

Entertainment, media and communications

Beyond the horizon*

2008 Global Wireless Industry Survey



*connectedthinking

PRICEWATERHOUSECOOPERS 

Introduction

The PricewaterhouseCoopers (PwC) 2008 Wireless Industry Survey was led by Paul Rees, PwC's Global Infocomm Leader and Pierre-Alain Sur, PwC's US wireless industry leader, and represents the efforts and ideas of many members of our Entertainment, Media and Communications Industry group. The principal contributors were: Shara Slattery, Sarah McWilliams, Rob Glasgow, Tom Leonard Jr., Mackenzie Welch, Michael Riordan, Jamal Douglas, Kristen Lybrand, Taylor Cloninger, Erik Hönig, Constantin Vogel, Brian Caisman, Timothy Schmitt, Tyler Furness, Peter Osvaldik, Karen Plunkett, Dominic Wong, and Keri Dickey.

PwC would especially like to thank the companies that participated in and contributed topics for the survey. Their candid responses and support of this project are very much appreciated. Together we have created valuable insight into the operations of and challenges faced by today's wireless industry on a global basis.

About this survey

The PricewaterhouseCoopers Wireless Industry Survey is an annual publication that covers the financial and operational reporting policies and practices of wireless telecommunications service providers. The 2008 survey includes companies in the U.S., Canada, Europe, Asia-Pacific, and South America. The survey is conducted by PwC's Entertainment, Media and Communications Industry group, which prepares the survey questions, solicits company participation and compiles and analyzes the survey results. Companies participate voluntarily and the individual survey results are kept confidential by PwC.

PwC has taken reasonable steps to ensure that the information contained in this publication accurately summarizes the survey responses received from the participating companies; however, PwC has not performed any procedures to verify the accuracy of the survey responses. The survey provides a summary of the participating companies' financial and operational reporting policies and practices and does not purport to render accounting guidance nor any other type of professional advice. Should such advice be required, please contact your local PricewaterhouseCoopers office.

You can access our worldwide office directory at www.pwc.com.

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Executive summary

We are pleased to publish the first annual PricewaterhouseCoopers Global Wireless Industry Survey. This survey is a continuation of the past 11 years of the North American Survey and for 2008 has been expanded to include global wireless operators. The expansion of the survey globally also reflects the ever-growing importance of International Financial Reporting Standards (IFRS) and the United States and Canada adoption in the future of IFRS. The global survey will provide the opportunity for carriers to compare and contrast the two frameworks. This year's survey begins to articulate differences. The goal of the survey is to help companies understand industry performance measures and their evolution over time, policies and procedures utilized by responding companies, and to help companies better understand the comparability of financial statements within the industry. We also have a goal of addressing general financial accounting and reporting practices in the industry and identifying emerging trends or issues.

The survey has become a resource for many wireless communication industry executives and has evolved with the changing businesses and trends of the industry. We have provided a highlight of this year's survey results in the executive summary. We hope you find the 2008 PricewaterhouseCoopers Global Wireless Industry Survey informative, pertinent, and stimulating.

Executive summary

The 2008 survey results reflect the participation of nine U.S. companies, including six of the largest wireless operators, plus four Canadian wireless companies and five carriers in the rest of the world. Because of the breadth of coverage and participation, we believe that the survey provides the most representative summary of industry accounting policies and practices available on a global basis.

In the 2007 North American Wireless Survey, and the surveys before that, we examined wireless carriers in the U.S. and Canada only. This year, we expanded our population of carriers and responding companies to include wireless carriers from the rest of the world, outside of North America, including Asia, Europe and South America. Although the responding carriers differ only slightly this year from our last North American Survey, we highlighted important changes, if applicable throughout the survey.

Here are a few highlights from this year's results that covers 2007 year-end and early 2008 metrics:

Revenue and performance measures

New products and features represent ongoing sources of additional revenue growth for wireless carriers. Industry competition has continued to decrease monthly rate plans while minutes of use continue to increase to an average of 628 minutes used per month. Recently, many of the North American carriers began offering all-inclusive packages to increase data usage. Data services—including SMS, picture, ring tones, e-mail services and games—continue to increase revenue for the responding companies. On average, data revenue increased by more than 50% for all responding companies on a year over year basis. The industry defines data users by several different methods ranging from daily data use to all subscribers if data technology exists on the handset. In addition, prepaid plans continue to be a significant portion of revenue, representing on average 26.8% of total service revenue.

We asked survey respondents how they define minutes of use (MOU) and 61% define MOU as billed minutes (whether included as part of the customer's plan or additional non-packaged minutes billed). Roaming revenue for the responding companies represents an average of five percent (5%) of total service revenue while long distance revenue represents six percent (6%) of total service revenue. Advertising of products and services represents a significant expense for most responding carriers. The average advertising cost per gross addition for companies with revenue greater than \$5.0 billion is \$82.50, and for companies with less than \$5.0 billion in revenue it is \$65.75. Advertising dollars are mostly spent for television spots (34%), newspaper (13%), other printed media (12%), and radio (11%).

We asked the responding companies to identify the method through which their postpaid subscribers receive their monthly invoices. On average, 85% of subscribers receive a paper bill. Six percent (6%) receive bills electronically while five percent (5%) do not receive any type of invoice.

Property, plant and equipment

As the demands of subscribers change and the industry experiences changes in technology and equipment, 76% of the respondents stated that they have either recorded impairment charges or accelerated depreciation. The respondents stated that the primary drivers of this decision included obsolescence due to technological updates (77%). The demand for new products and services, especially data, translates into significant amounts of capital expenditures. On average, capital expenditures as a percentage of service revenue was 21.2% or an average of \$122.24 per subscriber. Seventy-six percent (76%) of the respondents indicated they had performed an inventory of network assets and over half had completed the inventory within the past 12 months.

Legal and regulatory

The Sarbanes-Oxley Act continues to be an area that consumes time and resources for wireless carriers even four years after its implementation in the United States. One trend that has continued is the reduction in the number of key controls that are tested each year. The average number of controls tested for companies with revenue greater than \$5.0 billion has decreased from over 1,300 to just over 400, and companies with revenue of less than \$5.0 billion have seen a decrease from approximately 700 to approximately 125 controls. The decrease in the number of key controls has evolved as companies place greater emphasis on entity level controls. Consistent with the prior year North American Wireless Industry Survey, fixed assets, financial reporting and general computer controls remain the largest sources of significant deficiencies. The Securities and Exchange Commission (SEC) continues to be active among the North American wireless carriers as over half of the respondents received comment letters in the last three years.



Participating company information

The 2008 Global Wireless Industry Survey results represent nine United States, four Canadian and five rest of world wireless companies. The following pages provide the demographics and general corporate data and structure of the responding carriers.

Names of participating companies

Company type and subscriber base

Annual service revenue

Employee base

Sales locations

Customer care

Licensed spectrum

Environmental sustainability

Participating company information

Names of participating companies

United States

Alltel Corporation

AT&T Mobility

Centennial Communications

Leap Wireless

Metro PCS

Sprint/Nextel

T-Mobile USA

U.S. Cellular

Verizon Wireless

Canada

Bell Mobility

Rogers Wireless

Saskatchewan Telephone

TELUS Mobility

Rest of world

PT Excelcomindo Pratama Tbk.

KPN International

Oi Movel

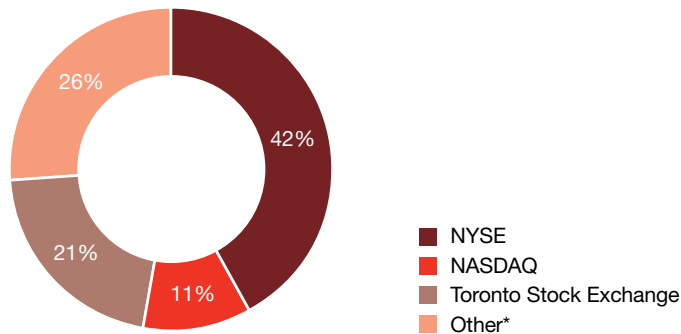
Smart Communications, Inc.

T-Mobile Germany

Company type and subscriber base

Ninety-four percent (94%) of the responding companies reported being required, or being a subsidiary of a company that is listed on a stock exchange and is required, to file quarterly and/or annual financial statements. The chart below depicts which stock exchanges the responding companies are listed on.

Stock exchanges

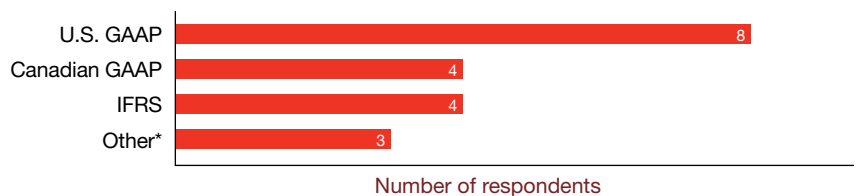


* Other includes Euronext, Frankfurt, Indonesian, Philippine, and Sao Paulo exchanges.

The responding companies prepare their financial statements under various generally accepted accounting principles (GAAP). Twenty-two percent (22%) of the responding companies currently report under International Financial Reporting Standards (IFRS). IFRS was adopted by one carrier in 2004, two carriers in 2005 and one carrier in 2007. Forty-two percent (42%) of the responding companies either have the option to prepare local statutory accounts in accordance with IFRS, or are mandated to prepare local accounts in accordance with IFRS.

The chart below shows the number of responding companies preparing their financial statements according to the respective accounting principles.

Accounting principle followed



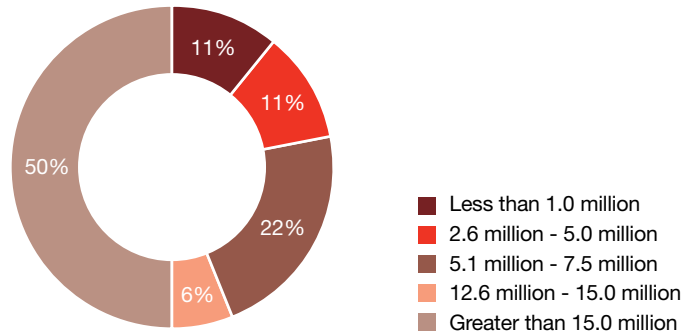
* Other Includes Brazilian, Indonesian, and Philippine GAAP.

Chart sums to greater than the number of respondents as multiple responses were allowed.

Participating company information

The chart below shows the responding companies' reported subscribers as of March 31, 2008.

Subscribers as of March 31, 2008



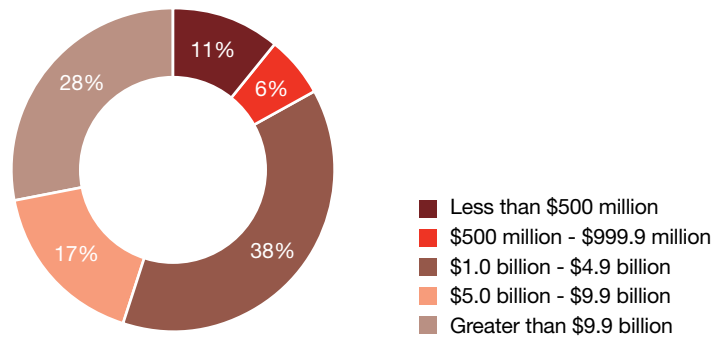
There were no responses in the 1.0 million - 2.5 million, 7.6 million - 10.0 million, and 10.1 million - 12.5 million categories.

The industry continues to experience subscriber growth as more people are substituting wireless devices for traditional wireline service. For North American carriers, the subscriber levels increased: 89% of the responding carriers reported greater than 2.5 million total subscribers compared to the 74% reported in the 2007 North American Wireless Survey.

Annual service revenue

The chart below illustrates the responding companies' service revenue reported for the most recently ended fiscal year (December 31, 2007 for all respondents, except one which is May 31, 2008). The average revenue is \$19.7 billion for carriers with revenue greater than \$5.0 billion and \$2.2 billion for carriers with revenue less than \$5.0 billion.

Annual service revenue



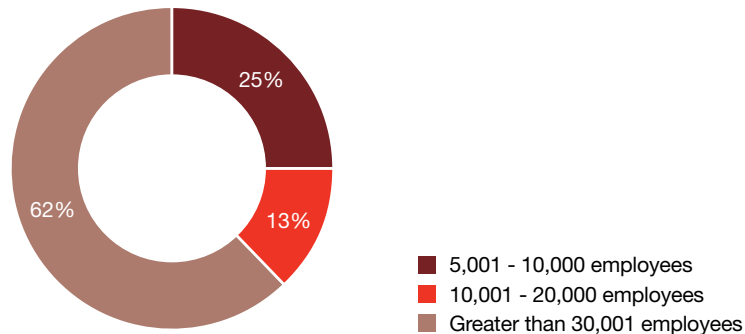
Participating company information

Employee base

Seventy-eight percent (78%) of the responding companies reported operating their company on a centralized basis (a single headquarters location that completes the accounting/finance function for the entire organization), as opposed to a decentralized basis (multiple business units or segments that have separate accounting/finance functions that are consolidated by a headquarters office).

The chart below represents the number of full-time employees as of March 31, 2008 by the responding companies with greater than \$5.0 billion in revenue.

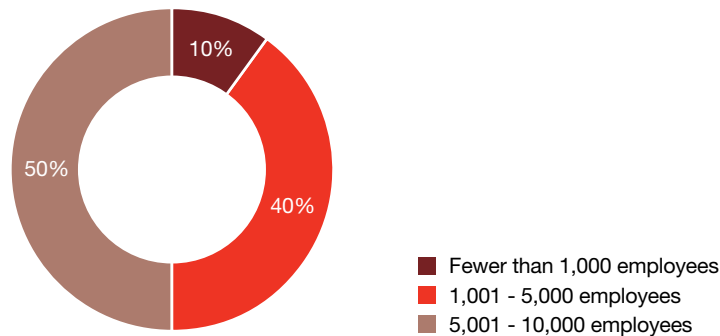
Full-time employees (Carriers with revenue > \$5.0 billion)



No responses were received in the fewer than 5,000 and 20,001-30,000 categories.

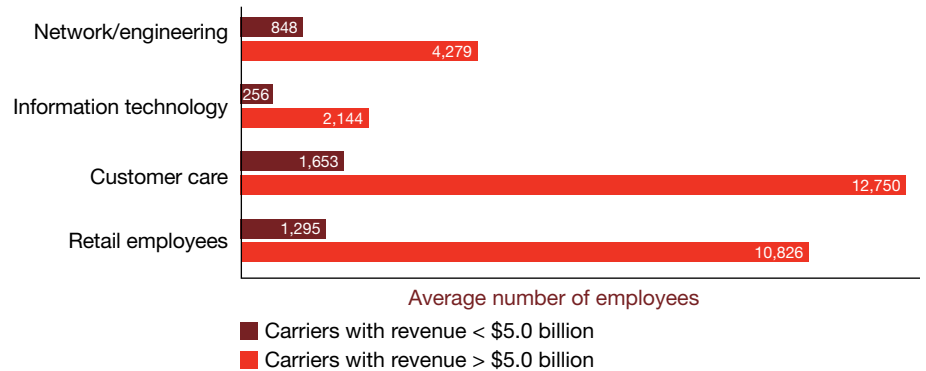
The chart below represents the number of full-time employees as of March 31, 2008 by the responding companies with less than \$5.0 billion in revenue.

Full-time employees (Carriers with revenue < \$5.0 billion)

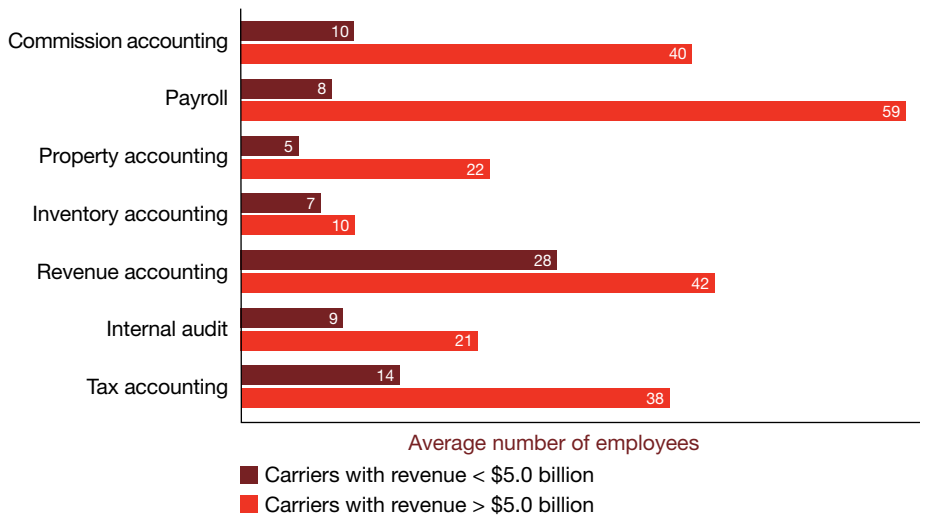


The charts below depict the number of full-time employees for each functional category as of March 31, 2008. The responding companies were split between carriers with greater than \$5.0 billion in revenue and those with less than \$5.0 billion in revenue.

Average number of employees per functional position



Average number of employees per functional position

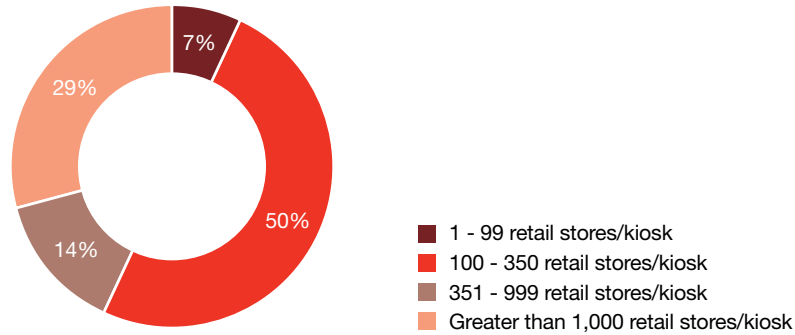


Participating company information

Sales locations

All but three of the responding companies reported using company-owned retail store/kiosk locations to sell and provide services to customers. The chart below depicts how many company-owned retail store/kiosk locations the responding companies reported.

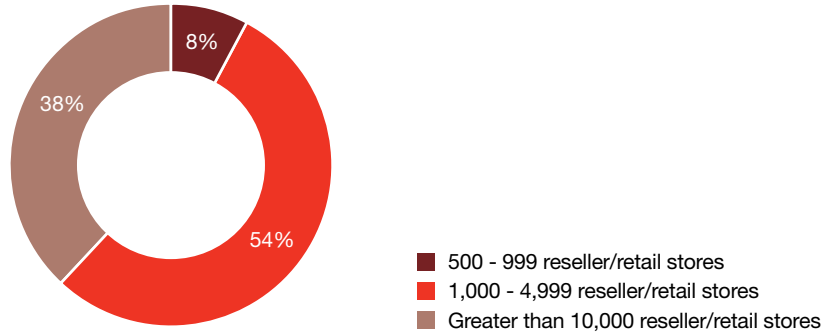
Company-owned retail stores and kiosk locations



The average number of company-owned retail stores for carriers with greater than \$5.0 billion in revenue and for those with less than \$5.0 billion in revenue is 1,208 and 183, respectively.

The charts below depict the number of reseller/retail stores (third-party companies) and branded franchise locations that sell each carrier's services.

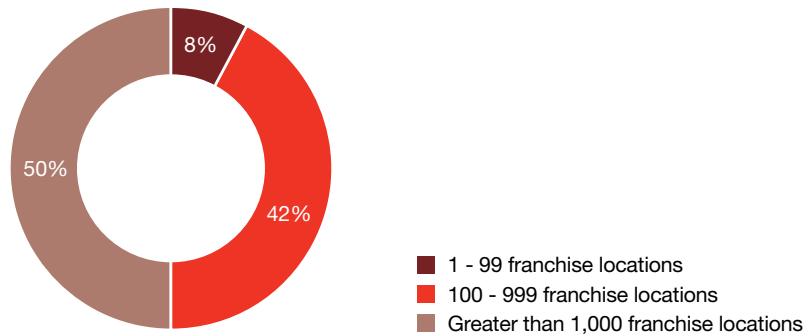
Reseller/retail stores



No responses were received in the 1 - 499 and 5,000 - 9,999 categories.

The average number of reseller/retail stores (third-party companies) that sell services for carriers with revenue greater than \$5.0 billion and for carriers with revenue of less than \$5.0 billion is 53,034 and 2,188, respectively.

Franchise locations



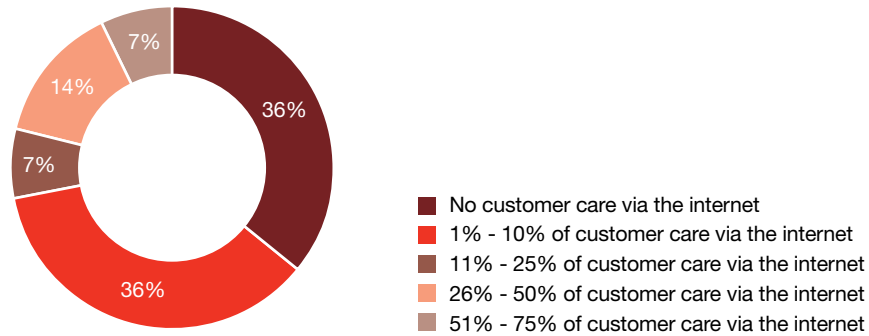
Franchise locations represent a branded store that is independently owned by a third party. The average number of franchise locations that sell services for carriers with revenue greater than \$5.0 billion and for carriers with revenue of less than \$5.0 billion is 2,782 and 473, respectively.

Participating company information

Customer care

The following charts depict the responding carrier's percentage of customer care activity by the source.

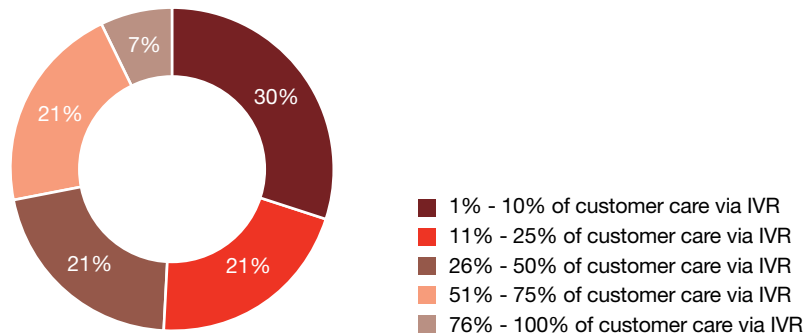
Customer care activity via internet transactions



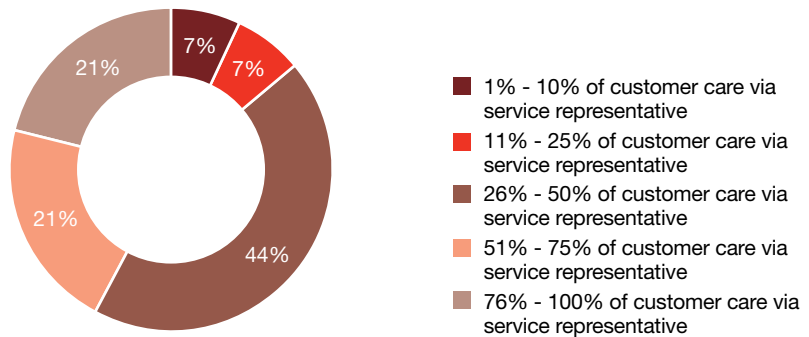
No responses were received in the 76% - 100%.

The average percentage of all customer care activity performed via internet transactions by carriers with revenue greater than \$5.0 billion is 23% and is 7% for carriers with revenue of less than \$5.0 billion.

Customer care activity via Interactive Voice Response (IVR)



Customer care activity via live customer service representative



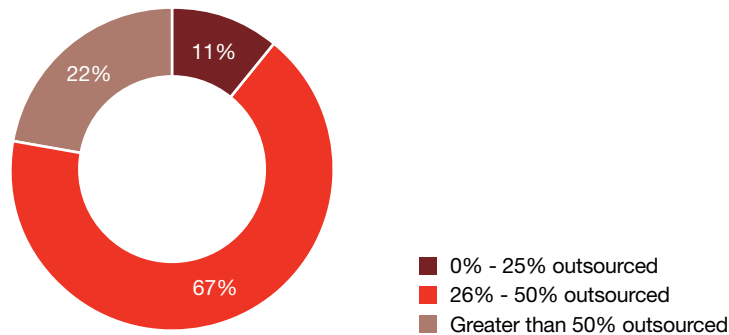
The average customer care activity via the web is 14% (up slightly from the 2007 North American Wireless Survey) and nine companies are using the internet. Live customer service via a customer service representative continues to be utilized the most at 51%, consistent with the 2007 North American Wireless Survey.

Carriers with revenue greater than \$5.0 billion use IVR for 25% of all customer care activity, and use live customer service representatives approximately 50% of the time. Carriers with revenue of less than \$5.0 billion have more live interaction (53% of all transactions) for customer care activity and complete 39% of transactions through IVR.

