other carriers.

**Inter-carrier settlements** - the gross receipts from other telecommunication service providers for roaming and interconnection: the provision of facilities (beyond the point of interconnection) to terminate or transit calls originating in another carriers' networks. This includes transiting or transport where provided pursuant to an interconnection tariff or agreement. Interconnection occurs between local exchange carriers (LECs) and interexchange service providers, LECs and wireless service providers, and between domestic and foreign service providers.

**Circuit** - a facility consisting of the equipment and apparatus required to form a path suitable for the transmission of voice, text, audio, video or data communication between telephones and other communication equipment, e.g., direct access lines; non-switched transport services such as low-speed data links for automated teller machines; private voice and data networks linking multiple business locations; and dedicated links for transferring high-resolution video images.

**Circuit rentals** - revenues earned from telecom service providers (those providing or reselling telecommunication carriage) for the lease of telecom circuits regardless of bandwidth. Circuit rental income (private line rental) earned from non-telecom service providers should be reported as 'Non-switched' revenue in the 'Narrowband', 'Wideband' or 'Broadband' categories (see bandwidth descriptions below).

**Other** - other services provided to telecommunications service providers not described above such as wholesale long distance (outbound and inbound toll), co-location, access to support structures, data base access, etc.

**Retail services** - telecommunications services delivered to residential or business end users (not intended for resale to other consumers).

Telecommunications carriage revenue categories have been broken down by **bandwidth** (the communication channel's throughput capacity) and the **type of switching** employed:

**Narrowband** - 2-way capabilities with speed in either direction not exceeding 64 kbps.

**Wideband** - 2-way capabilities with speed in at least one direction of greater than 64 kbps to 1.544 Mbps.

**Broadband** - 2-way capabilities with speed in at least one direction exceeding 1.544 Mbps.

**High speed services** - services exceeding 64 kbps (wideband and broadband services).

**Circuit switched** - PSTN telecommunication employing **reserved circuits** (the establishment and continuous operation of a circuit between two or more users for their exclusive use until it is released).

**Packet switched** - PSTN telecommunications sent and received in packets of fixed or variable length with addresses to route the packets along non-reserved circuits.

**Non-switched** - dedicated circuits or private lines between specified points for the exclusive use of the circuit lessees or owners; the PSTN is not used for routing or switching the communication.

**Local telecommunications** - the switching and transmission of voice, data, image and video messages over the PSTN *within* a local calling area. This includes fixed and measured services including centrex, Extended Area Services (EAS), card or coin local payphone telephony, 9-1-1 services, touch tone charges, TDD/TY services and operator services such as local directory assistance.

This does not include the provision of private line services or dedicated data access and services (see 'Non-switched services'), local loop provided to other telecommunication service providers (see 'Other (non-telecommunications) operating revenues'), the provision of calling features (its own category), or one-time activation or deactivation charges (see 'Connection charges').

**Long distance** - (message toll services) the switching and transmission of voice, data, image and video messages over the PSTN *between* local calling areas. This includes flat or measured outbound or inbound services (e.g., 1-800, 877, etc.), operator handled calls (e.g., collect calls), overseas calling, card or coin long distance payphone telephony and other operator services such as long distance directory assistance. Private line long distance services should be reported in a 'Non-switched' revenue category.

**Backbone (wholesale) services** provided to ISP's should be reported as wideband or broadband switched services, whereas (retail) Internet services provided directly to end users should be reported as a Other (non-telecommunications) Operating Revenues (see Question 2).

**Program transmission** service revenues should be reported as non-switched revenues, according to the appropriate bandwidth category.

**Virtual Private Network (VPN)**, services carried over the PSTN should be reported as a long distance service.

**Calling features** - (also referred to as optional or enhanced local services), specialized software and database applications linked to telecommunications networks such as call waiting, call forwarding, caller identification, three-way calling, speed dialing, etc.: call management services: call display, call return, call screen, call blocking, automatic call-back, etc.; and, telemessaging: call answer, extension call answer, voice mail, voice menus, etc.

These features are commonly offered on a per-use, or on a fixed monthly charge basis. If any of these services are included as part of a basic services package, an estimation of their value can be used and the local revenues adjusted accordingly.