Participating company information

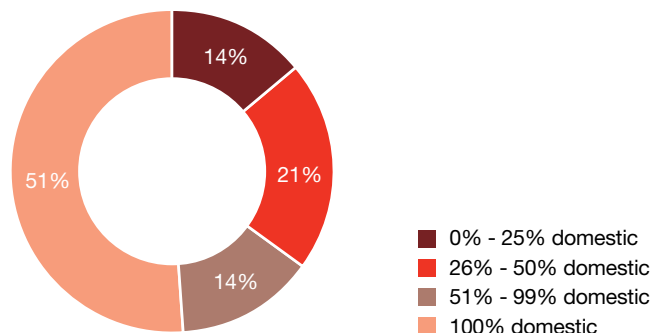
The number of employees in customer care at each organization varies due to the differing levels of outsourcing to third parties. Twenty-eight percent (28%) of the responding companies outsource all of their customer care call volume, while an additional 22% do not outsource any of their customer care call volume. The remaining 50% outsource a portion of their customer care call volume. The chart below depicts the percentage of outsourced call volume for those responding companies who outsource a portion of their volume.

Outsourced customer care activity



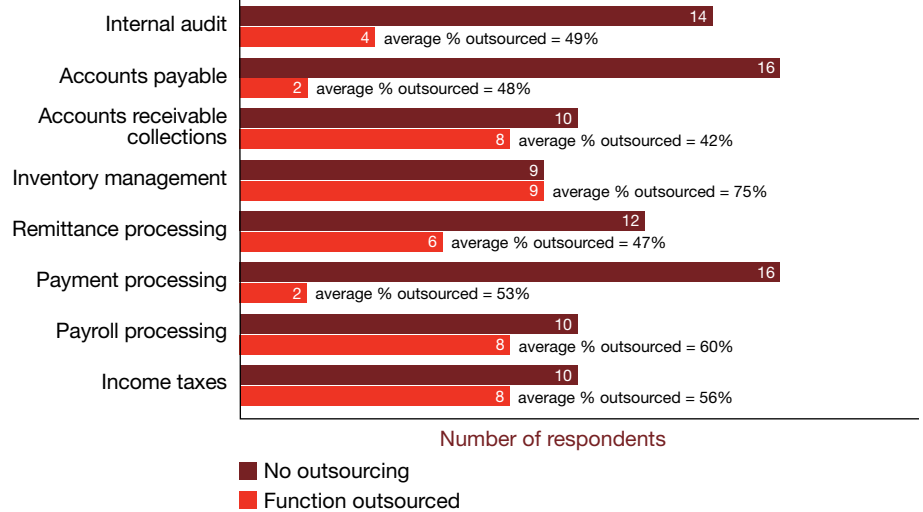
Among the companies that outsource a portion or all of their customer care volume, an average of 71% of customer care is performed domestically (i.e. in the primary country of operation) and 29% is performed internationally (i.e. outside of the primary country of operation). The following chart shows the percentage of this outsourced volume that is handled domestically (primary country of operation).

Outsourcing handled domestically



The chart below depicts the number of respondents that outsource a portion of their primary accounting functions. For those functions that are outsourced, the average percentage of their activity that is outsourced is depicted below.

Outsourced functions



Participating company information

Licensed spectrum

The responding companies own and use licenses primarily in the cellular (~850 MHz) and Personal Communication Services (~1.9 GHz) categories to provide service within North America. The chart below shows the percentage of companies that own and/or use each of the reported license types within North America.

North American licensed spectrum

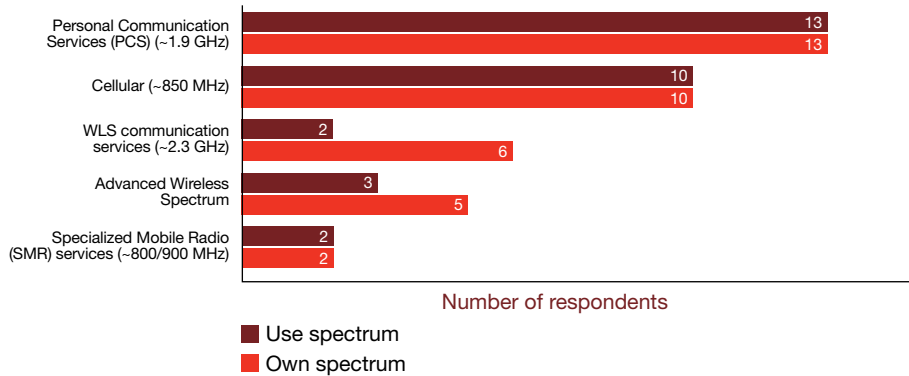
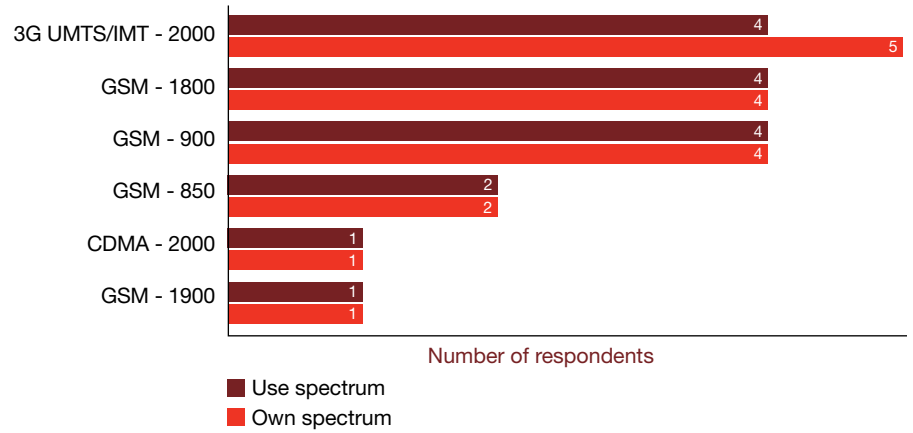


Chart sums to greater than the number of responding carriers as multiple responses were allowed.

Outside North America, the responding companies own and use licenses across various categories, as represented by the chart below.

Licensed spectrum outside of North America



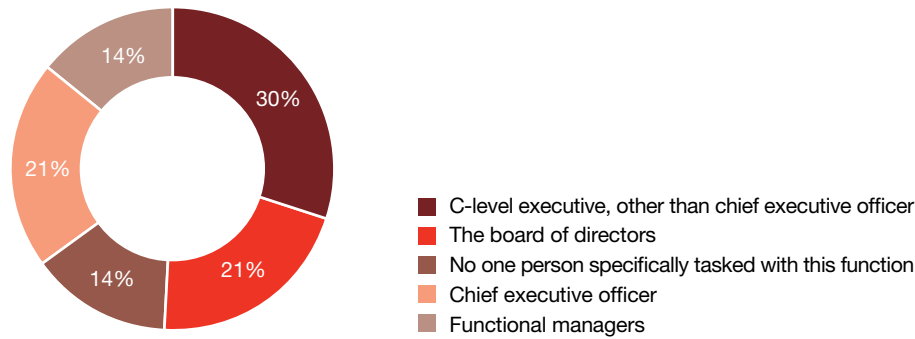
No responses were received in the GSM-400 and CDMA-450 categories.

Participating company information

Environmental sustainability

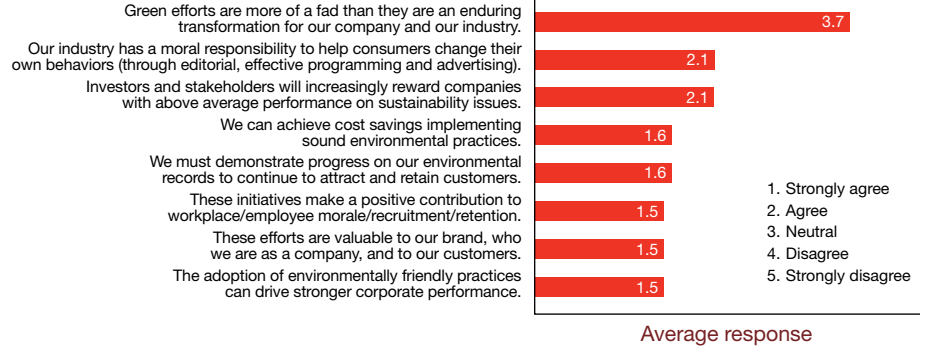
Given the growth in environmental responsibility by individual companies and the increase in environmental concerns by consumers, we asked responding companies about their environmental responsibility programs. The chart below shows who within the responding companies' organization has responsibility for overall environmental performance.

Environmental performance responsibility



The surveyed companies were asked several questions related to their views on environmental practices. The companies were asked to respond on a scale of 1 to 5, with 1 being “strongly agree” and 5 being “strongly disagree.” The chart below represents the average response received for each question.

Environmental views



Sixty percent (60%) of the responding companies reported their performance on environmental or social issues to the public (either through triple-bottom line reporting or another discretionary report such as a corporate responsibility report). Another 13% of the respondents indicated that they plan to report environmental performance in the future.

Eighty-nine percent (89%) of the responding companies reported supporting existing programs to recycle mobile phones/accessories and reducing their environmental impact. These programs include in-store collection, donating proceeds to local charities, planting trees and customer account credits. Only 50% of the respondents reported monitoring their carbon footprint to determine ways to reduce environmental impact.



Revenue recognition

The following pages cover wireless company practices in the area of revenue recognition.

Service contracts and family plans

Termination fees and bad debt expense

Prepaid

Data services

Mobile advertising

Wi-Fi data services

Customer retention

Sales incentives

Market development funds and rebates

Other revenue activities

Revenue assurance

Customer billing and payments

Handset insurance

All-inclusive packages

Revenue recognition

Service contracts and family plans

Of the responding companies, 83% said they have postpaid service contracts with their subscribers. Of the 15 total respondents that have postpaid service contracts, 11 offer one-year contracts, 13 offer two-year contracts, and six offer three-year contracts.

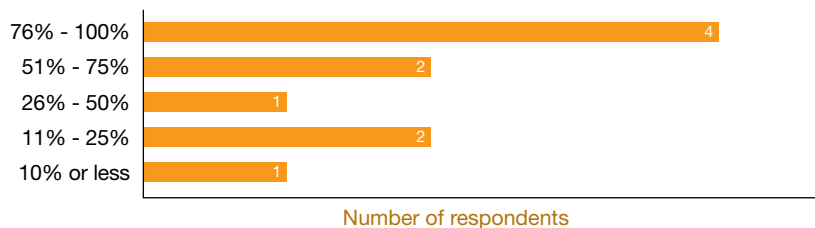
The following two charts illustrate the respondents' terms of postpaid service contracts and the approximate percentage of customers on each contract term. Not all respondents indicated the percentage of customers on each contract term.

One-year contract term



No responses were received in the 51% - 75% category.

Two-year contract term



The chart below illustrates the approximate percentage of customers who are out of contract or who do not currently have a contract.

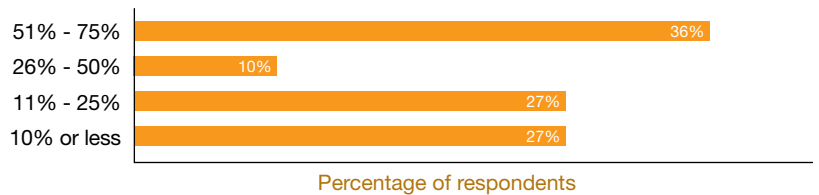
Out of contract/no current contract



No responses were received in the 10% or less and the greater than 50% categories.

An increasing number of companies are offering family plans to their customers. Seventy-eight percent (78%) of the responding companies offer family plans to their postpaid subscribers. The chart below shows the percentage of postpaid subscribers who are on family plans.

Percentage of postpaid subscribers on family plans



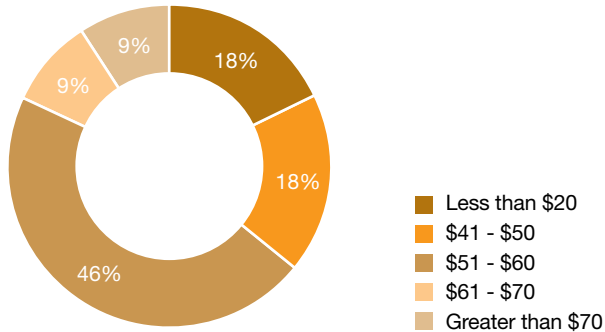
No responses were received in the greater than 75% category.

The average percentage of postpaid subscribers on family plans among all respondents is 33%. For companies with revenue greater than \$5.0 billion, 46% of total subscribers are on family plans, compared to 26% for companies with revenue of less than \$5.0 billion.

Revenue recognition

Of the responding companies that offer family plans, 43% indicated that family plans average two subscribers per plan and 50% indicated that family plans average three subscribers per plan. The remaining seven percent indicated an average of four subscribers per plan. The chart below illustrates the average postpaid monthly revenue per user for subscribers enrolled in family plans.

Average monthly family plan subscriber revenue



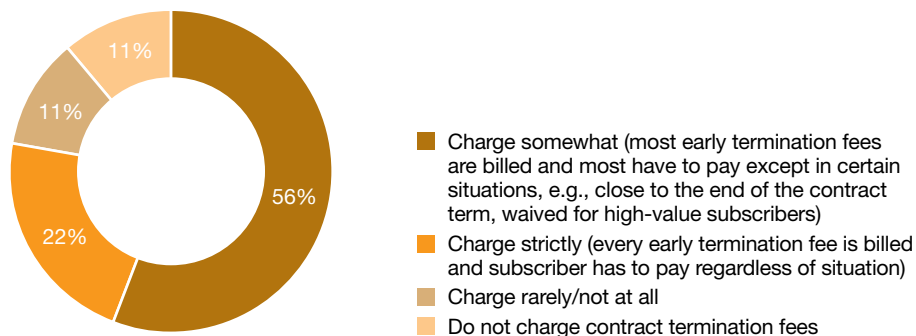
No responses were received in the \$21 - \$40 category.

In order to add subscribers to family plans, many of the respondent companies charge for each additional subscriber enrolled. Fifty-six percent (56%) of the respondents charge \$10 or less per additional subscriber on family plans, while the remaining 44% charge between \$10.01 and \$20.00.

Termination fees and bad debt expense

The chart below illustrates how responding companies charge contract termination fees, and how strictly the companies bill and enforce the collection of the contract termination or early disconnect fees. None of the North American companies responded that they strictly enforce contract termination fees; in comparison, in the 2007 North American Wireless Survey, six percent of the respondents strictly enforced contract termination fees. Eighty percent (80%) of the rest of world responding companies indicated that they strictly enforce early termination fees.

Contract termination or early disconnect fees

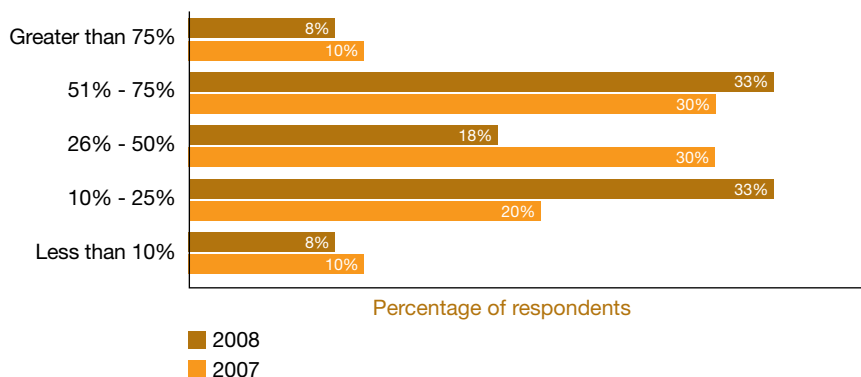


Six companies responded that contract termination or early disconnect fees are prorated over the life of the contract. Among them, the six companies use several methods to determine the prorated amount. One prorates 100%, one prorates three percent per month, two prorate \$20 for each month remaining in a contract, and the others utilize a combination of the aforementioned methods.

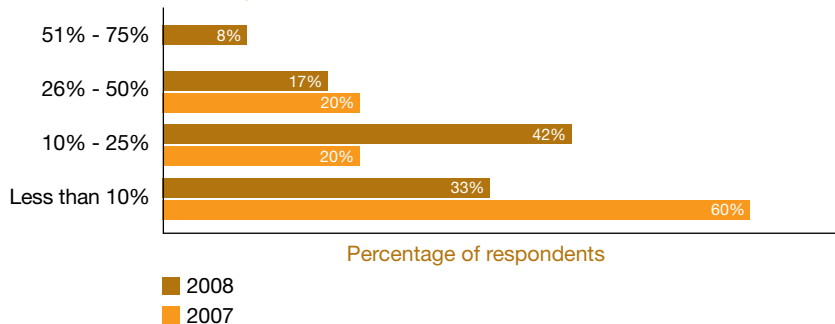
Revenue recognition

We also asked the responding companies to comment on their success in collecting contract termination or early discount fees. As indicated in the charts below, the collection rates on these fees vary drastically depending on whether the customer has voluntarily terminated service or whether service has been involuntarily terminated by the company. As illustrated in the chart below, 41% of the 2008 responding companies are collecting approximately 50% or more of contract termination fees related to voluntary terminations. The following charts represent data compared to the 2007 North American Wireless Survey and represent only North American carriers.

Collection rates - Voluntary termination fees

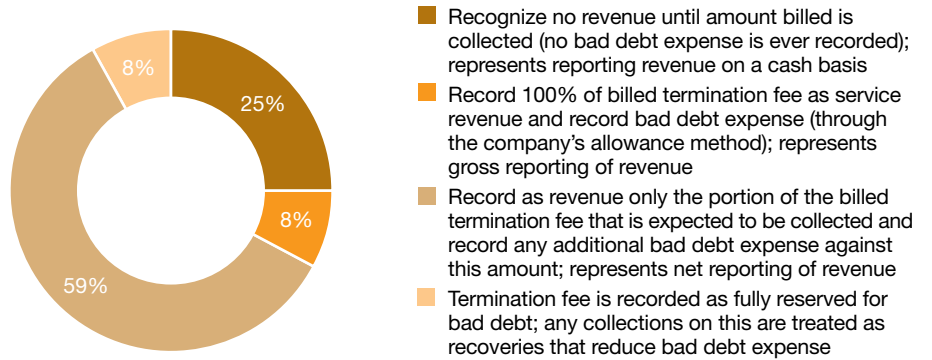


Collection rates—Involuntary termination fees



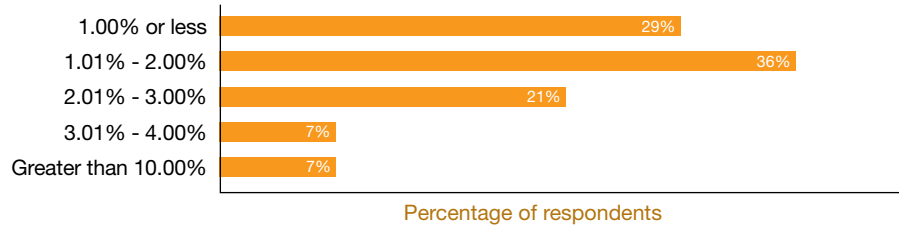
The responding companies use several different methods to record bad debt expense related to termination fees. The following chart illustrates what percentage of companies uses each type of method identified.

Revenue recognition of contract termination or early disconnect fees



The following chart illustrates the bad debt expense related to postpaid receivables as a percentage of total postpaid revenues.

Postpaid bad debt expense



No responses were received in the 4.01% to 10% category.

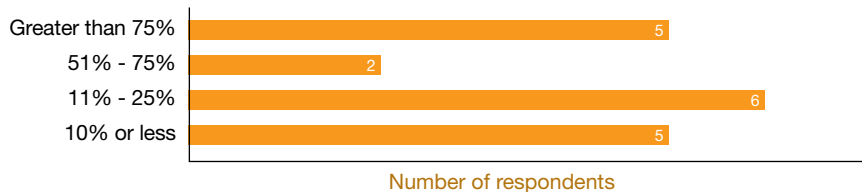
For companies with revenue greater than \$5.0 billion, the average postpaid bad debt expense as a percentage of postpaid revenue was 2.23%. For companies with revenue of less than \$5.0 billion, average bad debt expense as a percentage of postpaid revenue was 2.54%.

Revenue recognition

Prepaid

Of the responding companies, 100% offer customers the opportunity to pay for service in advance. The following chart illustrates the percentage of the responding companies' total subscribers that are prepaid subscribers.

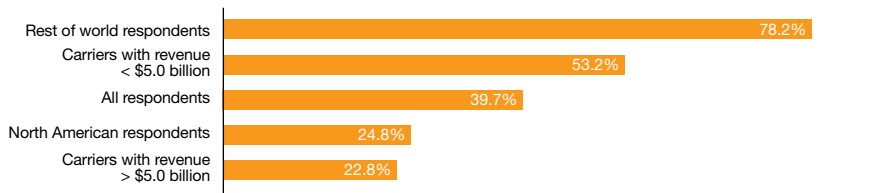
Percentage of prepaid subscribers



No responses were received in the 26% - 50% category.

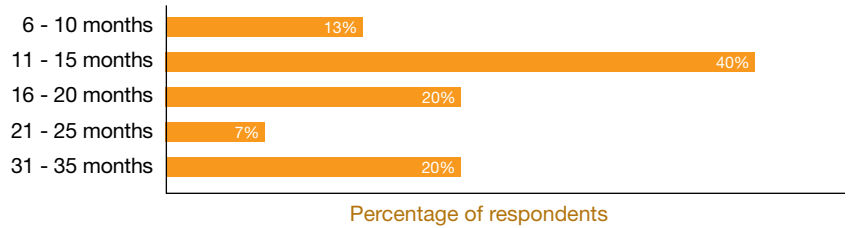
The following chart indicates the average percentage of prepaid subscribers as a percentage of total subscribers.

Average percentage of prepaid subscribers



The responding companies reported the average prepaid subscriber life as approximately 18 months. The chart below represents the average prepaid subscriber life in months for the responding companies that offer this service.

Average prepaid subscriber life

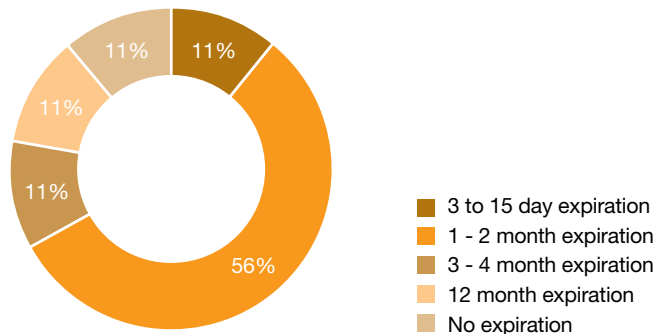


No responses were received in the 26 - 30 months category.

For companies with revenue greater than \$5.0 billion, the average prepaid subscriber life was 18 months in 2008. For companies with revenue of less than \$5.0 billion, the average prepaid subscriber life was 17 months.

Of the responding companies, 86% have prepaid cards with expiration periods. The chart below illustrates the average expiration periods for the responding companies.

Expiration periods

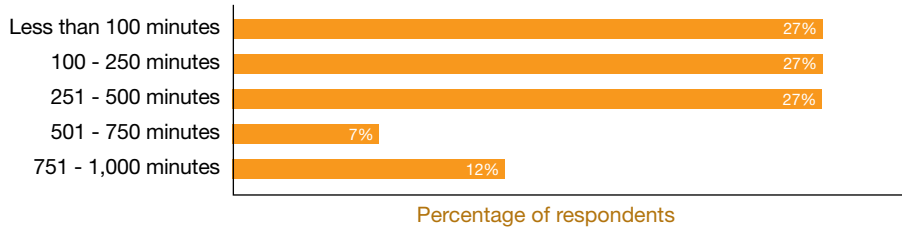


Forty-four percent (44%) of the responding companies' inactivated prepaid cards have an expiration period/expiration date.

Revenue recognition

The chart below illustrates the average monthly minutes of use (MOU) per prepaid subscriber for the responding companies. The average minutes of use per month for all the responding companies were 343.

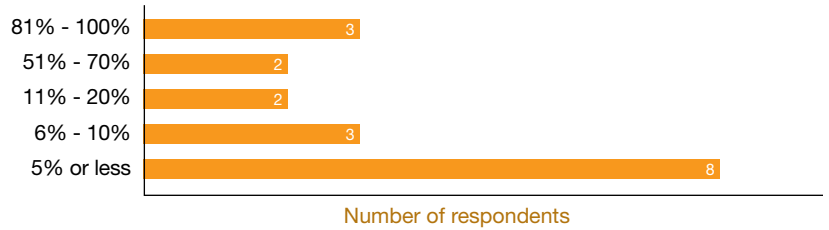
Average monthly MOU per prepaid subscriber



Companies with revenue greater than \$5.0 billion reported average prepaid MOU of 387 minutes, and companies with revenue of less than \$5.0 billion reported average prepaid MOU of 292.

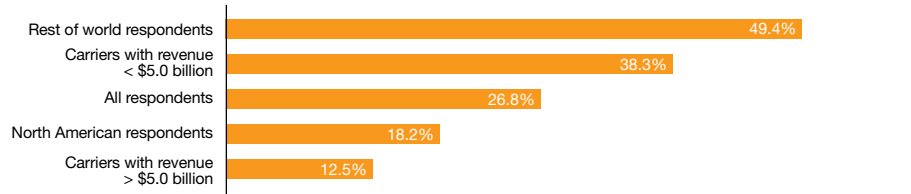
The following charts represent prepaid revenues as a percentage of total revenues, both for the responding companies in total and by categories of respondents.

Prepaid revenue as a percentage of total revenues



No responses were received in the 21% - 50% and 71% - 80% categories.

Average prepaid revenue as a percentage of total revenues by category of respondents



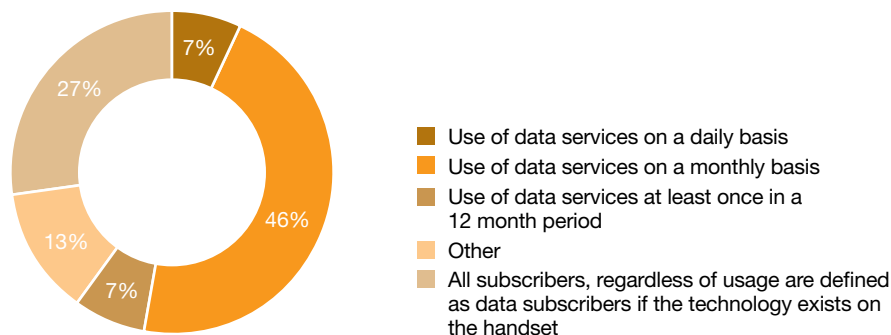
Four of the 18 responding companies offer family plans to their prepaid subscribers.

Revenue recognition

Data services

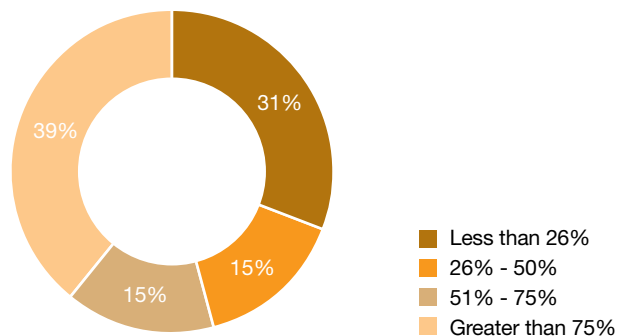
Data services continue to be an area of focus, as most responding companies are seeking opportunities to grow revenue. The responding companies use several different methods to define users of data services. The following chart illustrates what percentage of the responding companies uses each type of method identified.

Definition of user of data services



We asked the responding companies what percentage of their data revenue is generated from stand-alone data services versus combined voice and data bundled packages. The chart below illustrates that the majority of the respondents (54%) indicated that more than 50% of their data revenue is from stand-alone data services.

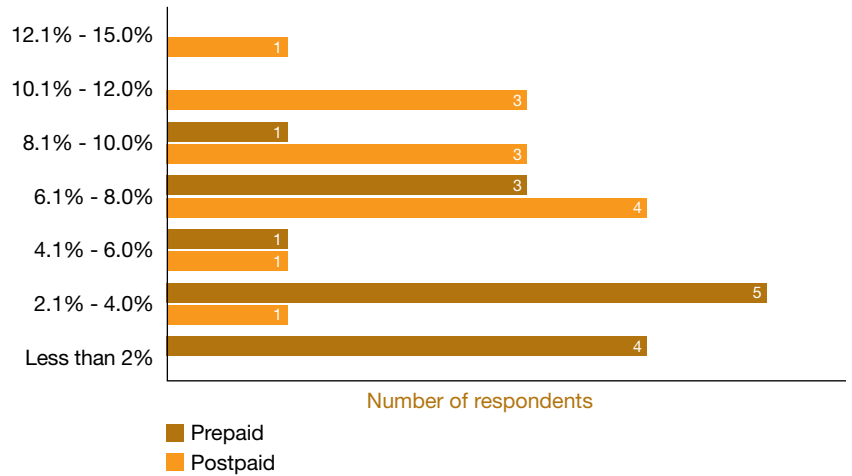
Data revenue generated from stand-alone data service



Twenty-eight percent (28%) of the respondents have implemented e-wallet (the ability to make purchases through the mobile phone).

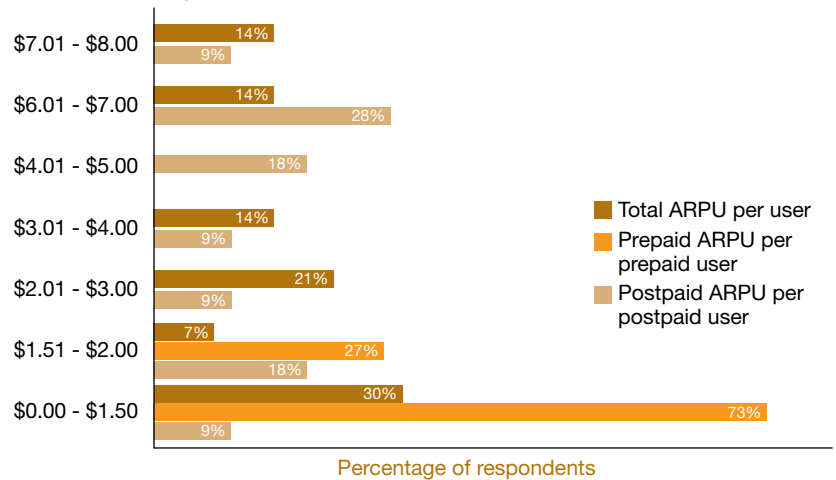
The chart below illustrates the percentage of service revenues, excluding SMS/text, generated by postpaid and prepaid data services.

Percentage of service revenues generated by postpaid and prepaid data services



The chart below indicates the effect that data services, excluding SMS/text, have on the average revenue per user on a monthly basis for total, prepaid, and postpaid ARPU.

Data services, excluding SMS/Text, effect on ARPU



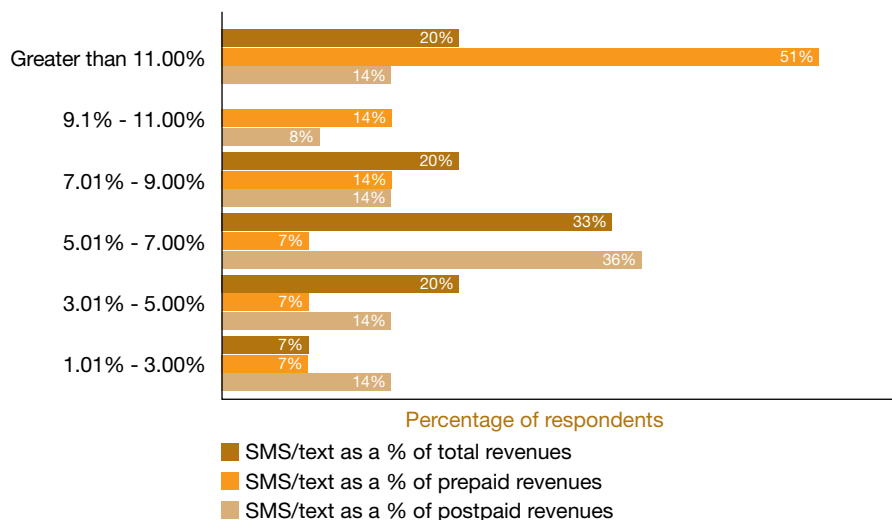
No responses were received in the \$5.01 - \$6.00 category.

Revenue recognition

Fifty-eight percent (58%) of the responding companies indicated that postpaid data services revenue, excluding SMS/text, increased more than 50% year over year. Sixty-seven percent (67%) of the responding companies had an increase of more than 50% in their prepaid data services revenue year over year.

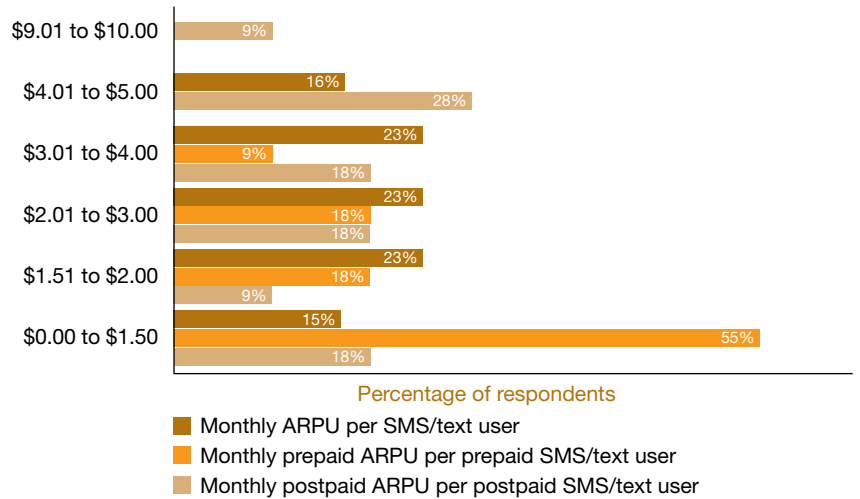
As SMS/text becomes increasingly popular among North American subscribers, companies are beginning to see the positive effects of SMS/text revenue on total services revenue, prepaid revenue, and postpaid revenue. The chart below illustrates SMS/text revenue as a percentage of total services revenue, prepaid revenue, and postpaid revenue.

SMS/text revenue as a percent of service revenues



The chart below indicates the monthly contribution of SMS/text revenue to total, prepaid, and postpaid ARPU.

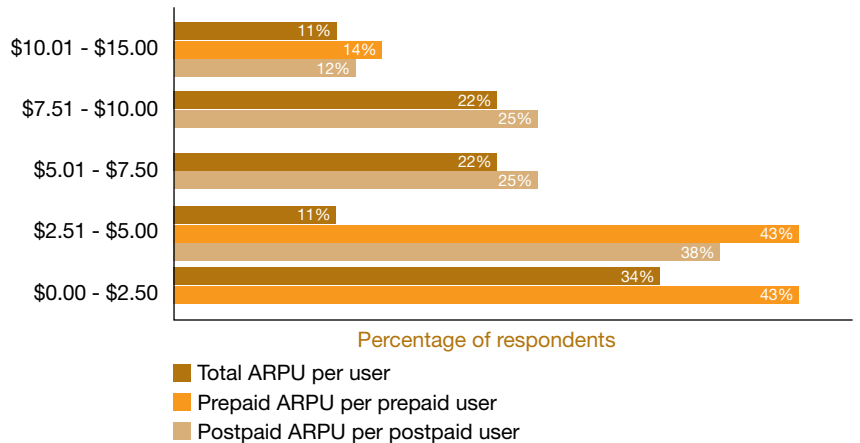
SMS effect on ARPU



No responses were received in the \$5.01 - \$9.00 category.

We asked the responding companies to indicate SMS/text data revenue for each of the following: SMS/text data revenue per user, prepaid SMS/text data revenue per prepaid user, and postpaid SMS/text revenue per postpaid user. The results are illustrated in the chart below.

SMS data ARPU



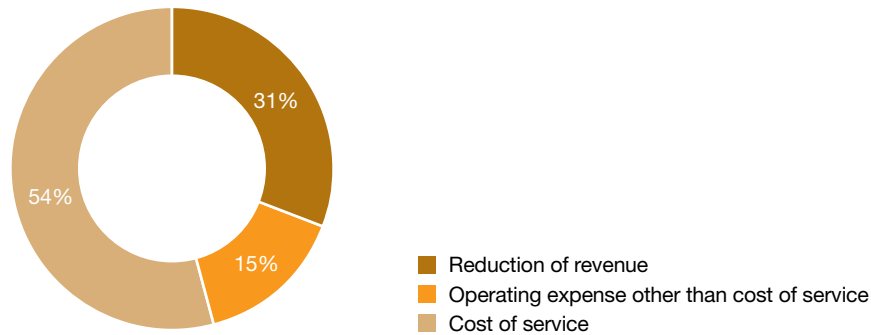
Revenue recognition

We asked the responding companies whether they allocate airtime usage charges between data services and voice service. Only 28% of the responding companies indicated that they allocate airtime usage between data services and voice service.

Fifty-four percent (54%) of the responding companies indicated a more than 50% increase in postpaid data services revenue for SMS/text revenue only year over year. Fifty-eight percent (58%) of the responding companies had an increase of more than 50% in prepaid data services revenue year over year.

Eighty-eight percent (88%) of the respondents' subscribers can access third-party content that the company does not source through their handsets, e.g., through a shortcode SMS/text, m-sites, or a premium rate. The chart below illustrates how the respondents account for the revenue share payment made to the third-party content provider.

Third-party content



The chart below illustrates the criteria the responding companies considered in determining the accounting for the revenue share payment for third-party content.

Criteria used to determine revenue share payment for third-party content

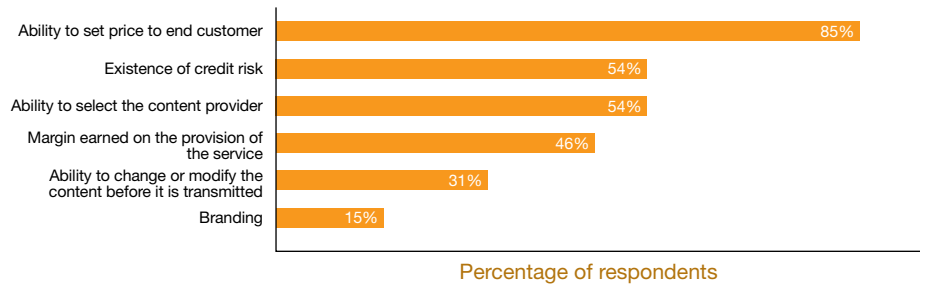


Chart sums to greater than 100% because multiple responses were allowed.

Mobile advertising

We asked the responding companies whether they include any non-subscriber revenue in calculating average revenue per user (e.g., roaming revenue, wholesale revenue, and advertising revenue). Seventy-eight percent (78%) of the responding companies include other non-service revenues in their ARPU. Seventy-one percent (71%) of those carriers reported that they include roaming revenues.

Of the responding companies, 39% record revenue related to mobile advertising. Fifty-seven percent (57%) of the respondents indicated that they recognize the revenue using the gross method, while the remaining 43% indicated that they use the net method.

Revenue recognition

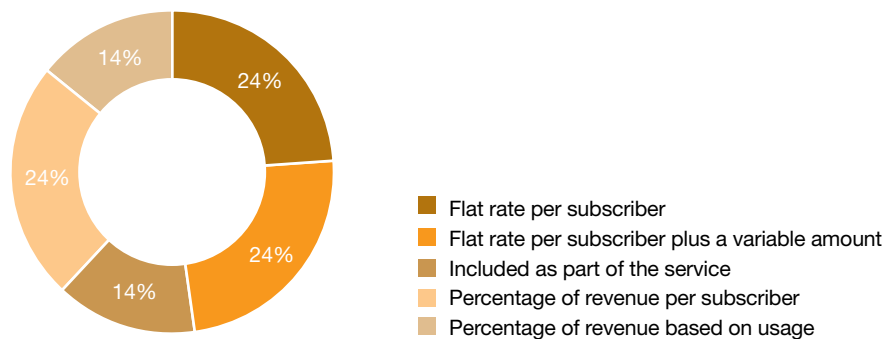
Wi-Fi data services

Wi-Fi hotspots and wireless broadband access cards are common in today's marketplace. Of the responding companies, 67% offer Wi-Fi hotspots in public locations, such as airports, coffeehouses, hotels, and offices.

For the companies that offer hotspot services and pay the hotspot location a portion of the fee billed to the customer, 88% account for fees paid to location owners as an operating expense. The remaining 12% of respondents account for such fees as a reduction of revenue.

For the companies that offer hotspot services and pay the hotspot location a portion of the fee billed to each customer, the following chart shows the various types of rate structures used.

Rate structures used for payments to hotspot locations

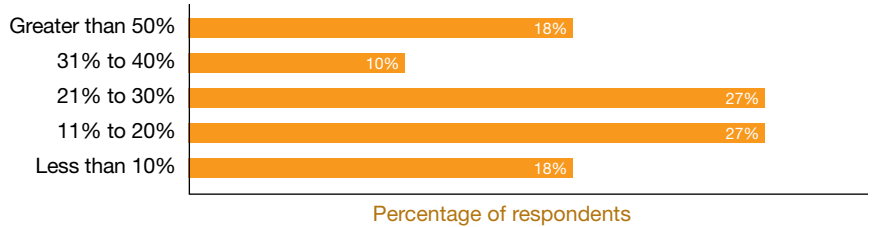


Of the responding companies, 94% provide wireless broadband access through personal computer cards. Of companies that offer wireless broadband access, the average number of users for companies with revenues greater than \$5.0 billion is 1.33 million, while the average number of users for companies with revenues of less than \$5.0 billion is 82.4 thousand.

Customer retention

Companies continue to focus on retaining current customers, as overall market penetration rates have slowed. Accordingly, retention-related activities have increased in recent years. The chart below illustrates the percentage that retention-related costs increased from fiscal year 2006 to fiscal year 2007 for the responding companies.

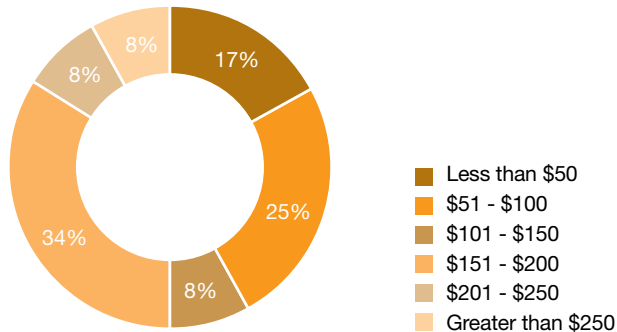
Increase in retention-related costs FY06-FY07



No responses were received in the 41% - 50% category.

Subsidies offered on handset upgrades to retain current customers can be a significant component of customer retention costs. The range of subsidy costs per handset upgrade reported by the responding companies is presented in the chart below.

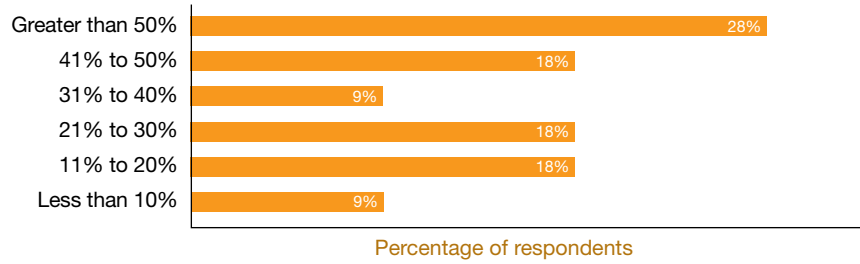
Average handset subsidy for customer retention



Revenue recognition

The increased focus on retaining customers is further evidenced by the percentage of equipment and accessory revenue that is attributed to retention activities, which is illustrated in the chart below.

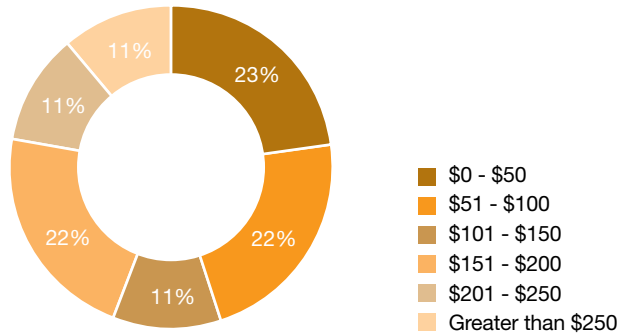
Equipment and accessory revenue attributed to retention activities



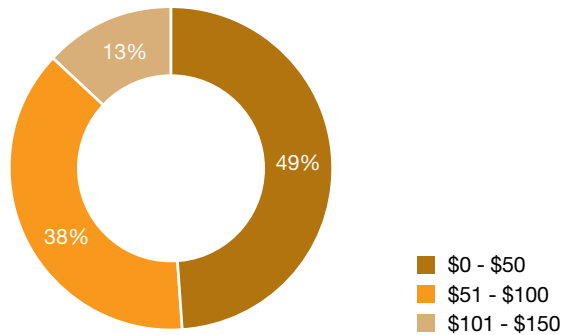
Sales incentives

All the responding companies offer significant subsidies on handsets to attract new customers. The following charts present the range of average handset subsidies the respondents offer to new postpaid, to new prepaid, and to their total customers.

Average new postpaid customer handset subsidy

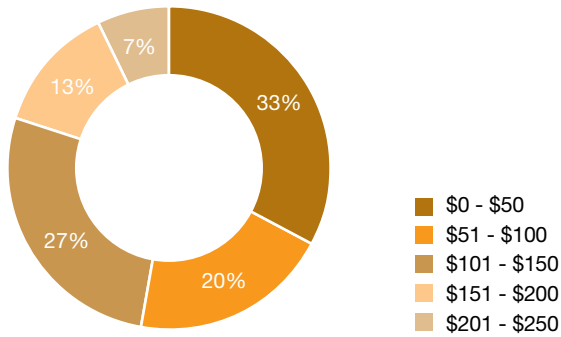


Average new prepaid customer handset subsidy



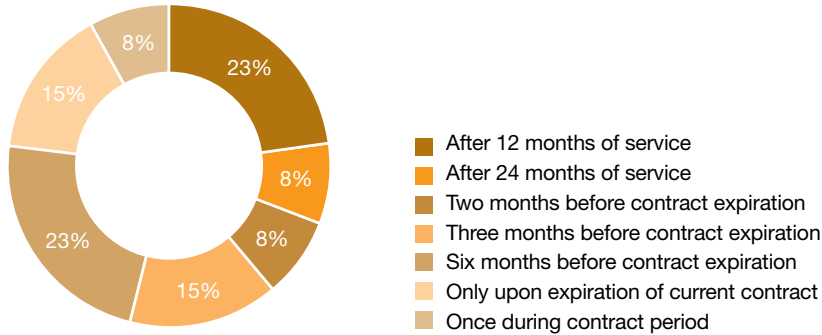
Revenue recognition

Average new customer handset subsidy



We asked respondents when they consider a customer eligible to receive subsidies for a new handset. The chart below illustrates when companies allow subsidies to existing customers for a new handset.

Postpaid customer eligibility to receive retention subsidy for a new handset

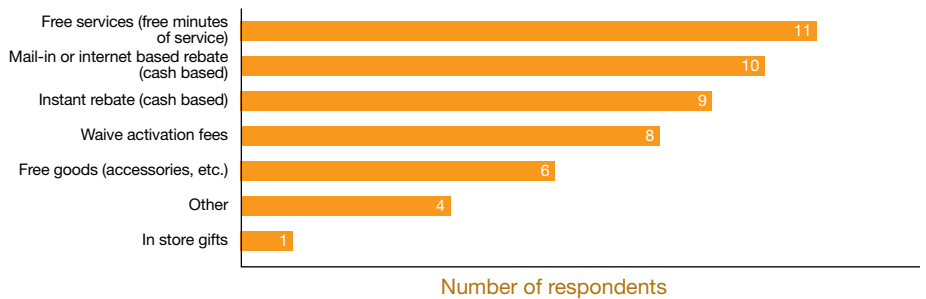


Market development funds and rebates

Seventy-six percent (76%) of the responding companies receive marketing development funds from their vendors. Of those companies, 85% classify these receipts as contra-expense.

The following chart illustrates the incentives and services offered as customer subsidies by the respondents.

New customer incentives and services offered



** Other includes third-party gift cards, airline vouchers, gas cards, and free downloads.
Chart sums to greater than the number of responding companies as multiple responses were allowed.*

Many companies use mail-in rebates as a way of attracting new customers to buy their handsets. Of the responding companies, 44% offer mail-in rebates to their postpaid customers while 33% offer mail-in rebates to their prepaid customers. Thirty-three percent (33%) of the responding companies indicated that the value of the rebate depends on the length of the contract terms.

Of the companies that provide mail-in rebates, 91% indicated that they use a third-party provider to process mail-in rebate programs. The remaining 9% use a combination of internal and third-party providers to process redeemed rebates.

Revenue recognition

Rebate requirements vary widely for the responding companies; however, most respondents required customers to return the receipt, rebate redemption form, and UPC code. Other carriers required a packaging slip and a copy of the customer's bill.

Many different levels of rebates are offered to customers. Each responding company that offers mail-in rebates quantified the dollar value of the rebates. The following chart summarizes their responses within prepaid and postpaid categories.

Dollar value of mail-in rebates offered

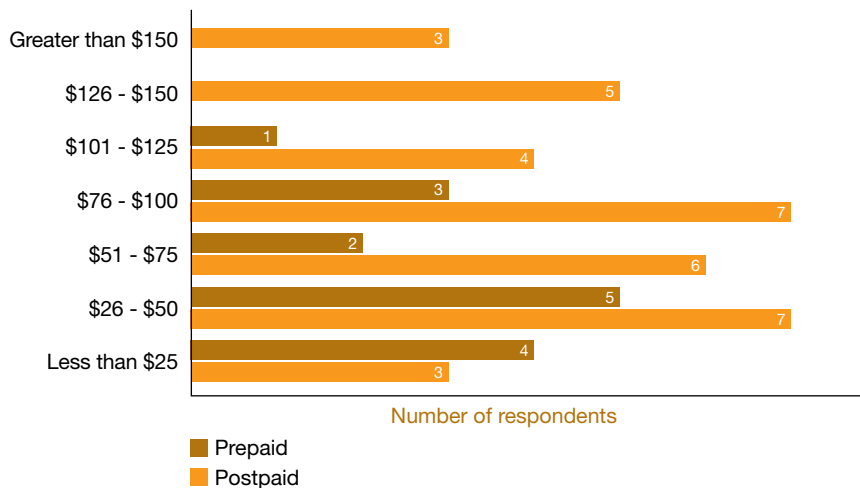


Chart sums to greater than the number of respondents as multiple responses were allowed.

The following chart represents the average percentage redeemed for each dollar-value range of rebates offered, for both prepaid and postpaid.