**Connection** - non-recurring revenue earned from connecting, reconnecting or disconnecting customers to the PSTN. This does not include premises wiring - report as a 'Other (non-telecommunications) operating revenues', (Question 2).

**Other telecommunications operating revenues n.e.c.** - include all other operating revenues not falling into the above categories but earned as part of the respondent's core operating activities (directly related to the carriage or resale of telecommunication revenues). Please specify any large other revenue items (i.e., dollar value equal to a category described above).

## 2. Other (non-telecommunications) Operating Revenues

This question relates to services which support core telecom activity but are not part of, or derived from, the carriage or resale of voice, data, sound or image telecommunications. These activities are typically provided by telecommunication service providers but may also be provided by companies that are not part of the NAICS telecommunications industries (5133).

*Do not include revenues for the activities listed below that are earned by a non-telecommunications subsidiary or affiliated company unless that company consolidates its records with the respondent and does not maintain its own financial statements or accounts.* These companies may be subject to a Statistics Canada survey appropriate for their industry.

**Terminal equipment rental** - operating lease revenues for telephone sets, key telephones, PBX, modems, and data terminal equipment provided by the survey respondent. This equipment may be on the customer's premises but is not integral to the operation of the telecommunication channels provided by the carrier. Include capital lease revenues in the sale of telecommunications goods.

**Sales of telecommunications goods** - telecommunication goods such as terminal equipment, single line inside wire, etc.

**Directory (advertising and database) services** - revenues from advertising listings in publications, on-line directories and databases, and the sales or leases of directories and databases. This does not include operator directory assistance services.

**Retail Internet access** - dial-up or dedicated connections between an end-user and an Internet Service Provider (ISP). Internet access may be over ordinary telephone lines, ISDN, or other special arrangements. Wholesale Internet or backbone services are to be reported in Question 1.

**Other (non-telecommunications) operating revenues n.e.c.** - include all other operating revenues not falling into the above categories but earned as part of the respondent's non-core operating activities (e.g., installation, premises wiring, customer repairs and maintenance, late payment charges, consulting, commission income, etc.). Please specify any large other revenue items (e.g., dollar value equal to a category described in Question 2).

### 3. Non-Operating Revenues

Include investment income (interest and dividends), net gains (losses) on the sale of assets or foreign exchange, extraordinary gains (losses), equity in net income of unconsolidated affiliates, etc.

### 4. Telecommunications Operating Expenses

**Payments made to other carriers or to the central fund:**

**Contribution payments** - mandated payments from long distance revenues to the central fund (including transfers from the competitive segment of your operations) or to other telecom service providers to underwrite local or access services.

**Interconnection/settlements payments** - payments made to a terminating telecommunication service provider for the provision of services and facilities beyond the point of interconnection (such as switching and aggregation) by an originating service provider (the party which bills the end user). See Question 1 for more detail.

**Circuit rentals** - see Question 1 above.

**Other payments to carriers** - other system capacity or equipment rentals, purchase of long distance services, network management, maintenance and repairs, billings and collections, etc., paid to carriers or resellers.

**Salaries, wages and benefits** - the total remuneration paid for expensed employees before deductions (the equivalent to the taxable employment income reported in Box 14 of the employees' Canada Customs and Revenue Agency T4 slips). This includes regular wages and salaries, overtime pay, paid leave, taxable allowances and benefits, gratuities, director's fees, vacation pay and special payments such as bonuses and commissions, retroactive and accumulated wage payments, termination/severance payments, cost of living adjustments and working owner's draws.

Benefits include employer contributions to pension plans, medical and other welfare plans, unemployment insurance, Canada and Quebec Pension Plans and workers' compensation. Do not include non-taxable benefits provided by an employer such as premiums under a private health plan, recreational facilities, moving expenses and certain employee counselling services.

Do not include payments and expenses associated with outside contract workers and employment agencies or personnel suppliers.

**Depreciation and amortization** - include depreciation of capital assets (buildings, structures, and machinery and equipment not allocated to cost of sales) and the amortization of intangible assets, leasehold improvements, rental assets, deferred charges, tooling and special tooling costs and one-time nature write-offs or write-downs.