Percentage of rebates redeemed by dollar value

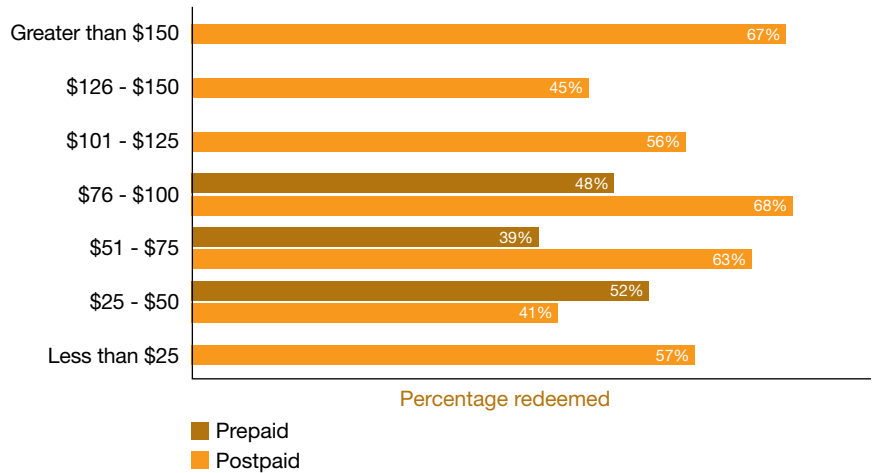


Chart sums to greater than 100% because multiple responses were allowed.

The following chart illustrates the dollar value of instant rebates offered.

Dollar value of instant rebates offered

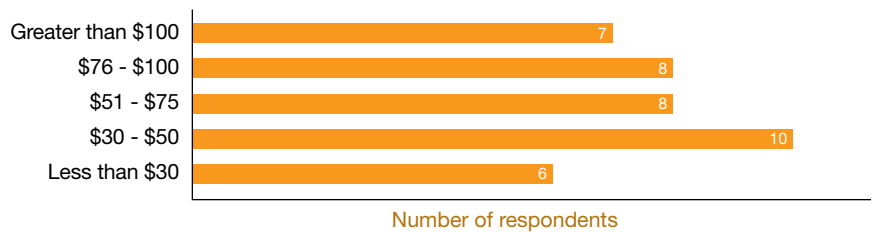


Chart sums to greater than the number of respondents as multiple responses were allowed.

Fifty-six percent (56%) of the responding companies team with their handset and accessory vendors to provide joint rebates to subscribers in which the manufacturer reimburses the carriers. Of those responding companies, 80% recognize a liability under the program when the related revenue is recognized. The companies recognize the reimbursement either as equipment revenue (40%) or as a reduction of the cost of revenues (40%).

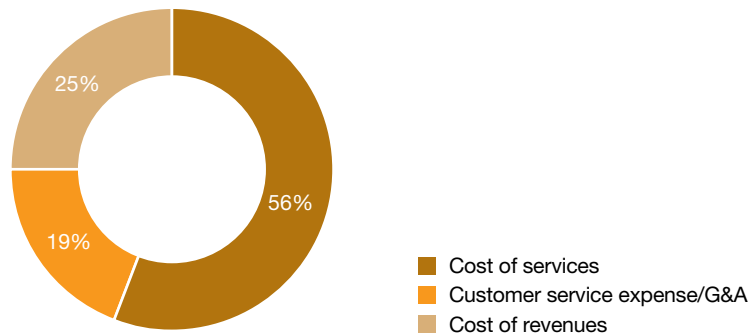
Revenue recognition

Other revenue activities

Fifty-six percent (56%) of the responding companies are currently or expect to be eligible for the status of Eligible Telecommunication Carrier (ETC) this year. Of the companies with revenue greater than \$5.0 billion, 63% receive ETC revenue; and of the companies with revenue of less than \$5.0 billion, 50% receive ETC revenue. We asked those who are receiving or expect to receive ETC amounts during the period to specify what percentage of their service revenues they expect to derive from ETC distributions. Of those that replied, 78% of those receiving ETC revenue expect less than one percent, 11% expect between two percent and five percent, and 11% expect more than five percent.

The following chart illustrates how the responding companies classify costs related to directory assistance (e.g., 411 calls) on the income statement.

Classification of directory services

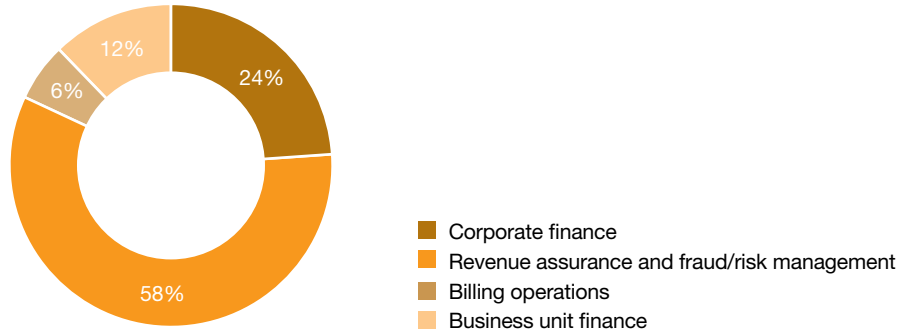


Revenue assurance

The revenue assurance function plays an important role in ensuring adequate internal controls over financial reporting and in minimizing revenue leakage. In fact, each of the 18 respondents currently has a dedicated revenue assurance function. The responding companies were asked what level of importance they place on the revenue assurance function within their company. Sixty-five percent (65%) rate revenue assurance as very important and 35% consider revenue assurance important.

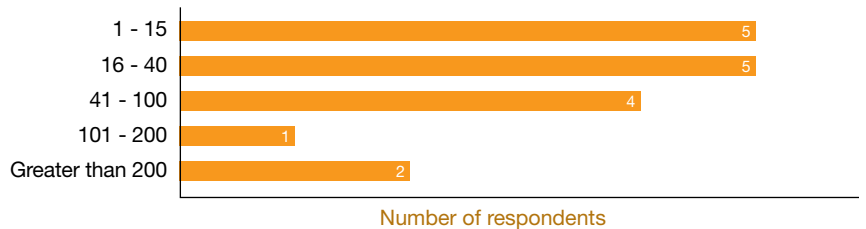
Primary responsibility for the revenue assurance function varies across the responding companies. The chart below shows the primary departments that oversee the revenue assurance functions.

Responsibility for revenue assurance

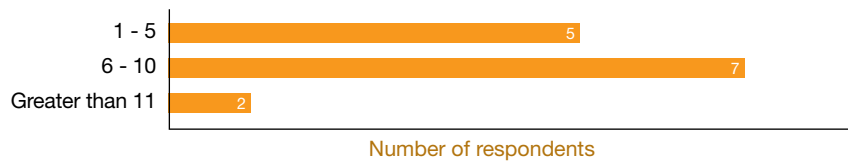


The following charts illustrate how many individuals are dedicated specifically to the revenue assurance function, and the number of dedicated revenue assurance individuals per \$1.0 billion in total revenue.

Dedicated number of revenue assurance individuals



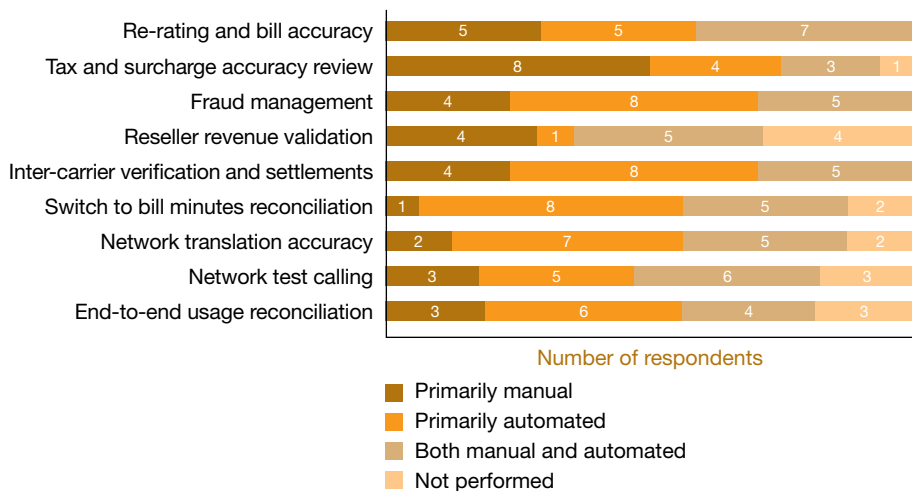
Dedicated number of revenue assurance individuals per \$1.0 billion



Revenue recognition

The extent of the activities carried out by the revenue assurance function varies among the companies. We asked the responding companies with a dedicated revenue assurance function to indicate which core activities their revenue assurance group performs. The results are presented in the chart below. In addition, for those activities that are performed, we asked whether the procedures are primarily manual, primarily automated, or evenly split.

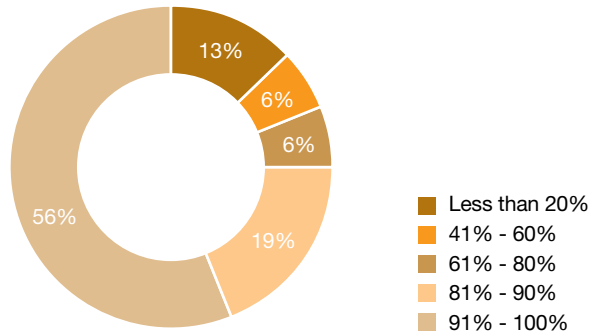
Revenue assurance activities



When asked which components of the revenue process represent the greatest area for revenue and margin leakage, the respondents identified the following greatest areas of risk in order of importance: rating and invoicing, activation revenue, customer care, and fraud revenue.

The following chart shows the percentage of each company's annualized revenue that is subject to the revenue assurance program.

Annualized revenue subject to revenue assurance program



No responses were received in the 21% - 40% category.

The chart below illustrates the revenue assurance and fraud management opportunities reported by the responding companies.

Revenue assurance/fraud management opportunities

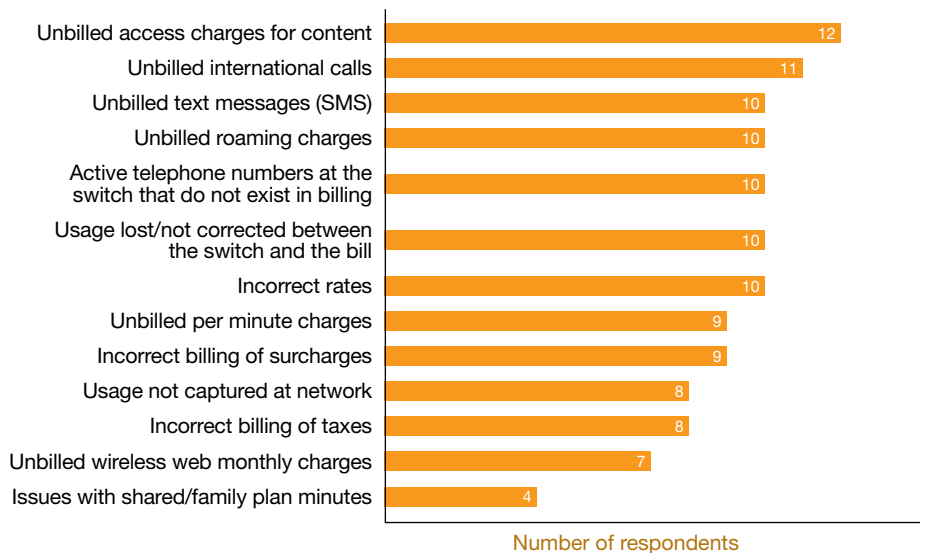


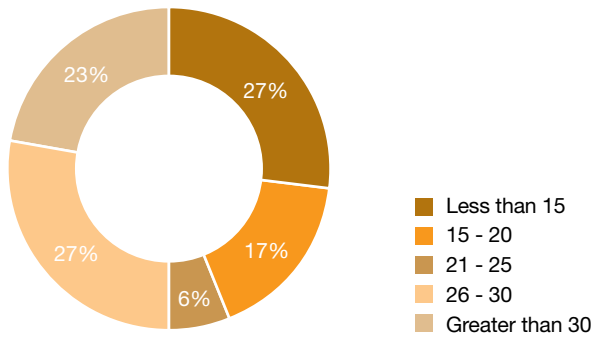
Chart sums to greater than the number of responding companies as multiple responses were allowed.

Revenue recognition

Customer billing and payments

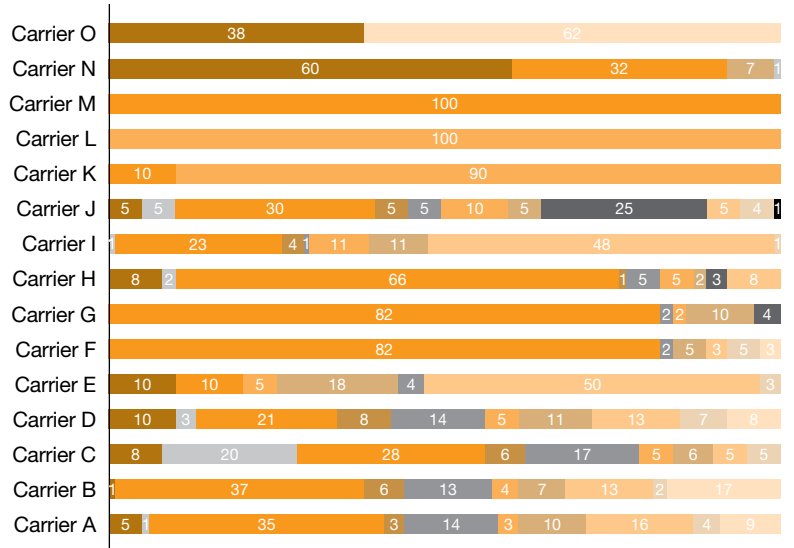
Practice varies among carriers as to whether certain charges can be included on a new subscriber's first billing cycle. Of the responding companies, 53% allow equipment purchases and 87% allow activation fees to be included on a subscriber's first billing cycle. The average number of billing cycles per month varies by respondent. The chart below illustrates the distribution of billing cycles per month.

Average number of billing cycles per month



We asked the responding companies to indicate the percentage of customer payments that they received through each channel for both postpaid and prepaid customers. The results are depicted in the charts below.

Postpaid customer payment channel



Percentage of customer payments

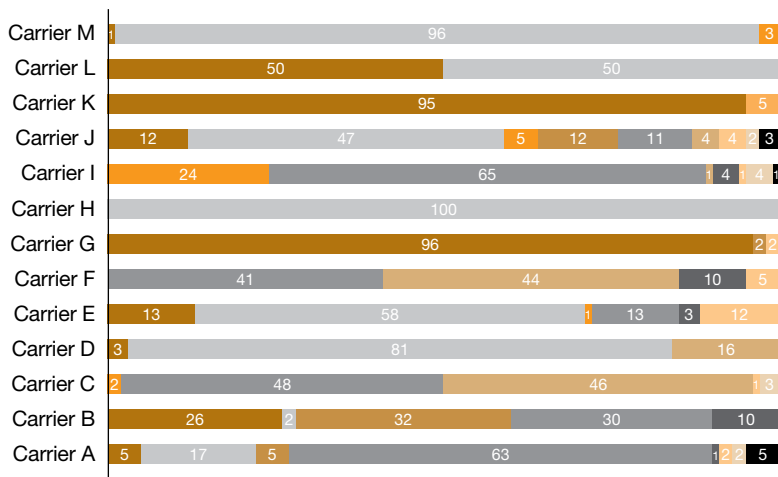
- In-store payments
- Agent/reseller locations
- Lockbox/direct mail/bank
- Retail kiosks
- Interactive Voice Response (IVR)
- Automatically deducted from bank account (e.g., ACH, customer initiated)
- Automatically charged to credit card (pre-authorized)
- Automatically charged to credit card for Prepay Subscribers (customer initiated)
- Internet payments
- Customer care/call center (non-IVR based)
- Initiated via handset menu
- Other

* Other includes payment channels such as home banking, bank transfer, and smart money.

Revenue recognition

On average for the responding companies, 20% of all payments (credit card, debit, Automated Clearing House, check) are recurring each month.

Prepaid customer payment channel

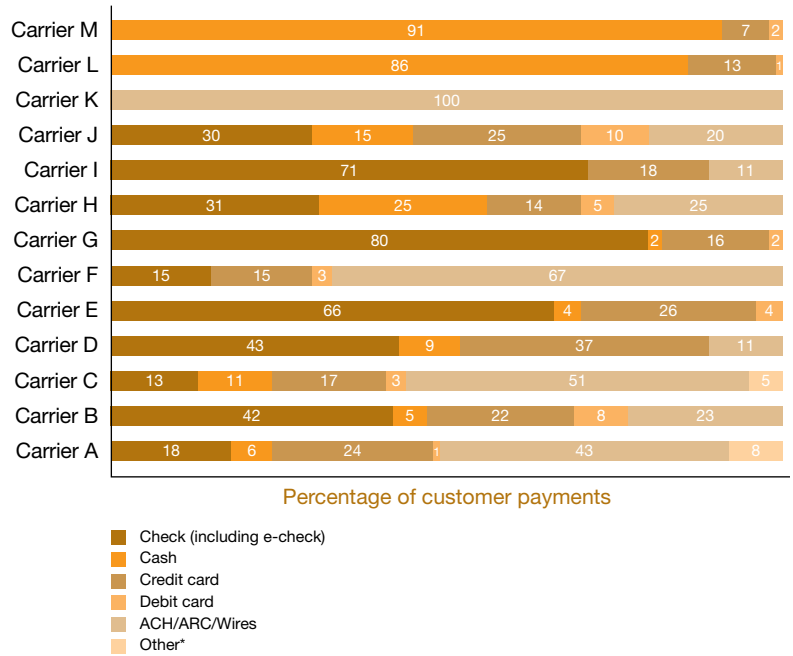


Percentage of customer payments

- In-store payments
- Agent/reseller locations
- Lockbox/direct mail/bank
- Retail kiosks
- Interactive Voice Response (IVR)
- Automatically deducted from bank account (e.g., ACH, customer initiated)
- Automatically charged to credit card (pre-authorized)
- Automatically charged to credit card (customer initiated)
- Internet payments
- Customer care/call center (non-IVR based)
- Initiated via handset menu

The following charts summarize the different types of postpaid and prepaid customer payments that are received via the various payment channels.

Methods of postpaid customer payments

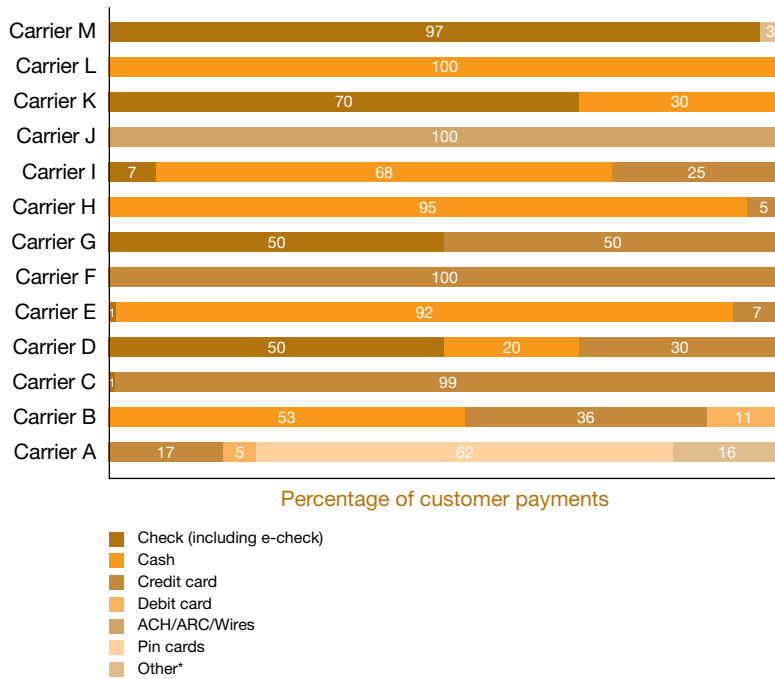


* Other includes pinless debit, PC banking, and direct billing.

Checks, representing 31% in the current year survey, continue to be the most common form of customer payment. ACH/ARC/Wires, cash, and credit cards account for 27%, 20%, and 18%, respectively, of all postpaid customer payments.

Revenue recognition

Methods of prepaid customer payments

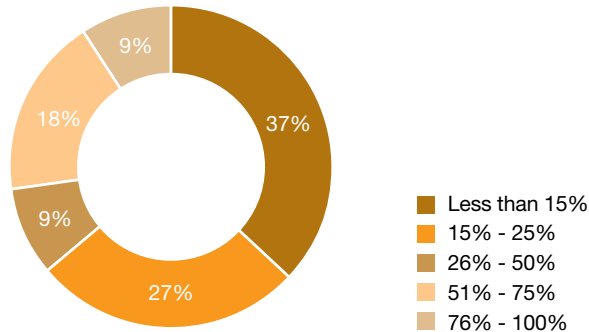


* Other includes pinless transactions and banks/ATMs.

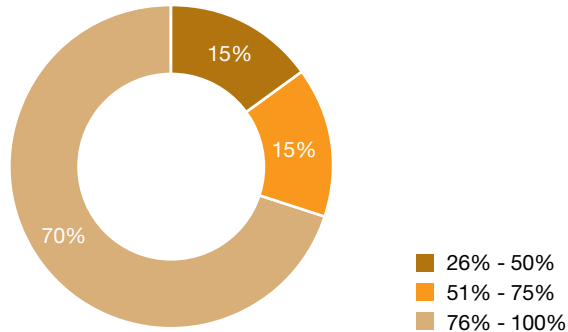
Cash, representing 35%, is the most common form of prepaid customer payment. Credit cards, checks (including e-checks), and ACH/ARC/Wires represent 28%, 21%, and 8%, respectively, of all prepaid customer payments.

Practices vary from carrier to carrier, as well as within certain carriers, as to whether postpaid subscribers are billed in advance or in arrears. The charts below illustrate the range of percentages of postpaid customers billed in arrears versus in advance for the responding companies.

Customers billed in arrears



Customers billed in advance



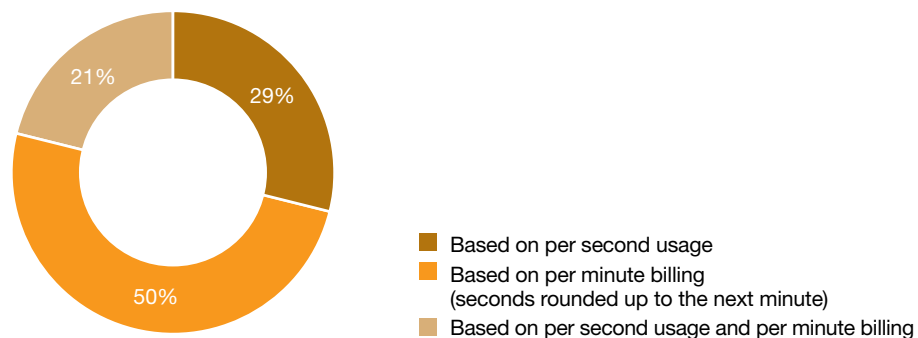
No responses were received in the less than 26% category.

The responding companies indicated that, on average, they bill 25% of their customers in arrears and bill 75% in advance.

Revenue recognition

We asked the responding companies how they bill postpaid subscribers for usage charges. The following chart illustrates how the responding companies bill their customers' usage.

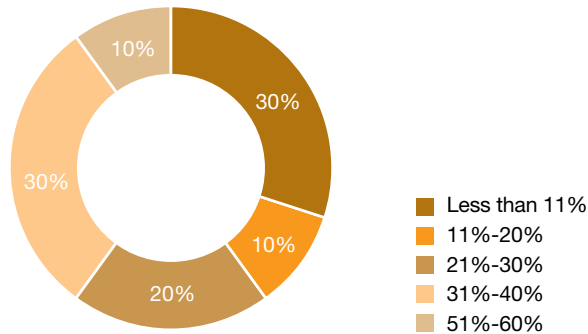
Billing of usage



Handset insurance

Most responding companies offer their subscribers a handset insurance or protection program. This program can either be self-insured by the provider, provided through a third party, or provided by a combination of the company and a third party. Seventy-one percent (71%) of the respondents offer handset protection programs. Of the respondents that offer a handset replacement program, 64% use a third-party provider, 27% use a self-insured protection program, and the remaining 9% indicated using a combination of a company-sponsored and a third-party program. The chart below illustrates the percentage of subscribers who choose to participate in handset replacement programs.

Handset protection participation

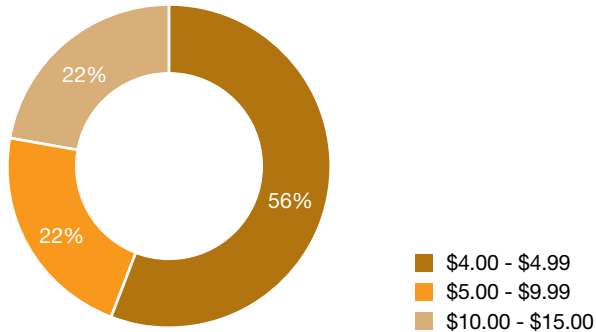


No responses were received in the 41% - 50% or the greater than 60% categories.

Revenue recognition

Eighty-two percent (82%) of the responding companies that offer handset replacement programs bill subscribers based on a fixed monthly amount, while the remaining 18% bill customers based on the value of the handset. The chart below illustrates the average fixed monthly fees charged to customers for handset replacement protection.