**Other telecommunications operating expenses n.e.c.** - all other operating expenses not specified such as selling and marketing, advertising, customer servicing, billings and collections, corporate administration and general office expenses, telecommunications, postage and courier fees, travel and entertainment, professional and business fees, managements fees paid to head office or a parent company, office equipment rentals, bad debts, non-income taxes, licenses and permits, research and development, utilities, rent, and similar categories to those listed above in the 'Other payments to carriers' - except made to non-telecommunications service providers, or which you yourself incur in providing telecommunications services to your customers.

### 5. Other (non-telecommunications) Operating Expenses

Expenses related to earning 'Other (non-telecommunications) operating revenues' - see Question 2 above.

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## 6. Non-Operating Expenses

**Interest expenses** - payments for the use of funds raised through loans, bonds, short-term paper, notes and other debt instruments.

**Other non-operating expenses** - write-offs, write-downs and valuation adjustments etc.; do not include income taxes.

## 7. Employment

**Employee** - any person drawing pay for services rendered or for paid absences and for whom an employer must complete a Canada Customs and Revenue Agency T4 Supplementary Form. This includes working owners, directors, partners and other officers of incorporated businesses whether the employees' salaries and wages are expensed or capitalized. It excludes owners or partners of unincorporated businesses, the self employed, unpaid family workers, persons outside Canada and casual workers for whom a T4 is not required. Report the number of persons employed at the end of the quarter or employed for the last pay period in the quarter.

**Part-time employee** - an employee receiving pay for work performed or paid absence of less than 30 hours a week.

**Salaries, wages and benefits** - include salaries, wages and benefits of expensed *and* capitalized employees. The sum of part-time and full-time salaries and wages may not equal the amount reported in Question 4 due to the inclusion of capitalized salaries, wages and benefits (employment costs that are recorded to an asset account rather than an expense account) in this question.

## 8. Capital Expenditures

Report the gross expenditures (including subsidies) on capital assets (construction and machinery and equipment) for use in the operations of your organization or for lease or rent to others. Include all capital costs such as feasibility studies, architectural, legal, installation and engineering fees as well as work done by your own employees.

**Construction** includes the total cost during the quarter for buildings and engineering construction, e.g., cables, lines and inside wiring, transmission structures such as communication towers, poles, antennas, whether contracted out or built by your own employees, and whether for your own use or rent to others.

Do not include expenditures for land, but include the cost of demolition of buildings, land servicing and of site preparation, leasehold and land improvements, all pre-construction planning and design costs such as engineering and consulting fees and any materials supplied to construction contractors for installation.

**Machinery and equipment** includes the total cost during the quarter of all new machinery, e.g., switches, transmission equipment (transponders, cross connects, multiplexers, optical electronics, satellite earth stations) or terminal equipment, whether for your own use or for lease or rent to others. Any capitalized tooling should also be included.

Include progress payments paid out before delivery in the quarter in which such payments are made. Receipts from the sale of your own fixed assets or allowance for scrap or trade-in should not be deducted from your total capital expenditures. Any balance owing or holdbacks should be reported in the period the cost was incurred.

Non-telecommunications equipment used to support your telecommunications operations such as automobiles, trucks, professional and scientific equipment, office and store furniture and appliances, motors, generators, transformers, tools, etc., whether for your own use or for lease or rent to others, should also be included.

## 9. Traffic

This question measures unduplicated PSTN calling/messaging activity (conversation minutes) for Canada as well as 'transit traffic' and toll free calling activity (1-800, 888, 877 calls, etc.).

Unduplicated activity includes outbound **calls originating with your customers** (cells 100-102) - including calls to destinations outside Canada, and **calls** carried by you **from outside Canada** over an international gateway and terminating in Canada (cells 103-105). Only include calls that you carry over an international gateway (from the USA and abroad). **Transit calls** (cells 106-108) are not considered part of the Canadian market because they neither originate nor terminate in Canada even though they are switched or transited through Canada.

Toll free and outbound LD calls sum to total domestic based LD activity. By industry convention, toll free calls (1-800) are reverse coded, (these calls count as outgoing calls for the receiving or billing system).