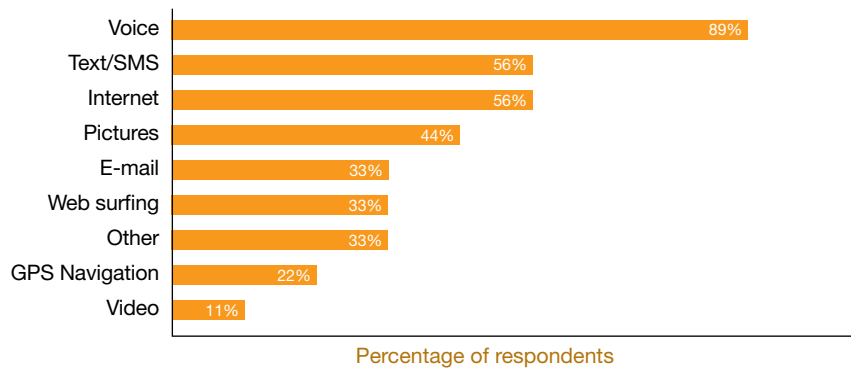
Fixed fees charged for handset protection



All-inclusive packages

The responding companies were asked whether they offer all-inclusive packages to subscribers. Fifty-six percent (56%) of the responding companies offer all-inclusive packages. Of those companies, 63% indicated that less than two percent of their subscribers participate in the plans they offer. The following chart illustrates the services that the respondents include in the all-inclusive packages.

Services offered in all-inclusive package



* Other includes unlimited text to in-system subscribers, unlimited to other countries, video messaging, roaming, and television.

Chart sums to greater than 100% because multiple responses were allowed.



Performance measures

The following section focuses on the internal and external key performance measures that wireless companies track and report.

Customers/Metrics

Subscriber costs

General and administrative

Data

Ring tones

Games

SMS and premium SMS

Phone/BlackBerry-based e-mail and Web access

Laptop cards

Internet access from handsets

Picture revenue

Network

Long distance and interconnect expense

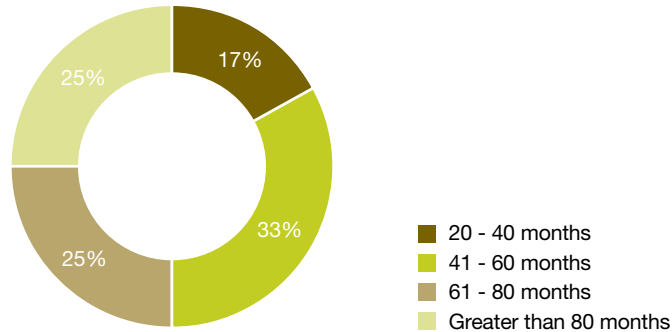
Rate plans and billing

Performance measures

Customers/Metrics

The chart below depicts the average length of the responding companies' relationships with postpaid customers.

Average length of customer relationship—Postpaid



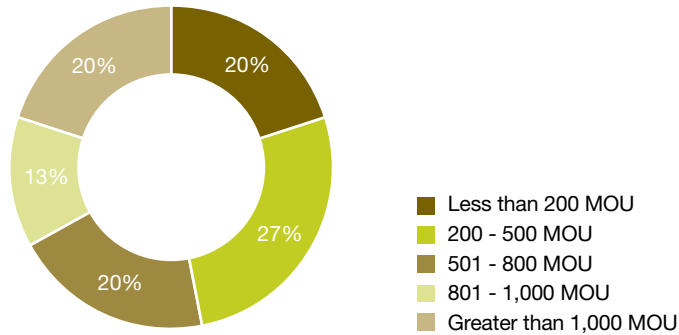
The average length of customer relationships is approximately 63 months in 2008. For companies with revenue greater than \$5.0 billion, the average customer relationship is 73 months, and for companies with revenue of less than \$5.0 billion, the average is 56 months. For North American respondents, the average length of customer relationships is 70 months. For North American companies with revenue greater than \$5.0 billion, the average customer relationship is 73 months, while companies with revenue of less than \$5.0 billion have an average customer relationship of 67 months.

We asked the respondents how they define minutes of use (MOU). Sixty-one percent (61%) of the respondents define MOU as billed minutes (whether included as part of the customer's plan or additional non-packaged minutes billed); 39% of the respondents define MOU as minutes per the switch, regardless of whether those minutes are ultimately billed to the customer.

The following chart depicts the average MOU per customer per month. According to the responding companies, the average percentage of MOU that is billed as excess (i.e., over plan) minutes is 20%. For North American respondents, the average MOU billed as excess is 7% in the current year and was 6% in the 2007 North American Wireless Survey.

The average MOU for all responding carriers is 628 minutes for the current year. The average North American MOU increased to 800 minutes in the current year survey from the 744 minutes reported in the 2007 North American Wireless Survey. MOU for North American respondents with revenue greater than \$5.0 billion averages 836 in 2008, as compared to 818 minutes in 2007; and the responding companies with revenue of less than \$5.0 billion have an increase in average MOU to 771 in 2008 from the 710 reported in the 2007 North American Wireless Survey.

Average monthly minutes of use per postpaid subscriber



Seventy-two percent (72%) of the responding companies report postpaid churn externally, and 44% of the responding companies report prepaid churn externally. The responding carriers indicated that an average of 32% of all churn is a result of involuntary disconnects (company-induced disconnects or termination of service).

We asked the companies how postpaid churn is calculated. Half of the responding companies use net deactivations for the numerator of the churn calculation, while 44% use gross deactivations. The majority (63%) of the respondents use average subscribers for the denominator of the churn calculation, while 25% use beginning subscribers and 12% use ending subscribers for the period. For the companies using net deactivations for the numerator, the definition varies widely—ranging from excluding only same-day activations/deactivations to a 60-day period.

Performance measures

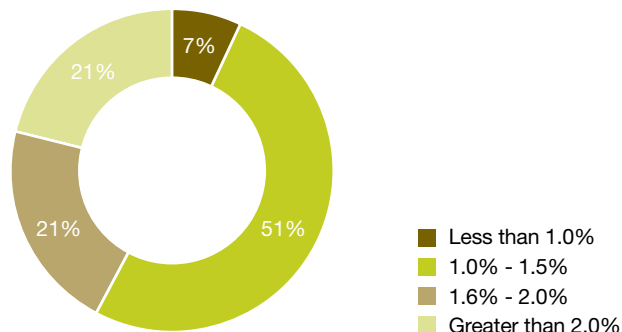
The responding companies indicated that for prepaid churn, 60% use net deactivations for the numerator of the calculation, while 40% use gross deactivations. For the denominator of the prepaid churn calculation, 60% of the respondents use average subscribers, while 27% use beginning subscribers and 13% use ending subscribers for the period.

Ninety-four percent (94%) of the respondents track information regarding postpaid and prepaid customers separately. The percent of respondents with a postpaid churn rate of two percent or less is 93% in the current year. For prepaid churn, the number of respondents with a churn rate of five percent or less is 56% in the current year. For North American respondents, 90% have a postpaid churn rate of less than two percent in 2008, as compared to the 75% reported in the 2007 North American Wireless Survey.

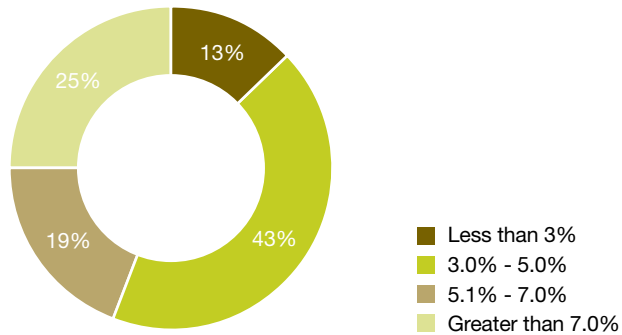
The percentage of respondents with postpaid average revenue per user (ARPU) greater than \$50.00 is 77%. The percentage of respondents with prepaid ARPU greater than \$20.00 is 56%. The average North American respondents' ARPU for postpaid and ARPU for prepaid subscribers are \$59.98 and \$27.76, respectively, in the current year, as compared to \$58.72 and \$23.56, respectively, in the 2007 North American Wireless Survey.

For those responding companies that track information separately, the following four charts compare churn rates and ARPU for postpaid and prepaid subscribers.

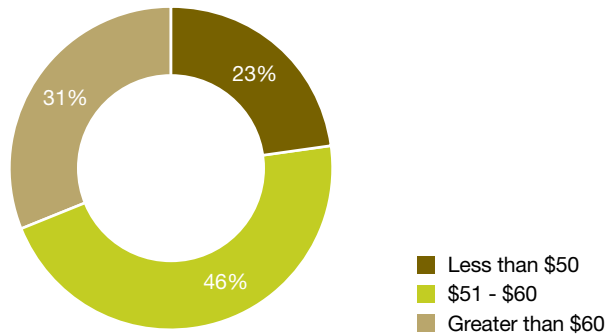
Churn for postpaid subscribers



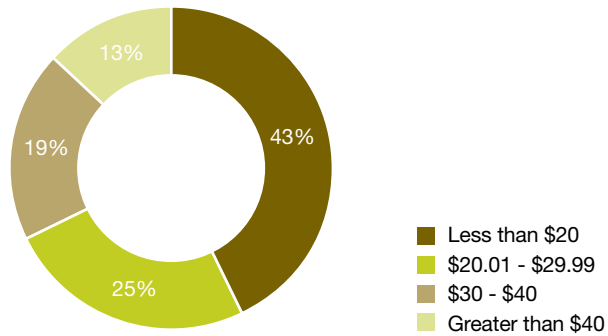
Churn for prepaid subscribers



ARPU for postpaid subscribers



ARPU for prepaid subscribers



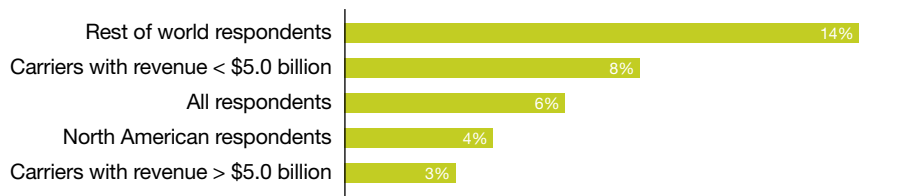
Performance measures

We asked companies what percentage of their 2007 postpaid subscriber revenue is access versus usage. Sixty-four percent (64%) of the respondents' revenue is due to access. Companies with revenue greater than \$5.0 billion have a larger percentage of subscriber revenue obtained from access charges (approximately 75%) than do the companies with revenue of less than \$5.0 billion (approximately 55%).

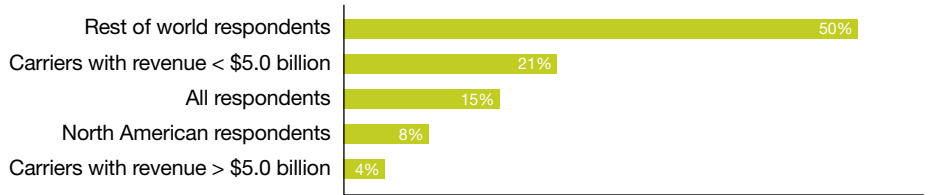
We asked the respondents what percentage of total service revenue was a result of roaming. The average of all respondents was five percent. For all responding carriers with revenue greater than \$5.0 billion and the rest of world based respondents, the average was six percent; and for all responding carriers with revenue of less than \$5.0 billion and the North American respondents, the average was four percent.

The following charts show the percentage of revenue for all responding companies that are a result of long distance and features.

Long distance revenue as a percentage of service revenue

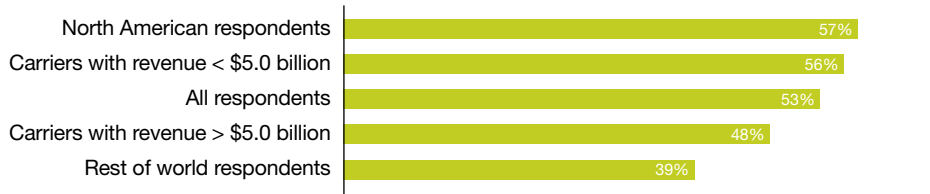


Feature revenue as a percentage of total service revenue



We also asked the responding companies their percentage of bad debt expense and operating expense to total services revenue. Two percent (2%) was the average bad debt expense. The chart below shows operating expense as a percentage of service revenue for 2007.

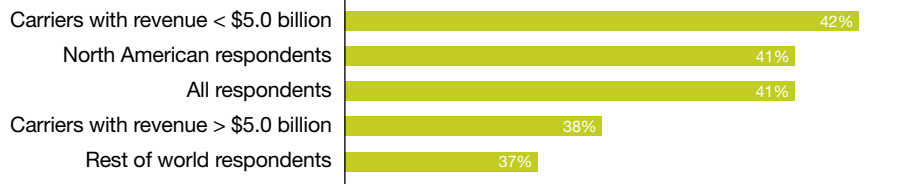
Operating expense as percentage of service revenue



Performance measures

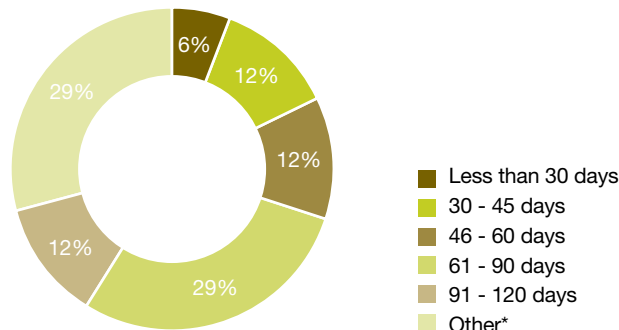
The chart below shows the EBITDA (earnings before interest, taxes, depreciation, and amortization) margin of the responding companies as a percentage of service revenue.

EBITDA margin as a percentage of service revenue



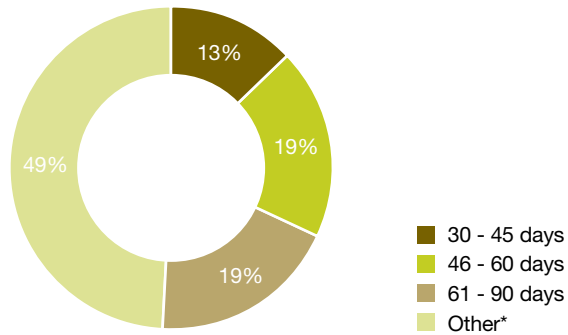
We asked companies how long they wait before discontinuing service if a prepaid customer fails to “replenish” his/her account when the balance is zero and when the subscriber has not had activity in the customer’s account. Their responses are illustrated in the following two charts.

Time to discontinue service



* Other includes 121 days to one year.

Time to disconnect prepaid customers with no activity



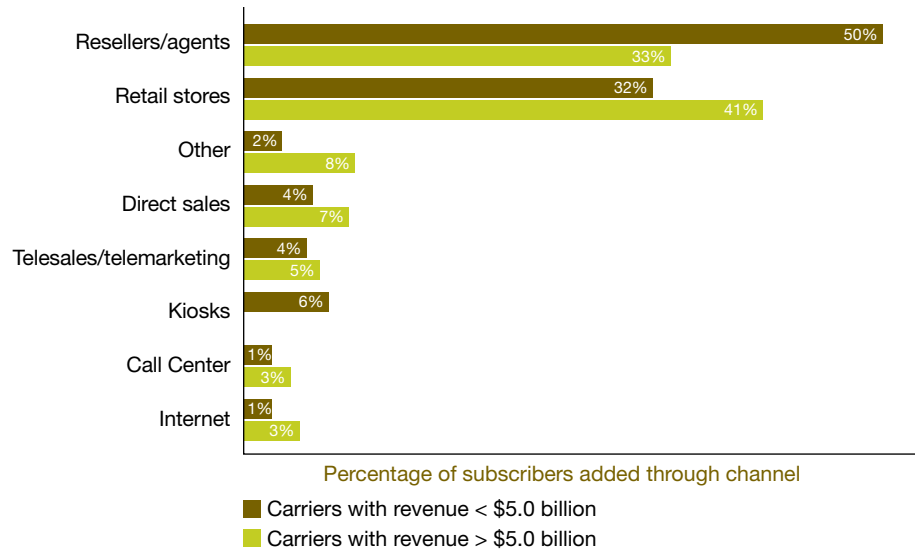
* Other includes 91 days to one year.

Further, we asked companies how they account for any remaining balance on an account when a prepaid customer is disconnected. Seventy-six percent (76%) stated that the customer forfeits the balance and that revenue is recognized. The remaining 24% stated that either the remaining balance is refunded to the customer or the subscriber is charged a monthly maintenance fee until the balance is zero.

Performance measures

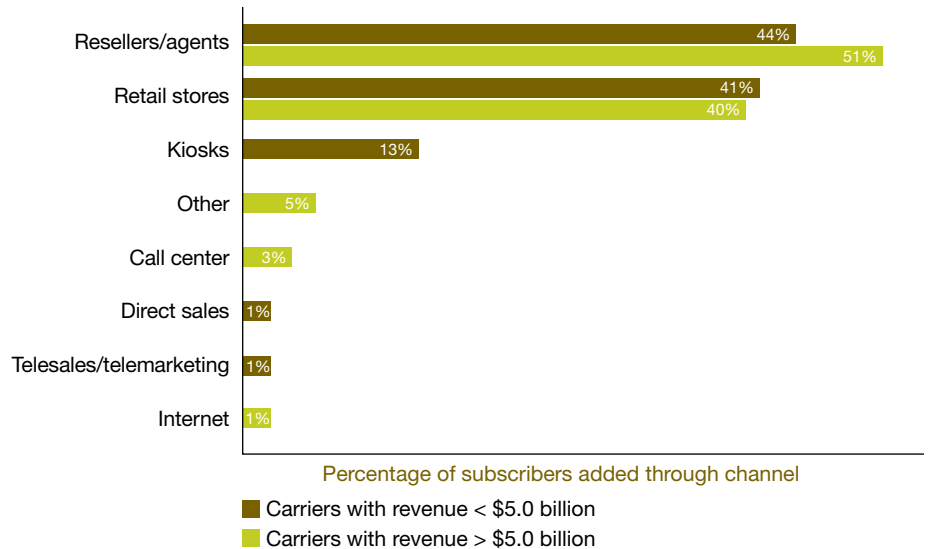
Carriers use various sales channels to acquire subscribers (postpaid and prepaid) and to allow prepaid subscribers to replenish service. We asked the responding companies to indicate the percentage of their postpaid subscribers, prepaid subscribers, and prepaid replenishments that they acquire through each channel. Their responses are illustrated in the following three charts.

Postpaid subscriber acquisition channels



In terms of regional differences, the North American responding carriers obtain more postpaid subscribers via retail stores (32%) compared to the rest of world-based respondents (21%). In contrast, the rest of world-based respondents obtain more postpaid subscribers via the reseller/agent channel (50%) than North American respondents do (40%).

Prepaid subscriber acquisition channel



In terms of regional differences, the North American responding carriers obtain more prepaid subscribers via resellers/agents (53%) compared to the rest of world-based respondents (24%). In contrast, the rest of world-based respondents obtain more prepaid subscribers via kiosks (24%) than North American respondents do (2%).

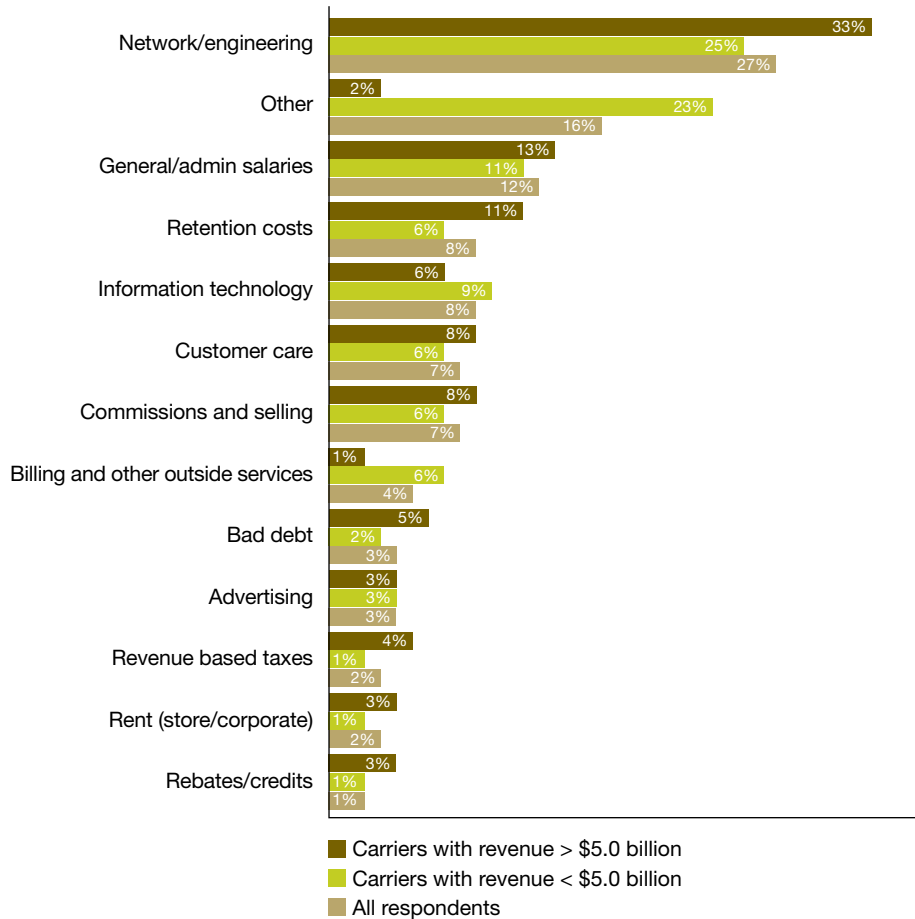
The allocation of different sales channels for all respondents to acquire postpaid and prepaid customers in the current year is consistent with the responses received in the 2007 North American Wireless Survey.

Performance measures

Subscriber costs

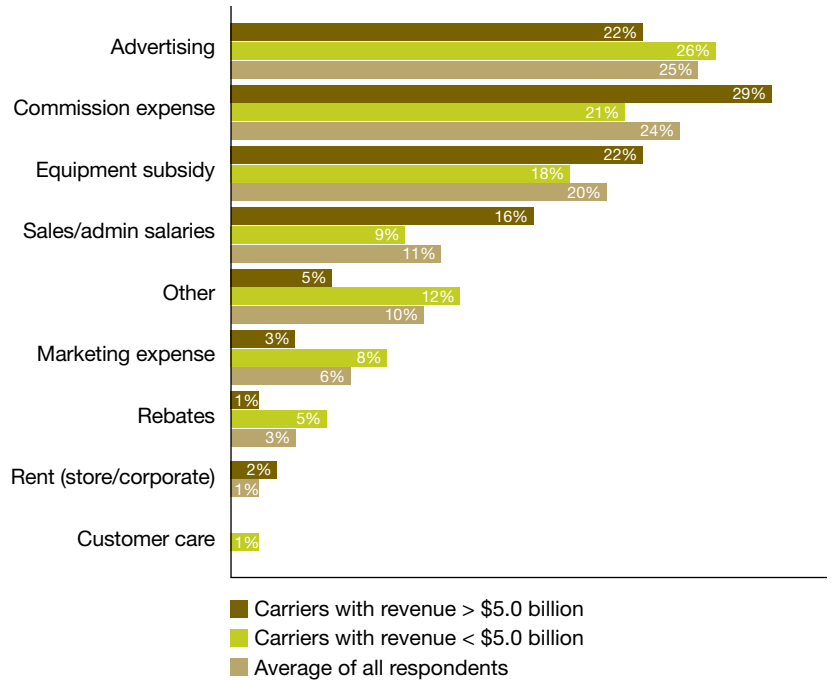
The following chart illustrates the allocation of cash cost per user (CCPU) between each component for all responding carriers and for carriers with greater than and less than \$5.0 billion in revenue.

Components of total Cash Cost Per User (CCPU)



We asked the responding companies what percentage of each component make up the total costs per gross addition (CPGA). The results are presented in the chart below for all responding carriers and for carriers with greater than and less than \$5.0 billion in revenue.

Components that make up total cash costs per gross addition (CPGA)



Eighty-eight percent (88%) of all the responding carriers' expense customer acquisition costs related to postpaid subscribers, while the remaining 12% capitalize all or part of these costs. Ninety-four percent (94%) of all the responding carriers expense customer retention costs for postpaid subscribers. All the responding carriers' expense customer acquisition and retention costs related to prepaid subscribers.

Performance measures

The responding companies were asked to indicate the costs that they include in the numerator for their calculation of CPGA when used as a performance measure. The following chart shows the elements used in the numerator for the calculation.

Costs included in CPGA

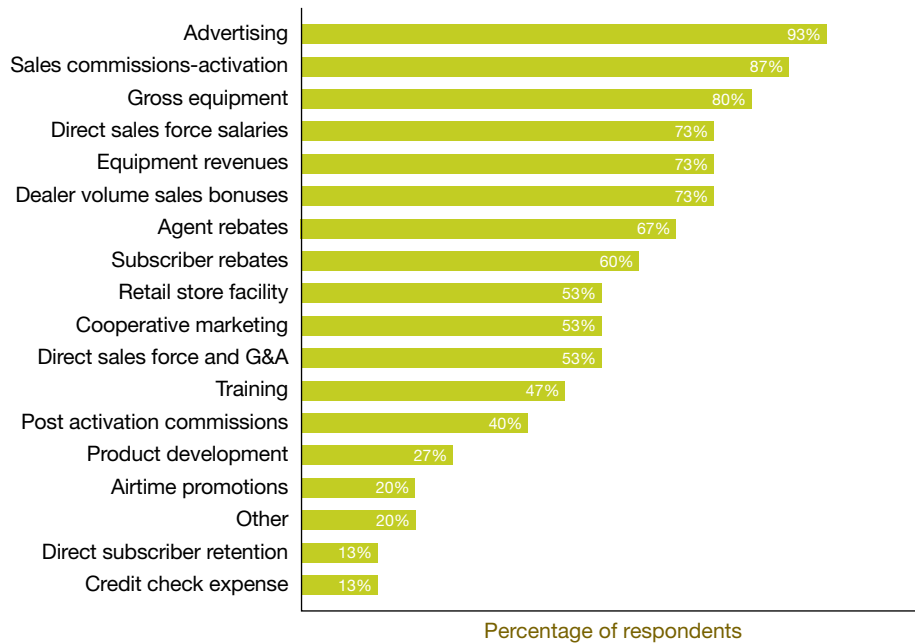
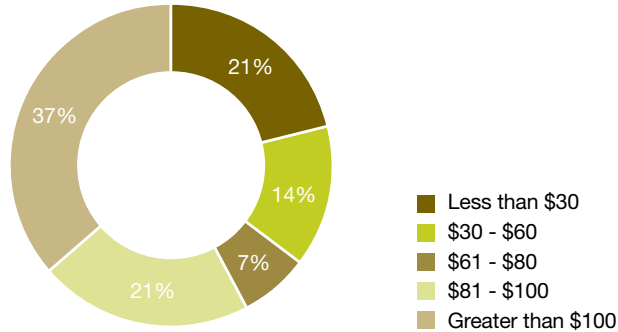


Chart sums to greater than 100% because multiple responses were allowed.

We asked the responding companies what their advertising costs were per gross addition. The results are presented in the chart below.

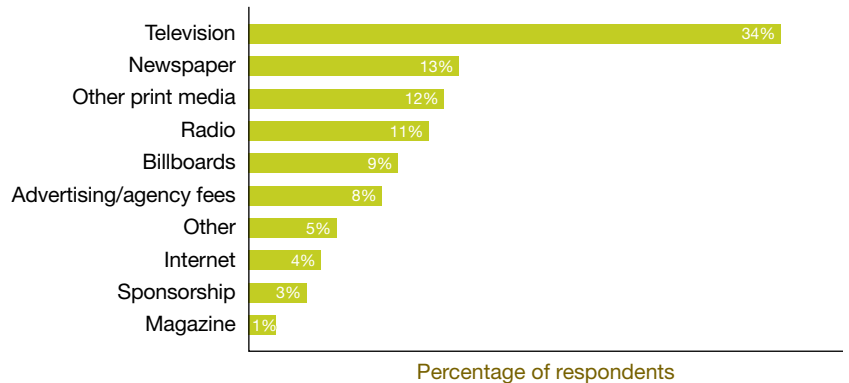
Advertising cost per gross addition



The average advertising cost per gross addition for companies with revenue greater than \$5.0 billion is \$82.50, and for companies with less than \$5.0 billion in revenue it is \$65.75.

The responding carriers were also asked which media they used for advertising their service. The table below shows the average response by each source of advertising.

Advertising medium

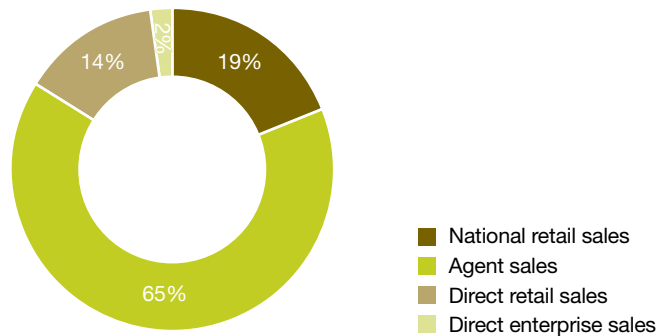


Performance measures

Carriers with revenue greater than \$5.0 billion reported using television for 50% of their advertising and the internet for seven percent. Carriers with less than \$5.0 billion in revenue use those two media only 24% and two percent, respectively; and they use billboards for 14% and radio for 13% of their advertising. In comparison, the carriers with revenue greater than \$5.0 billion use billboards only one percent and radio only nine percent.

We asked the responding carriers to provide the percentage of commission expense for each sales channel in fiscal year 2007. The results are presented below.

Commission expense by channel



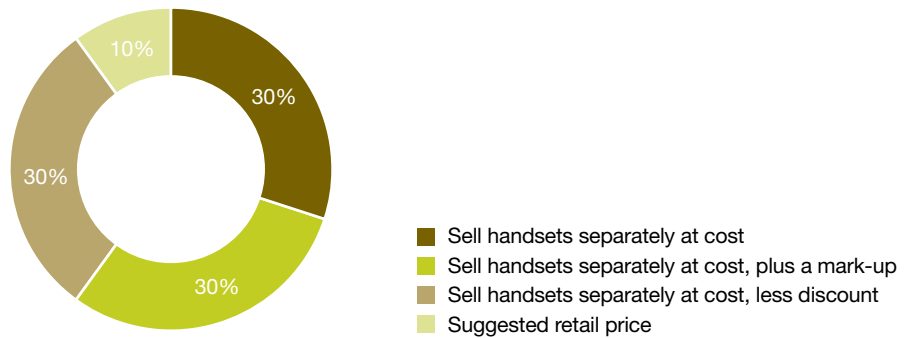
Eighty-one percent (81%) of the responding carriers' commission payments typically are structured to pay in full at the point of acquisition or retention of the subscriber. The remainder of the responding carriers pay in installments.

Thirty-five percent (35%) of the survey respondents record an accrual for potential chargebacks (reduction to commission expense resulting from potential deactivations). Of these companies, the majority record an accrual based on average chargeback percentages.

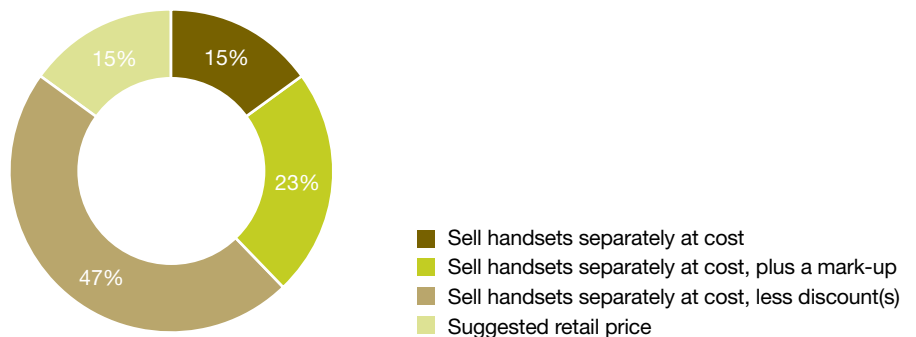
Fifty-nine percent (59%) of the survey respondents pay recurring residual commission fees. Of the companies that pay a residual commission expense, 100% pay it to sales agents and 60% pay the residual commission expense to national retail sales channel. Sixty percent (60%) of the respondents recognize the residual commission fee paid to agents when earned, while 30% recognize the commission fee paid to agents when paid. For the national retail sales channel, 83% recognize this expense when earned. Only one carrier pays residual commission expense for direct retail sales, and this expense is recognized when earned.

The responding companies were asked to indicate how they treat the sale of handsets if their company uses resellers and/or indirect agents.

Treatment of postpaid handset sales



Treatment of prepaid handset sales



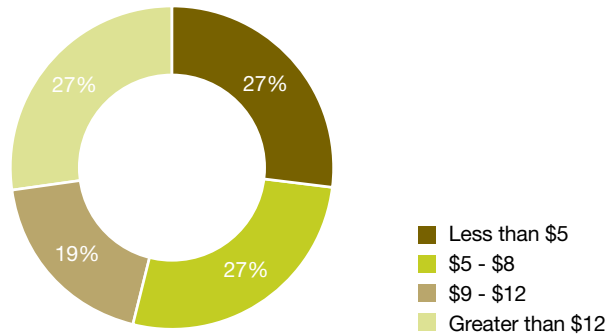
Seventeen percent (17%) of the responding companies pay commissions to resellers for sales of handsets in addition to the activation of subscribers.

Performance measures

General and administrative

We asked the responding companies what their average monthly general and administrative (G&A) costs were per customer. The results are presented in the chart below.

Average monthly general and administrative cost per subscriber



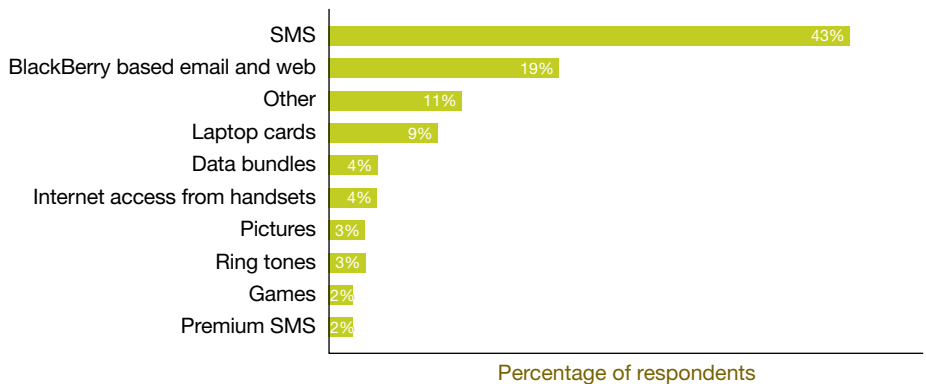
The average monthly general and administrative cost per subscriber in 2008 was \$9.92 compared to \$13.20 in the 2007 North American Wireless Survey.

Data

All of the responding companies offer data services to postpaid customers, while 94% of the responding companies offer data services to prepaid customers.

The responding companies offer multiple types of data services to customers. SMS continues to be the data revenue stream that generates the majority of data revenue. The chart below depicts the percentage of total revenue generated for each type of data service identified as related to postpaid data services.

Postpaid data revenue

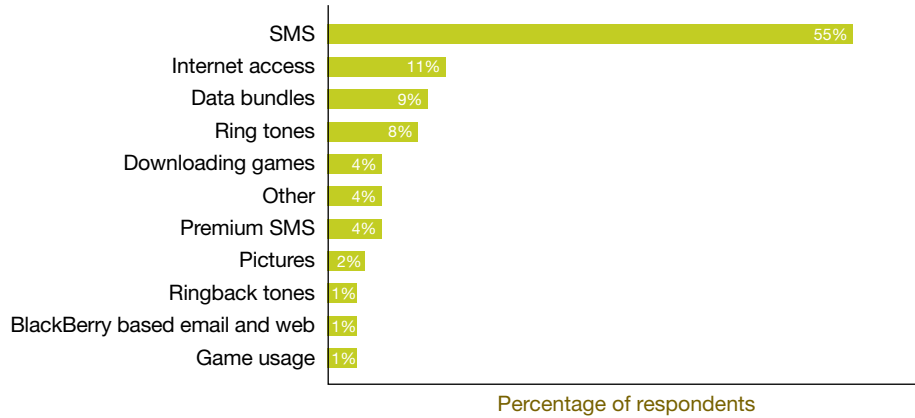


With the exception of SMS, phone/BlackBerry, laptop cards, and data bundling, no significant differences were reported between companies with revenue greater than \$5.0 billion and those with revenue of less than \$5.0 billion. For SMS, companies with revenue greater than \$5.0 billion average 34% of data revenue, while companies with revenue of less than \$5.0 billion average 51%. However, companies with revenue greater than \$5.0 billion average nine percent of data revenue related to data bundling and 23% and 11% related to phone/BlackBerry and laptop cards, respectively. Companies with revenue of less than \$5.0 billion average only one percent of data services revenue from data bundling and 15% and seven percent related to phone/BlackBerry and laptop cards, respectively.

Performance measures

The chart below depicts the percentage of total revenue generated for each type of data service identified as related to prepaid data services.

Prepaid data revenue



The following explanations and charts illustrate how the responding companies bill and recognize the various data revenue streams.

Ring tones

The majority (71%) of the companies bill their customers per download/usage charge, and 21% bill based on a fixed monthly fee plus variable fees per usage. Seventy-five percent (75%) of the responding companies recognize ring tones revenue gross on the income statement, and the remaining 25% use a net presentation.

Games

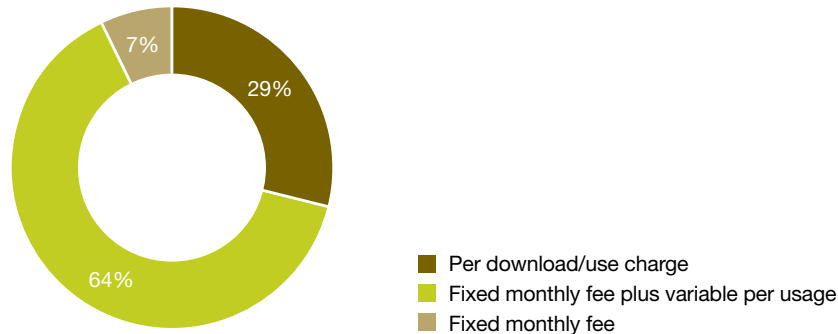
Sixty-seven percent (67%) of the companies bill their customers per download/usage charge and 17% bill a fixed monthly fee plus variable fees based on usage related to games. Eighty-six percent (86%) recognize game revenue gross on the income statement.

Performance measures

SMS and premium SMS

Sixty-seven percent (67%) of the respondents recognize SMS and premium SMS revenue gross on the income statement. The chart below illustrates how SMS is billed to customers.

Billing of SMS revenues



Compared to SMS in the chart above, 85% of the companies bill premium SMS based on a per-download use/charge or variable pricing.

Phone/BlackBerry-based e-mail and Web access

Sixty-seven percent (67%) of the respondents recognize phone/BlackBerry-based e-mail and Web access revenue gross on the income statement. A majority (82%) of the survey respondents bill their customers a fixed monthly fee plus a variable fee based on usage.

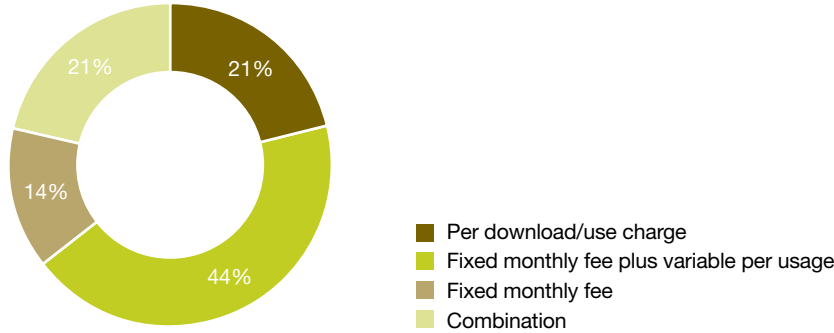
Laptop cards

Seventy-five percent (75%) of the respondents recognize laptop card revenue gross on the income statement. Sixty-seven percent (67%) of the survey respondents bill their customers a fixed monthly fee plus a variable fee based on usage, and 25% bill based on a fixed monthly fee.

Internet access from handsets

Sixty percent (60%) of the respondents recognize internet access from handset revenue gross on the income statement. The chart below shows the methods of billing internet access from handsets to customers.

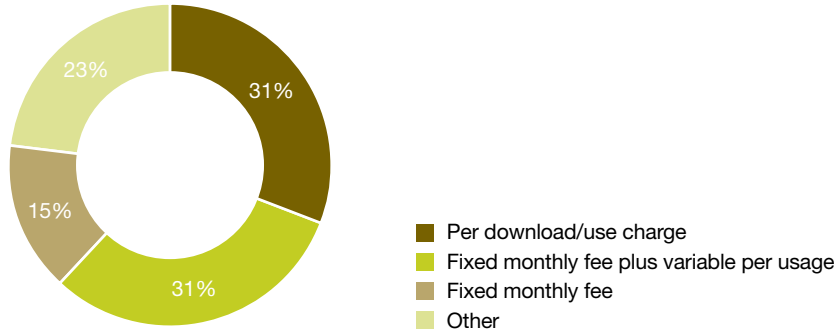
Billing of internet access from handset revenue



Picture revenue

Seventy-one percent (71%) of the respondents recognize picture revenue gross on the income statement. The chart below indicates how picture revenue is billed.

Billing of picture revenue



Performance measures

Network

We asked the responding companies which costs are included in the network/system expense. The responses are depicted below.

Costs included in network/system costs

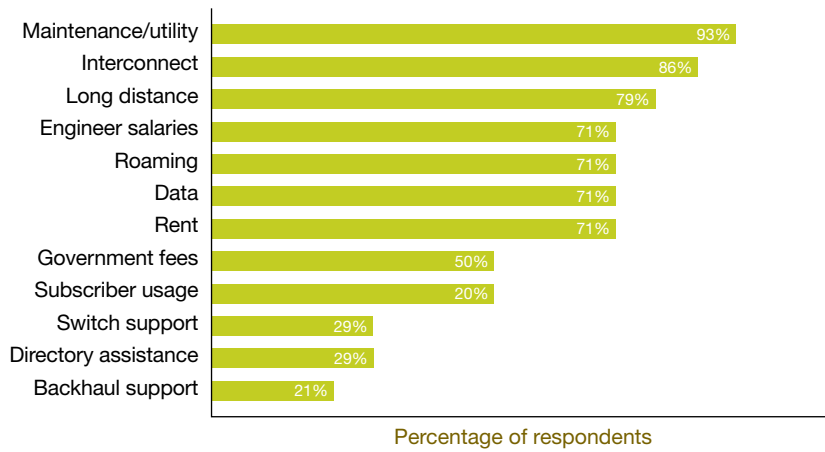
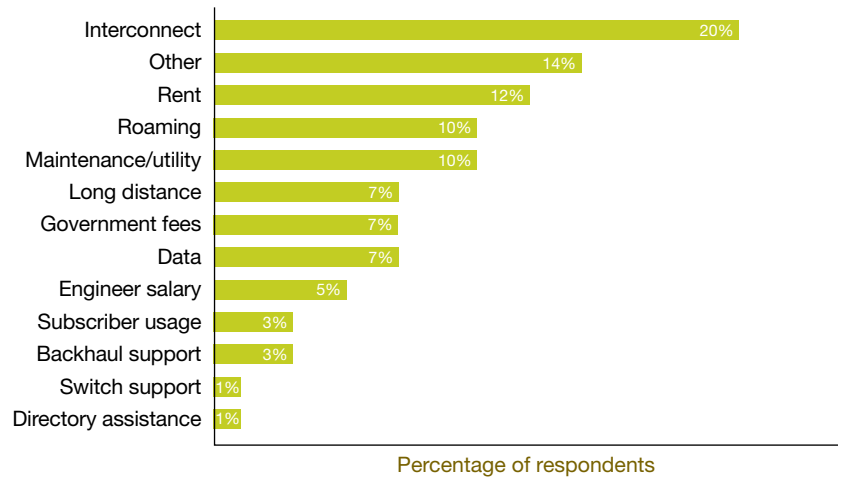


Chart sums to greater than 100% because multiple responses were allowed.

We asked the responding companies what percentages of each component make up the total network/system costs. Their average responses are illustrated in the chart below.

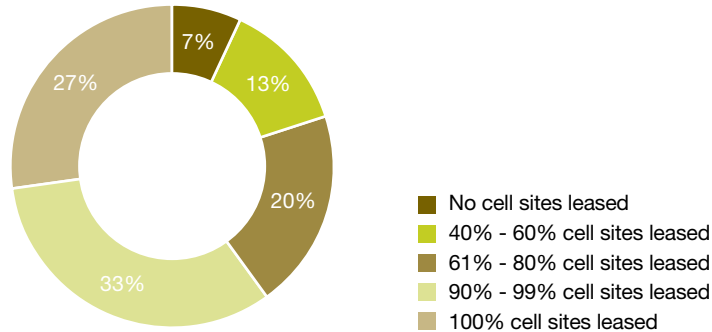
Components of network costs



Performance measures

The chart below depicts the percentage of cell sites that the responding companies lease rather than own. Four respondents indicated that they lease all of their cell sites, while one respondent indicated that they own all of their cell sites. Sixty percent (60%) of the responding companies stated that they lease 80% or more of their total cell sites.

Percentage of cell sites leased



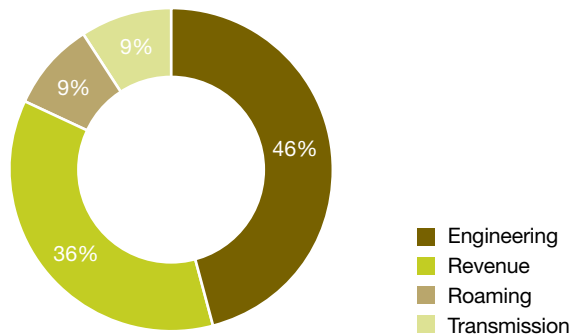
No responses were received in the 1% - 39% or 81% - 89% categories.

Seventy-five percent (75%) of the responding companies indicated that they use a circuit inventory tracking system to account for system expense. Of those companies, 50% use Excel to track circuit inventory.

Long distance and interconnect expense

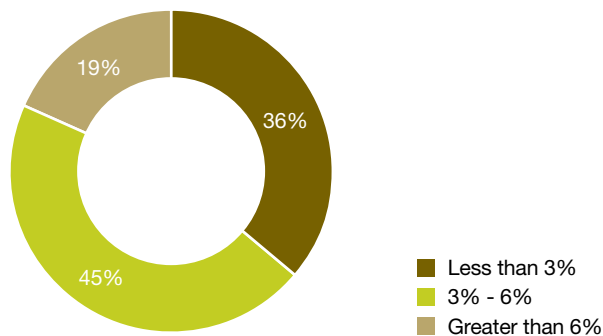
Ninety-four percent (94%) of the respondents perform bill verification for long distance and interconnect expenses. Of those companies, 75% perform bill verification internally, 19% use third parties to perform their bill verification, and six percent use a combination of internal resources and a third party to perform their bill verification. The following chart depicts which internal group performs their bill verification.

Internal department that performs bill verification



We asked the companies to report interconnect and long distance expenses as a percentage of service revenue. The average of all responding companies was 5.82%. The chart below illustrates the results.

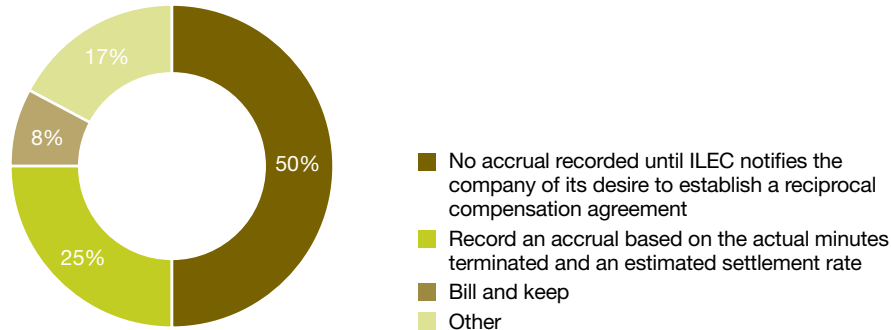
Interconnect and long distance as a percentage of total service revenue



Performance measures

Fifty percent (50%) of the responding companies reported that they recognize reciprocal compensation for calls terminating on ILEC networks with no reciprocal compensation agreements in place. The chart below illustrates how these companies account for terminating expenses when there is no reciprocal compensation agreement in place.

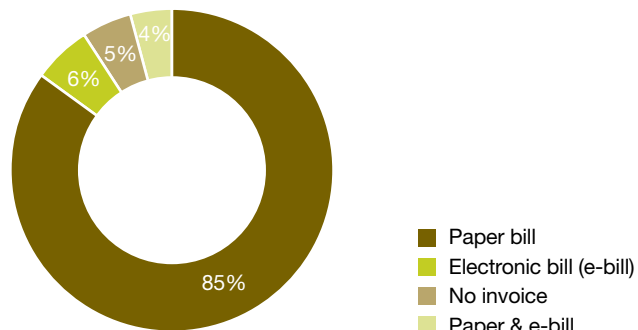
Accounting for calls terminated on ILEC networks



Rate plans and billing

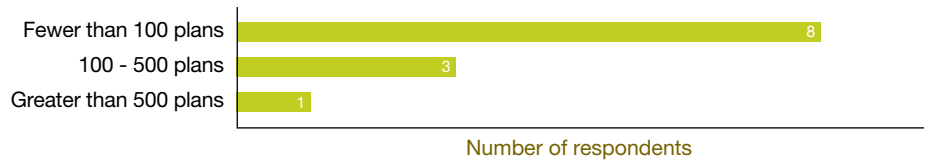
For fiscal year 2007, we asked the responding companies to identify the method through which their postpaid subscribers receive their monthly invoices. The responses are below.

Monthly invoice delivery method



The charts below indicate the varying numbers of rate plans that the responding companies currently offer to postpaid and to prepaid subscribers.

Number of rate plans offered to postpaid customers



Number of rate plans offered to prepaid customers



Compared to the number of plans currently offered (shown above), nine carriers indicated that they have more than 1,000 postpaid plans maintained in the billing system and five carriers indicated that they have more than 30 prepaid plans active in the billing system. Fifty-eight percent (58%) of the companies indicated that they are currently focused on reducing the number of rate plans offered to subscribers.



Property, plant and equipment

The following pages cover wireless company practices in the area of property, plant and equipment.