**Conversation minutes** is the actual elapsed period in minutes a respondent's switches, circuits, lines or groups of lines are in use, or in the case of rebillers, the actual conversation time their customers use for calls and messages. If **billing increments** are used to measure customer usage (the discrete time intervals telecommunications service providers use to bill customers), please convert to conversation minutes and report traffic accordingly.

Please measure the total telecommunications calling/messaging (voice, data, text, or image conversation) activity (conversation minutes) over the PSTN in thousands of units.

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## 10. PSTN Access Lines (at quarter end)

Report the number of lines you own that terminate on a customer's premises (circuits between a subscriber and a switching centre providing access to the PSTN and having a unique telephone number).

Report the access lines by user categories: 'Residential' (households) and 'Business and other customers' in actual units (not in thousands) for the end of the quarter in question.

1. Individual - a subscriber line arranged to serve one main telephone. Only count PBX lines which have a dedicated port in the telephone exchange equipment.
2. Party-line - a subscriber line arranged to serve two or more main telephones (e.g., residential party lines).
3. ISDN (Integrated Services Digital Network)
  - a) BRA (Basic Rate Access)  
a service that delivers two 64 kbps channels (B channels) and one 16 kbps channel (D channel) over a standard twisted-pair loop. Each of the B channels can transmit voice or data simultaneously while the D channel transmits call control messages and packet data at 9.6 kbps.
  - b) PRA (Primary Rate Access)  
a digital four-wire service that divides the familiar 1.544 Mbps T1 trunk facility into 23 64 kbps B channels and one 64 kbps D channel. The B channels carry voice and data at 64 kbps while the D channel carries out-of-band signaling for one or more primary rate links.
4. Public telephones - coin or card payphones. Include semi-public phones (payphones available to the public on a restricted basis owing to their location, e.g., those on private premises such as restaurants).
5. Centrex - a business telephone service offered by a service provider that permits direct inward dialing to a customer's extensions, transfer of incoming calls from one extension to another, and identification of extension telephones for billing of long-distance calls. Centrex is based on switching equipment usually located on the service provider's premises.
6. Official telephone lines (OTS) - these are active lines connected to the PSTN used by the respondent but for which it does not receive payments. Do not include lines that are not in service. This is not a measure of installed capacity.
7. Other - Wireline access lines not specified above, e.g., WATS, Mobile access lines (do not report mobile telephony subscribers), etc.

## 11. Internet Access Subscribers through PSTN Lines

The purpose of this question is to measure the number of subscribers to Internet access services that are served directly by telecommunications carriers. The subscriber statistics collected in this survey, when combined with results from other Statistics Canada surveys (survey of cable and ISPs industries) will allow the production of an estimate of the total number of subscribers to this important communications path. It is important that this measure be complete and without duplication. If the Internet access services available from your enterprise are delivered, billed and managed by a distinct business unit (subsidiary or ISP division) for which a statement of revenues and expenses is prepared, those revenues, expenses and subscribers should be reported on the Annual Survey of Internet Service Providers. If the provision of these services is an integral part or the activities of the telecommunication unit reported for in this survey, the revenues related to that activity should be reported in Question 2. Please report the number of subscribers to High Speed services separately from the number of subscribers to dial-up services.

## 12. Non-PSTN Lines (at quarter end)

Telecommunications lines not connected to the PSTN, e.g., non-switched transport services such as low-speed data links for automated teller machines; private voice and data networks linking multiple business locations; and dedicated links for transferring high-resolution video. For low speed lines, estimates are acceptable. Each non-PSTN line is attached to some sort of terminal equipment at a customer premise or facility. Report figures in actual units (not in thousands) for the end of the quarter in question.

1. Analogue (voice, sub-voice) - e.g., for alarm monitoring, traffic control, point-of-sale terminals, etc.
2. Digital - report the number of lines based upon the maximum amount of bandwidth available over each line:
  - xDSL: Digital Subscriber Line - A standard allowing digital broadband signals (at least one direction at rates exceeding 6 Mbps) over twisted copper pair wire. Typically, subscribers must be within 4 km of a central office or switch to use this service.