Capital expenditure reporting

Capitalization policies

Capitalized labor

Site acquisition costs

Asset impairments and fair value

Business combinations

Asset retirement obligations

Lease accounting and tracking

Asset tracking

Asset useful lives

Taxes and tax useful lives

Co-location

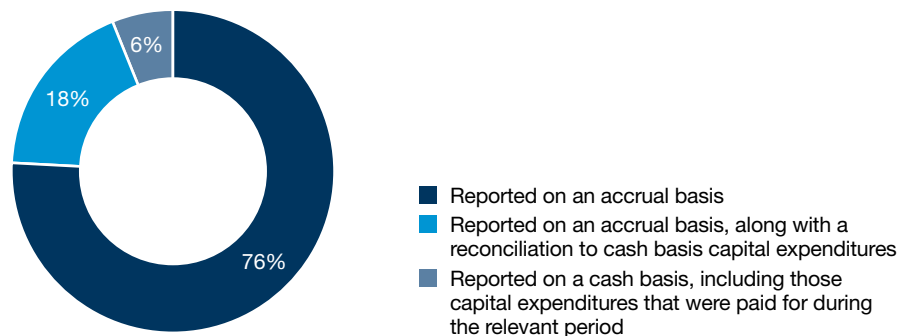
Fixed asset reporting

Property, plant and equipment

Capital expenditure reporting

The chart below shows what methods the responding companies use in reporting capital expenditures externally.

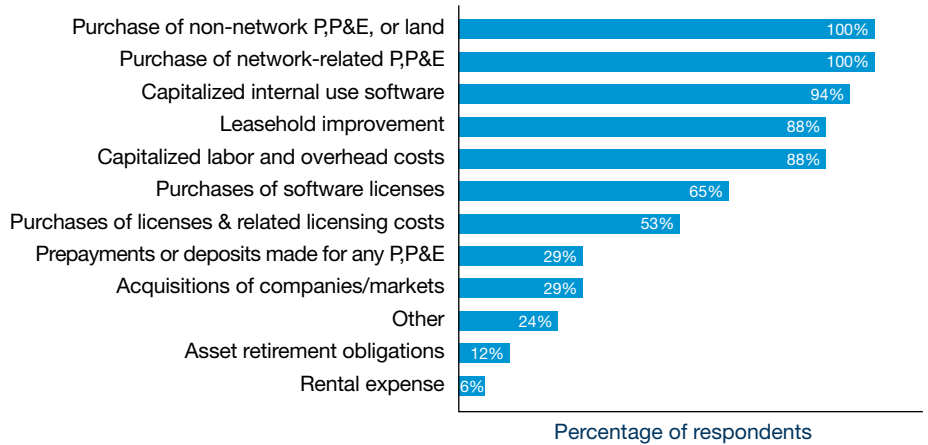
Externally reported capital expenditures



Survey respondents were asked whether their method of externally reporting capital expenditures was consistent with the capital expenditures reported on the statement of cash flows. Eighty-eight percent (88%) of all the respondents stated that their method of externally reporting capital expenditures was consistent with capital expenditures reported on the statement of cash flows, and 12% reported making other adjustments, which included acquisition of companies and capitalized interest.

The chart below illustrates the percentage of respondents who include the following expenditures in their externally reported capital expenditures related to property, plant and equipment (P,P&E).

Types of capital expenditures



* Chart sums to greater than 100% because multiple responses were allowed.

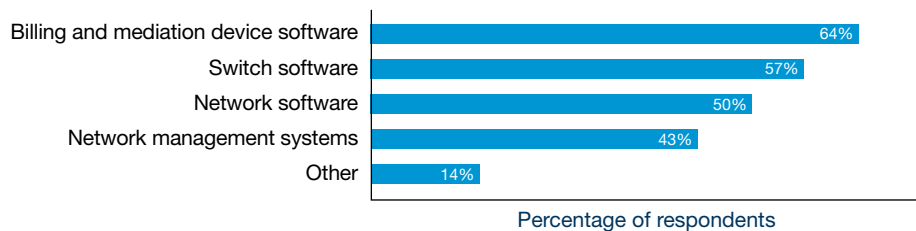
* Other includes perpetual license software, capitalized interest, and progress payments.

Responding companies were asked whether they consider the hardware and software components of network equipment separately. Eight-eight percent (88%) of the respondents consider hardware and software components separately.

Property, plant and equipment

The chart below illustrates which software costs the responding companies classify separately from property, plant, and equipment.

Software classified separately from property, plant, and equipment



** Other includes separate identification of network vs. non-network software and SAP/Windows. Chart sums to greater than 100% because multiple responses were allowed.*

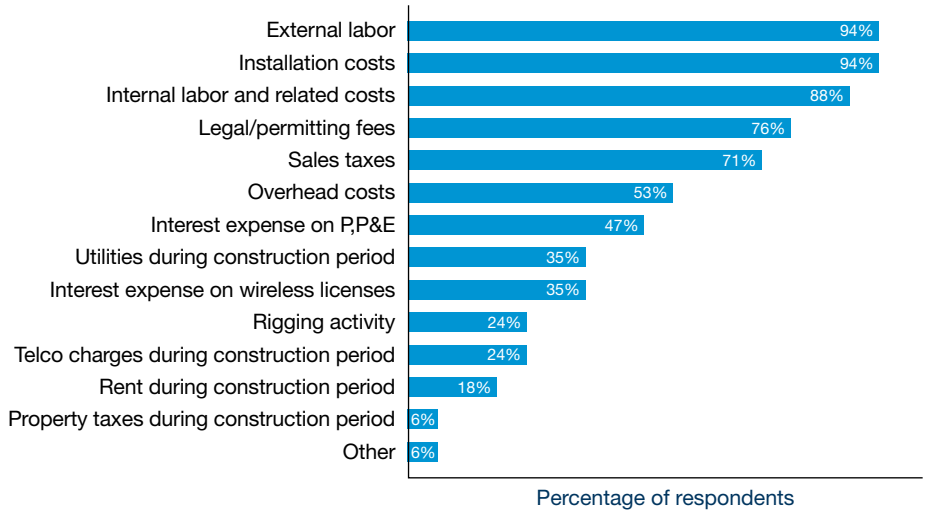
We asked the responding companies on which externally reported balance sheet line item they recorded capitalized internal use software. Seventy-one percent (71%) of the respondents include capitalized internal use software as property, plant, and equipment, and 29% record it as intangible assets subject to amortization, including three of the four carriers reporting under IFRS.

Eighty-eight percent (88%) of the respondents indicated that they disclose their construction-in-progress balance in their financials or notes thereto.

Capitalization policies

The chart below illustrates the types of costs associated with fixed assets that responding companies capitalize.

Types of capital expenditures



* Other includes network maintenance.

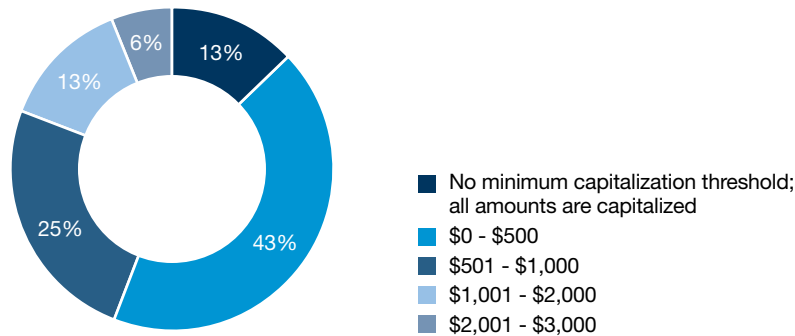
Chart sums to greater than 100% because multiple responses were allowed.

Responding companies that capitalize rent during the construction period indicated that doing so is related to site rental.

Property, plant and equipment

The chart below depicts the responding companies' de minimus level for the capitalization of property, plant, and equipment. The rest of world carriers had lower levels of capitalization policies (all equal to or less than \$500) compared to the responding companies in North America.

Minimum capitalization threshold for property, plant, and equipment



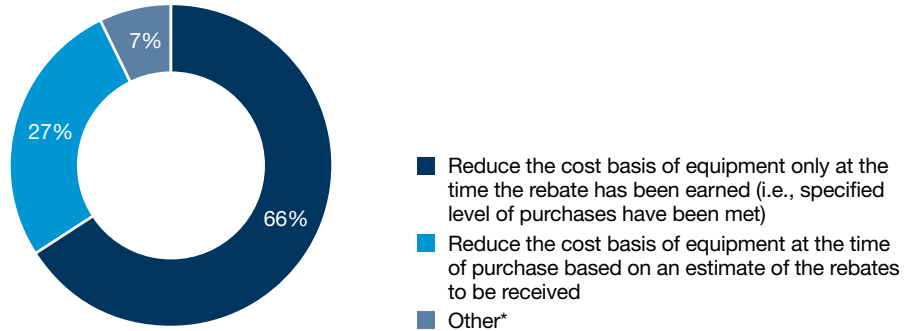
The respondents were asked whether or not they capitalize interest on wireless licenses or fixed assets. Fifty-five percent (55%) of the responding North American companies indicated that they capitalize interest on wireless licenses, and none of the responding rest of world companies capitalize interest on wireless licenses. Sixty-seven percent (67%) of the North American companies capitalize interest on fixed assets, and only one rest of world company capitalizes interest on fixed assets. Ninety-four percent (94%) of all the responding companies indicated that they had debt/borrowings that incur a material amount of interest expense, and 76% indicated that they are actively building out new markets.

Of the respondents who stated that they capitalize interest on wireless licenses, 50% indicated that they record the capitalized interest to fixed assets on the balance sheet. The other 50% record the capitalized interest to wireless licenses on the balance sheet.

The respondents were asked whether they receive rebates from their equipment vendors based on a specified level of fixed asset purchases or other commitments. Eighty-eight percent (88%) of the respondents indicated that they receive those types of rebates from equipment vendors.

For the responding companies that receive rebates from equipment vendors, the chart below depicts how these respondents account for the rebates received from the vendors.

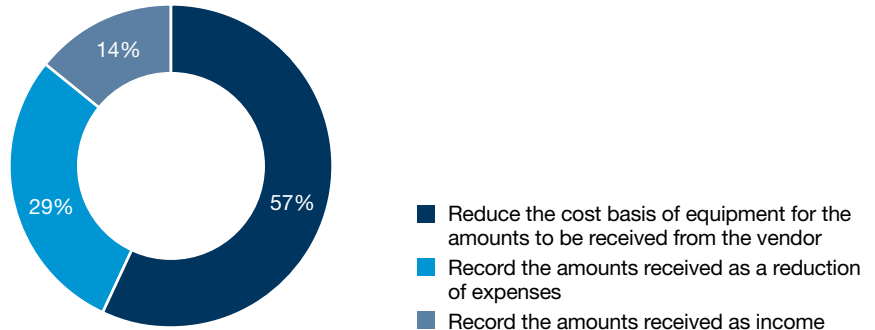
Accounting for rebates received from vendors



* Other includes other operating income related to bonuses and discounts.

We asked the responding companies whether they received any type of liquidating damages from equipment vendors for instances related to equipment failure, service downtime, customer service delays, repair delays, etc. Forty-two percent (42%) of the respondents indicated that they received liquidating damages from equipment vendors for those types of events. The chart below depicts how the responding companies that received liquidating damages accounted for the liquidating damages received.

Accounting for liquidating damages

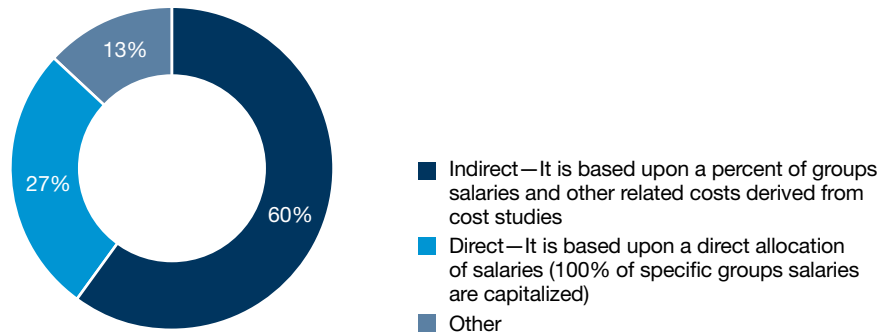


Property, plant and equipment

Capitalized labor

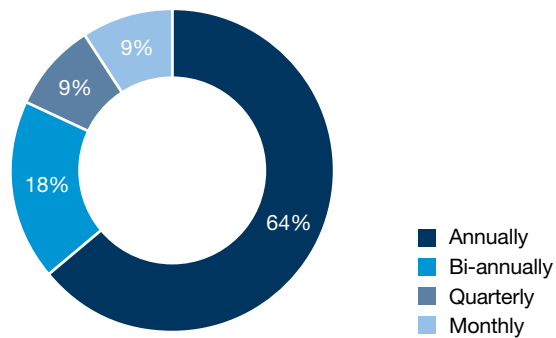
The chart below illustrates how the respondents determine or quantify their internal capitalized labor amounts.

Determination of capitalized labor amounts



The chart below depicts the frequency of cost studies that are used to determine the internal capitalized labor cost. Sixty-four percent (64%) of the respondents noted that the cost studies are performed annually.

Frequency of cost studies



The chart below illustrates the types of expenses that the responding companies include in their internal capitalized labor costs.

Types of internal capitalized costs

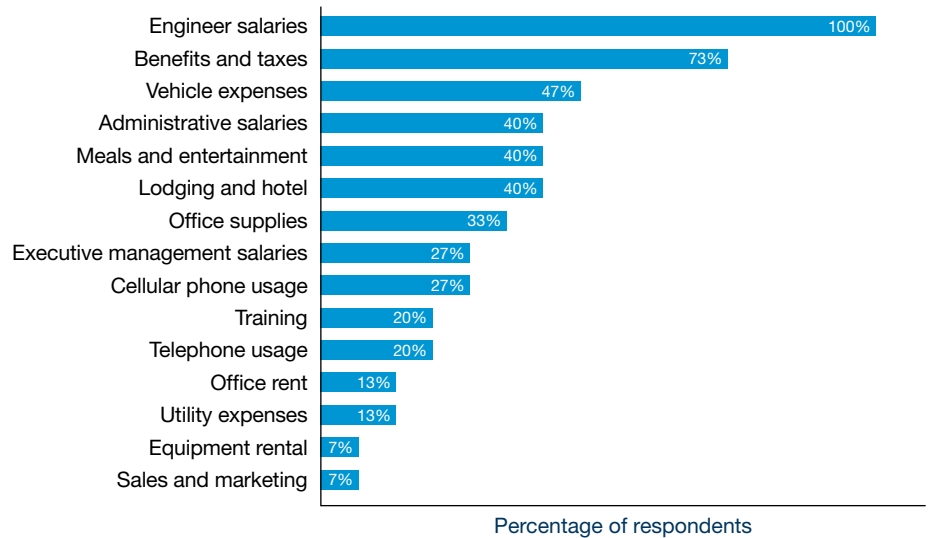


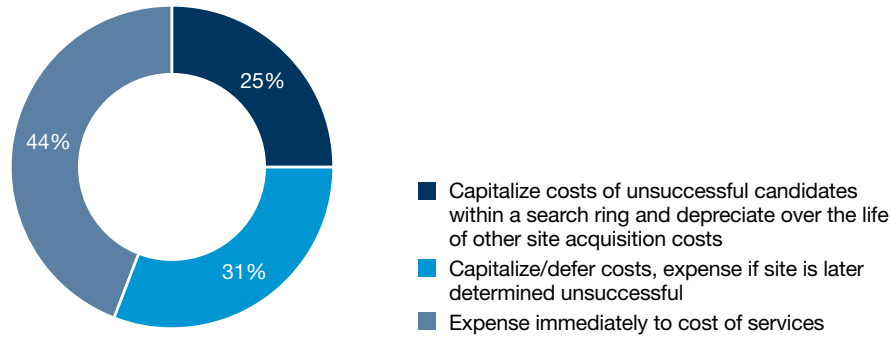
Chart sums to greater than 100% because multiple responses were allowed.

Property, plant and equipment

Site acquisition costs

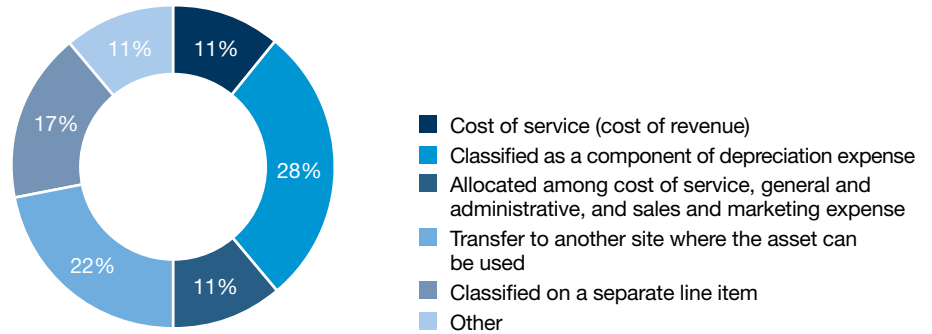
The chart below shows how the responding companies account for site acquisition costs associated with unsuccessful candidates within a search ring. We noted that 44% of the respondents expensed the site acquisition costs immediately to cost of services for all candidates/search rings evaluated.

Accounting for site acquisition costs



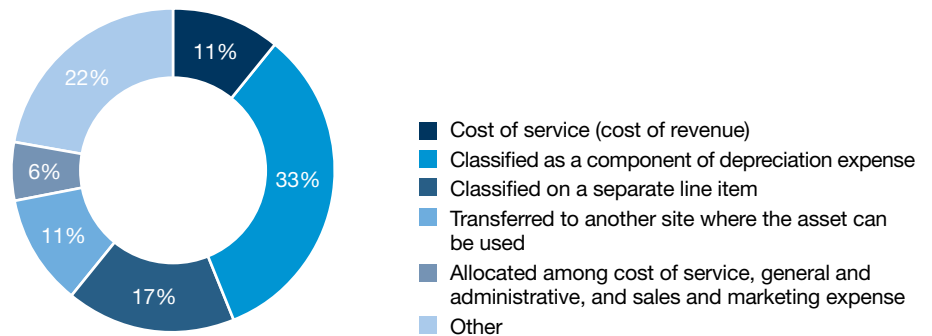
The charts below illustrate how the responding companies account for and classify construction-in-progress (CIP) abandonment costs related to soft assets (e.g., site acquisition costs and tangible assets such as radios, switch hardware, and software) under SFAS 144/IAS 36 or the equivalent.

Tangible assets



* Other includes non-operating expense and infrastructure expense.

Soft assets



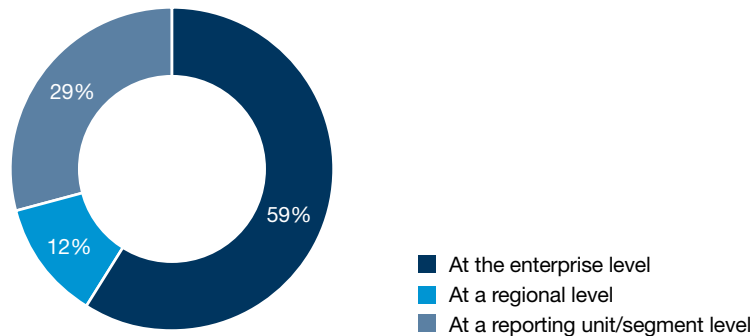
Property, plant and equipment

Asset impairments and fair value

Eighty-two percent (82%) of the respondents indicated that they exclude asset impairment charges from their EBITDA calculations.

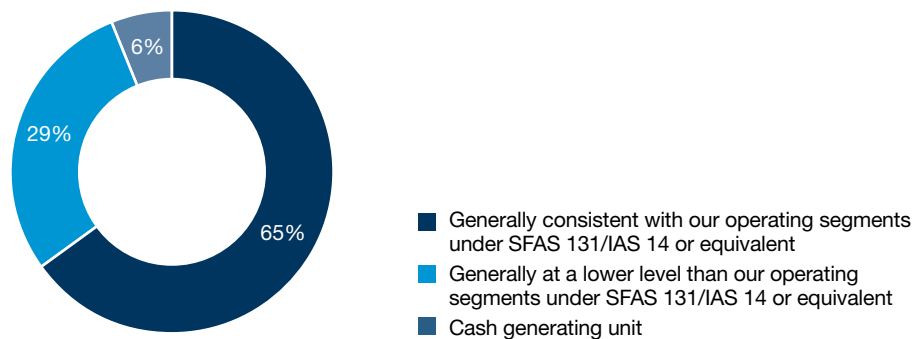
The chart below indicates how respondents define the lowest level of cash flows under SFAS 144/IAS 36 or the equivalent standard. Fifty-nine percent (59%) of the respondents stated that they define the lowest level of cash flows at the enterprise level. The global results below are consistent with the results of the 2007 North American Wireless Survey.

Lowest level of cash flows



The chart below depicts whether the respondents' definitions of the lowest level of cash flows/cash generating units (CGU) under SFAS 144/IAS 36 or the equivalent standard are consistent with their operating segments under SFAS 131/IAS 14 or the equivalent standard.

Definition of the lowest level of cash flows



Business combinations

Of the respondents who perform a fair value analysis under FAS 141/IFRS 3 or the equivalent, 40% indicated that the analysis is performed internally. Thirty-three percent (33%) indicated that they use the assistance of a third party. The remaining 27% use a combination of internal and third-party resources. Sixty-three percent (63%) of the respondents indicated that they completed a business combination within the past three years.

The chart below depicts the types of valuation methodologies the respondents use in determining fair values under FAS 141/IFRS 3 or the equivalent.

Valuation methodologies for FAS 141/IFRS 3 or equivalent analysis

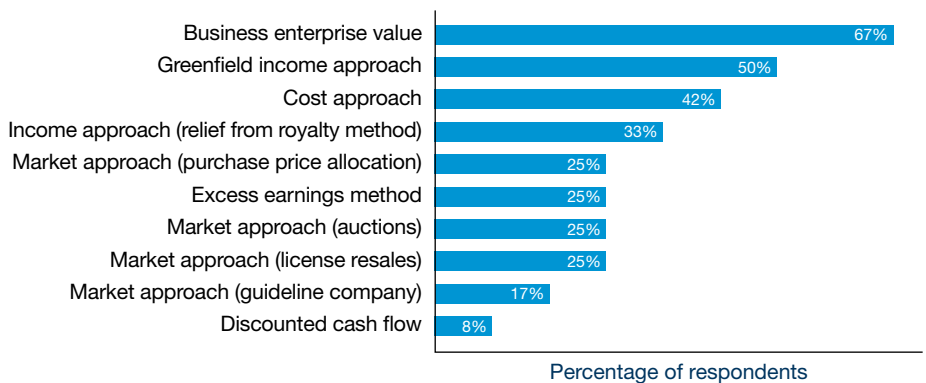


Chart sums to greater than 100% because multiple responses were allowed.

Property, plant and equipment

Of the respondents who perform a fair value analysis for valuation under FAS 142/IAS 38 or the equivalent, 27% indicated that the analysis is performed internally. Thirty-three percent (33%) indicated that they use the assistance of a third party. The remaining 40% use a combination of internal and third-party resources.

The chart below depicts the types of valuation methodologies respondents use to determine fair values under FAS 142/IAS 38 or the equivalent.

Types of valuation methodologies

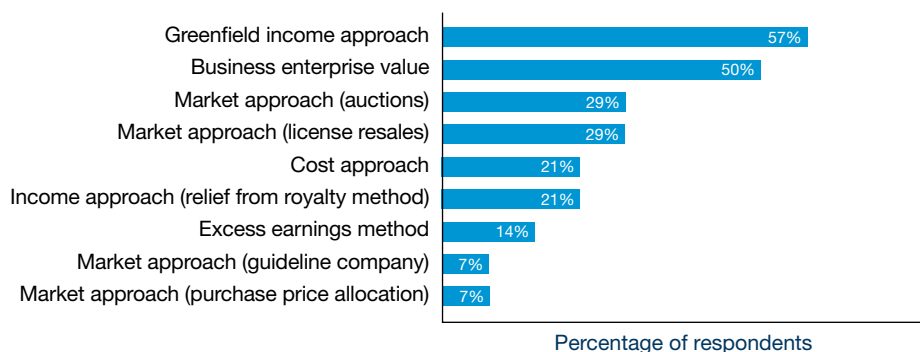
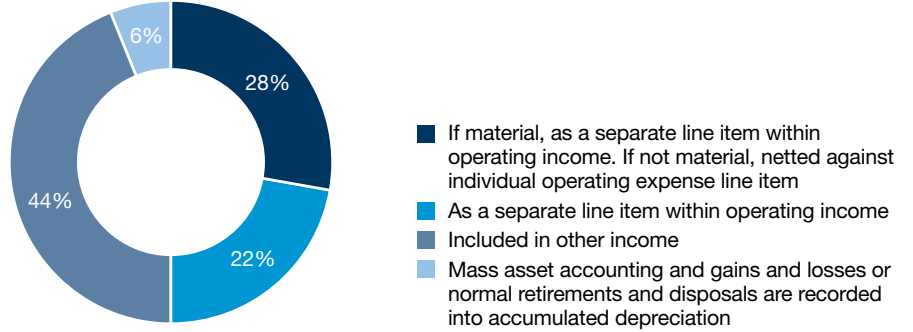


Chart sums to greater than 100% because multiple responses were allowed.

The chart below depicts where the responding companies record a resulting gain or loss upon the sale of a long-lived asset or group of assets.

Recording gain/loss from sale of long-lived assets



We asked the responding companies if they had recorded any non-monetary license exchanges in the past two years. Only 29% had any non-monetary license exchanges that were recorded under FAS 153/IAS 38 or the equivalent. Sixty-seven percent (67%) of those responding companies that had non-monetary license exchanges recorded the transactions at fair value. The remaining 33% recorded the non-monetary license exchanges at carrying value or used a combination, depending on the situation.

The survey asked the responding companies if they have either recorded an impairment of fixed assets or accelerated depreciation on a category or group of assets in the last 12 months. Seventy-six percent (76%) of the respondents stated that they have either recorded impairment charges or accelerated depreciation. The respondents stated that the primary drivers of the decision included obsolescence due to technological updates (77%), disposition or acquisition, or abandoned development for certain planned cell sites.

Property, plant and equipment

Asset retirement obligations

The chart below depicts the percentage of responding companies that have asset retirement obligations (ARO) (SFAS 143/IAS 16 or the equivalent) associated with the following types of long-lived assets.

Long-lived assets with asset retirement obligations

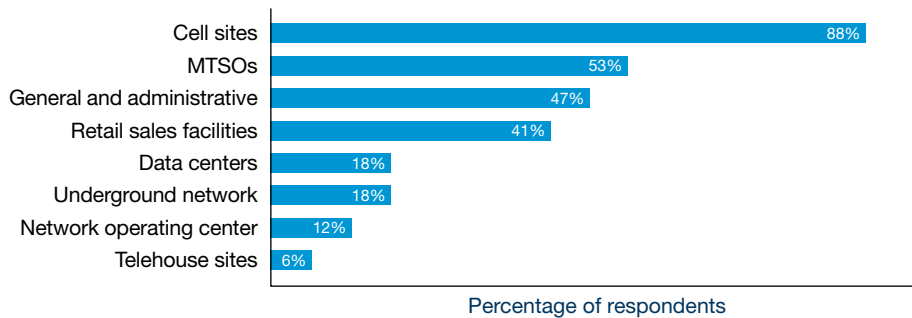
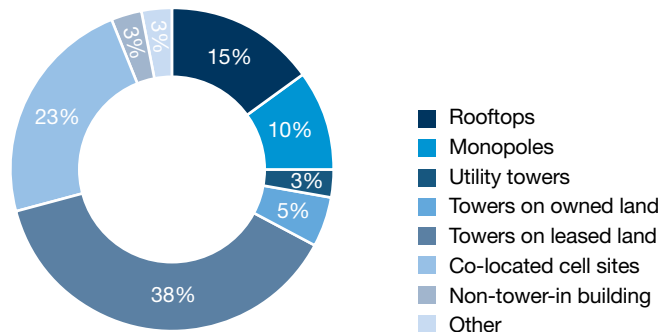


Chart sums to greater than 100% because multiple responses were allowed.

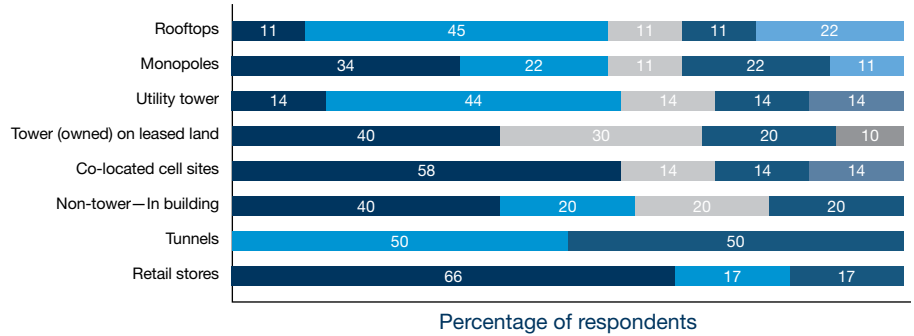
Responding companies were asked to indicate the location of their cell sites. The results are presented in the chart below.

Cell site locations

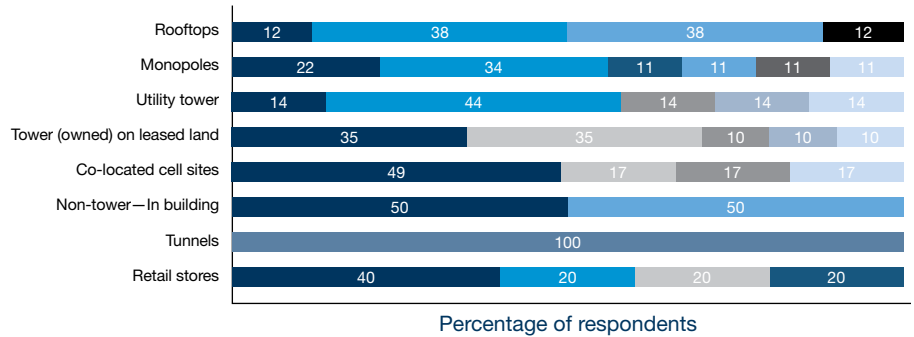


We asked the respondents for their estimates, low and high, of the expected ARO for each major asset type. Responses are summarized in the two charts below.

Average minimum ARO by asset type



Average maximum ARO by asset type



- Less than \$5,000
- \$5,001 - \$10,000
- \$10,001 - \$15,000
- \$15,001 - \$20,000
- \$20,001 - \$25,000
- \$30,001 - \$35,000
- \$35,001 - \$40,000
- \$40,001 - \$45,000
- \$45,001 - \$50,000
- \$65,001 - \$70,000
- \$95,001 - \$100,000
- \$165,001 - \$170,000

No responses were received in the \$25,001 - \$30,000, \$50,001 - \$65,000, \$70,001 - \$95,000, and \$100,001 - \$165,000 categories.

Property, plant and equipment

Of the respondents who indicated that they record an ARO, the chart below summarizes the costs included in the respective ARO calculations.

Costs included in ARO calculation

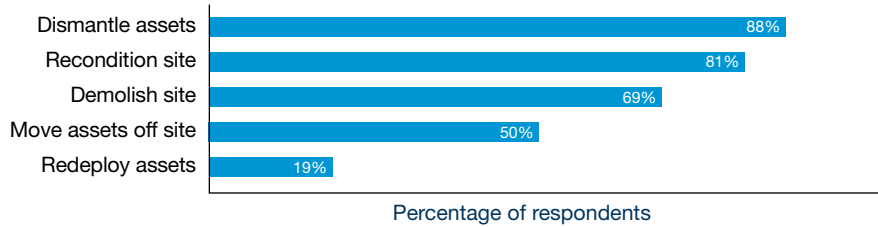


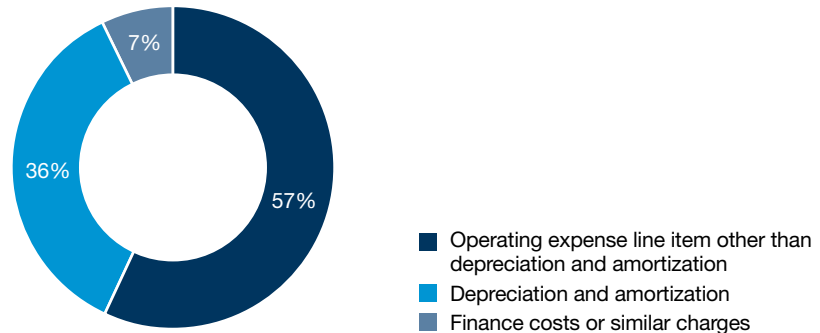
Chart sums to more than 100% because multiple responses were allowed.

Of the responding companies, 59% indicated that lessors have required performance of remediation or restoration activities for cell site leases that have been terminated.

The survey asked the responding companies whether they factored the probability of the lessor enforcement into the calculation of their ARO liability. Forty-seven percent (47%) of the respondents factor the probability of lessor enforcement into the calculation of their ARO liability.

The survey responses indicate that there continues to be variation in classifying ARO accretion expense in the income statement. The chart below shows where the responding companies record accretion expense.

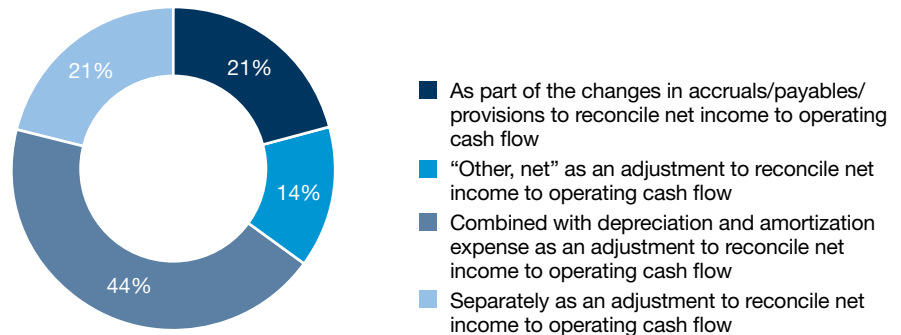
Income statement line item of accretion expense related to AROs



Of those companies that record accretion expense on an operating expense line item other than depreciation and amortization, 86% record it as cost of services or equivalent cost line item and 14% record the accretion expense in selling, general, and administrative.

The responding companies were asked which line items on the statement of cash flow are utilized for reporting accretion expense. The chart below shows which items on the statement of cash flow they use for reporting accretion expense.

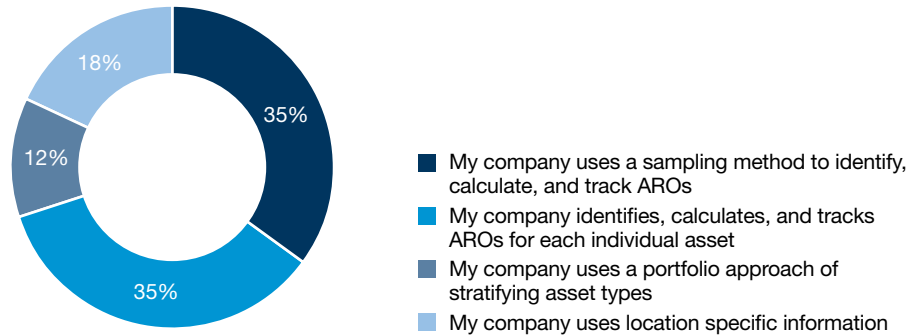
Reporting of accretion expense on statement of cash flows



Property, plant and equipment

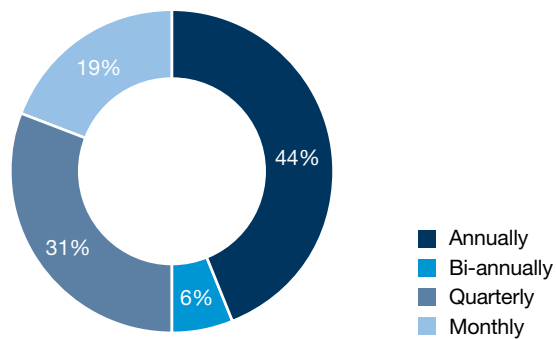
The chart below illustrates the responding companies' various methods of identifying, calculating, and tracking AROs.

Method of identifying, calculating, and tracking AROs



The chart below depicts the frequency with which the responding companies update their SFAS 143/IAS 16 or equivalent ARO analysis.

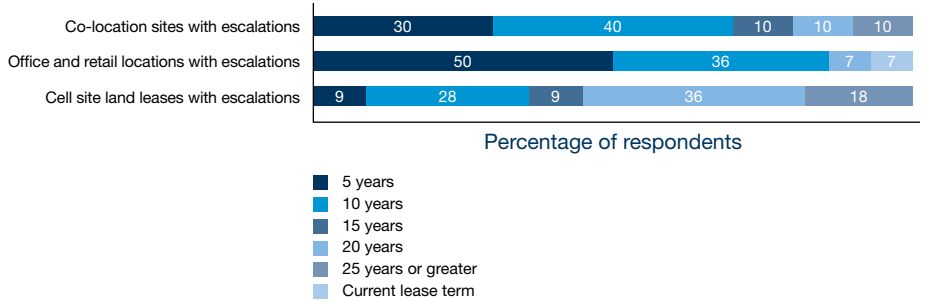
Frequency of update of SFAS 143/IAS 16 or equivalent ARO analysis



Lease accounting and tracking

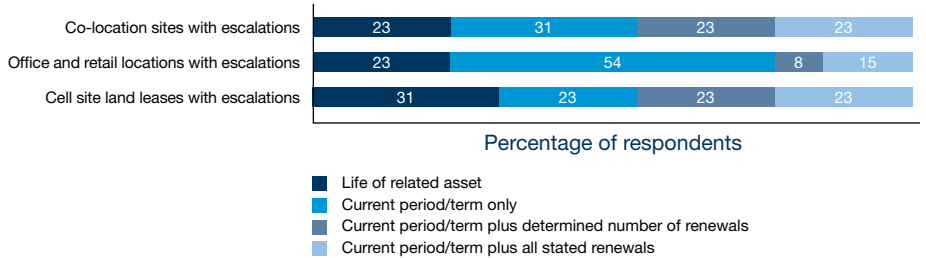
The chart below illustrates the average life that the responding companies utilize to recognize the scheduled increases in rent expense on a straight-line basis.

Average life of scheduled increases in rent expense



The chart below illustrates the policy that the respondents follow to determine the average lease life used to recognize the scheduled increases in rent expense on a straight-line basis.

Policy used to determine lease life



Property, plant and equipment

We asked the respondents how their companies track leases with escalations, renewable terms, retirement obligations, rent holidays, etc. Eighty-one percent (81%) of the responding companies indicated that they track this type of information via separate applications external to the accounting general ledger application. Six percent (6%) indicated that they use an application within the accounting general ledger application system, and 13% indicated that they use mainly spreadsheets.

Of the respondents who indicated that they use a separate application external to the general ledger application, 38% indicated that the application was developed internally, 46% indicated that the application was developed externally, and the remaining 16% indicated that a portion of the application was developed externally and a portion internally.

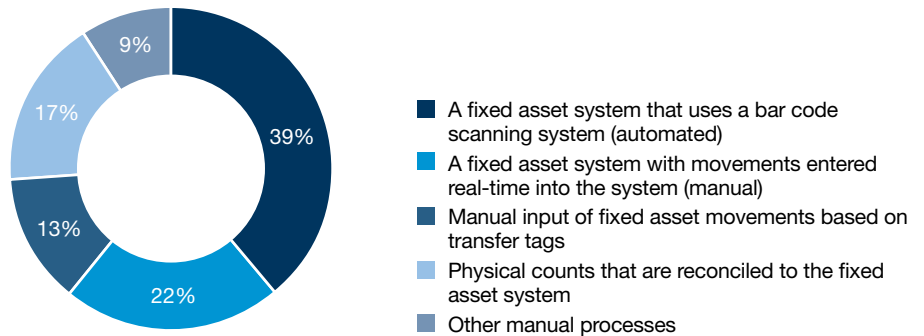
Fifty percent (50%) of the respondents indicated that their lease tracking application is managed within their company's engineering/property management function and 38% indicated managing the application within the accounting and finance function. The remaining respondents (12%) indicated that accounting and property management share responsibility for managing the lease tracking application.

Forty percent (40%) of the respondents stated that they had plans to add, modify, or purchase lease software applications.

Asset tracking

The chart below illustrates how the respondents track the movement of their network fixed assets.

Tracking network fixed assets

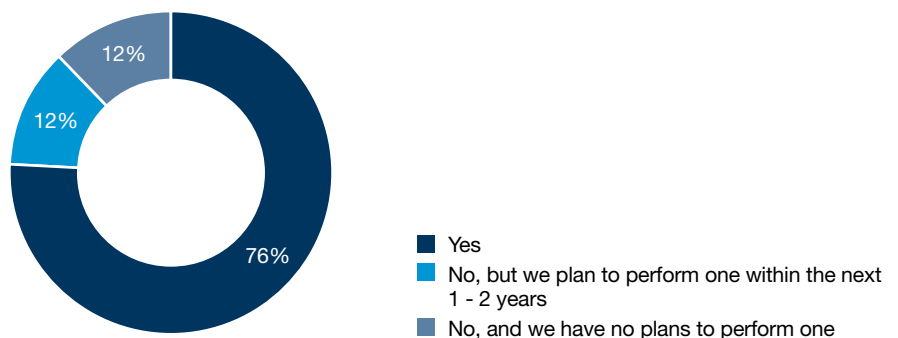


Responding companies were asked which fixed asset tracking system they use. The fixed asset tracking systems the respondents use include CATS/ Fulcrum (cellular asset tracking system), SAP, GAMMA, Lawson, Oracle, EMPAC/ Infowave, and AM-01.

Of the respondents, 69% stated that their tracking systems also track spare parts. Fifty-seven percent (57%) of the respondents who use a bar coding system indicated that the bar coding system is integrated or interfaced directly with the fixed asset sub-ledger.

Survey respondents were asked whether they have performed an inventory of their network assets. The results are presented in the chart below.

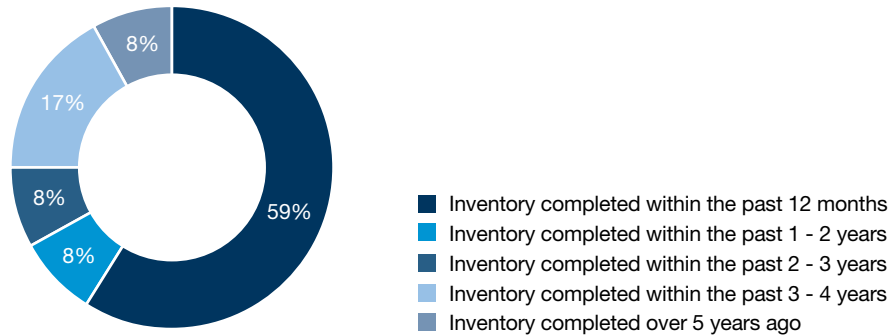
Completion of network asset inventory



Property, plant and equipment

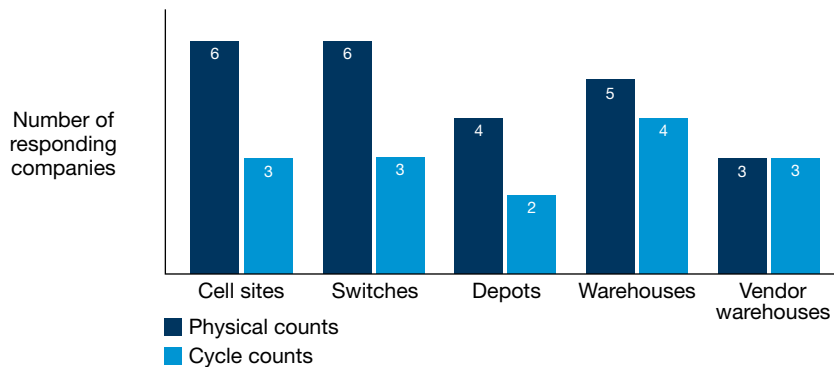
The respondents who completed an inventory were asked when they had performed the inventory. Fifty-nine percent (59%) stated that the inventory was completed within the last 12 months.

Timing of inventory of network assets



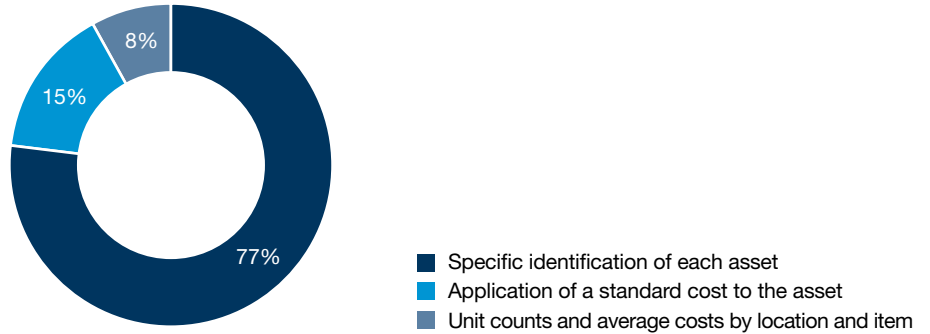
The responding companies indicated whether the inventory process for network assets was a result of physical counts or cycle counts for each type of item counted.

Nature of inventory procedures



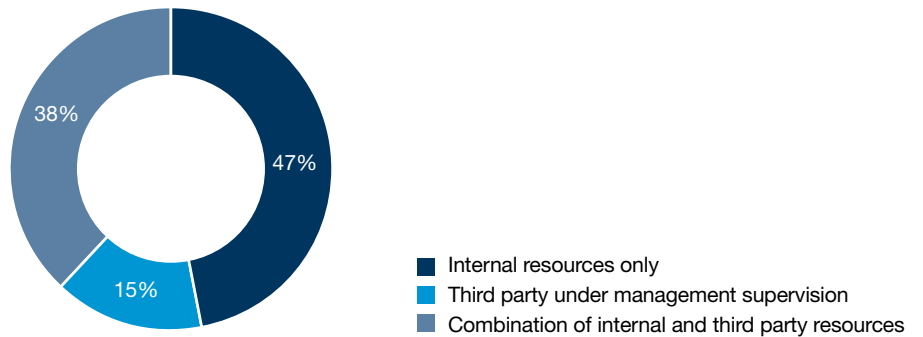
The respondents were asked how they reconcile their physical or cycle counts to their fixed asset ledger. The results are presented in the chart below.

Reconciliation of inventory



We asked the respondents whether they performed physical counts by internal resources, third-party resources, or a combination of the two. The results are summarized in the chart below.

Resources used for completion of physical inventory



Property, plant and equipment

Asset useful lives

The chart below depicts the respondents' fixed asset components that are tracked and depreciated separately within the respondents' fixed asset systems.

Separately tracked and depreciated fixed asset components

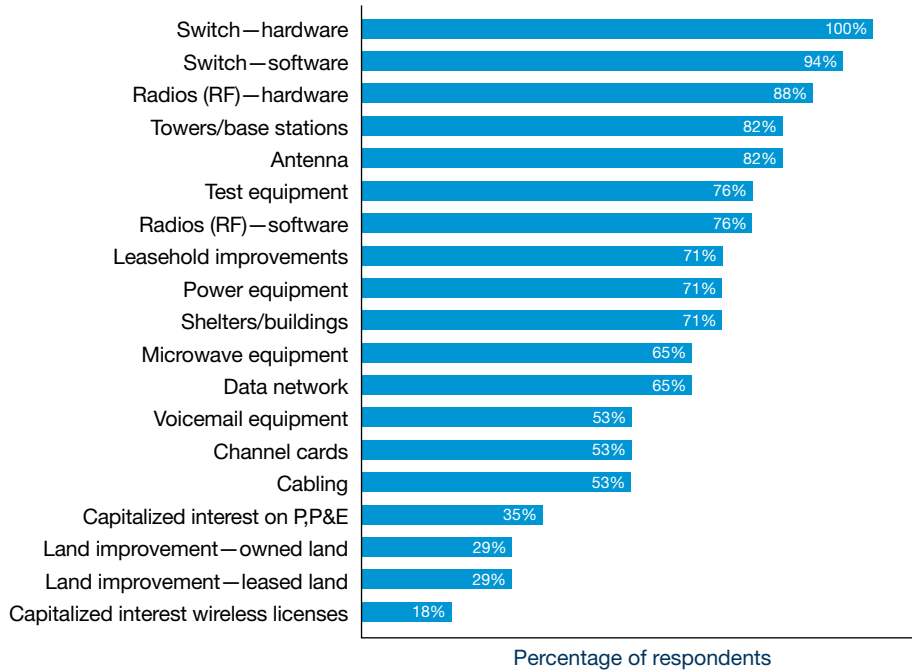
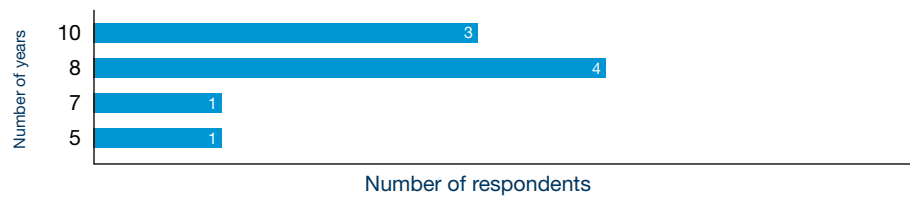


Chart sums to greater than 100% because multiple responses were allowed.

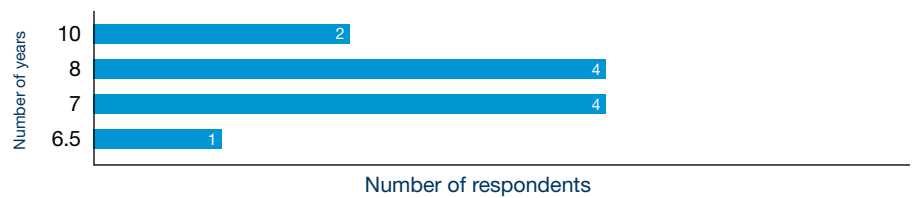
The charts below illustrate the depreciation lives for the fixed asset components. The charts are separated into the depreciation lives of 2.0G, 2.5G, and 3.0G for each fixed asset component.

Radios (RF) and related equipment—Hardware

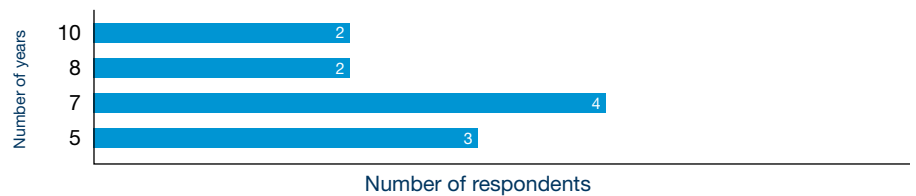
2.0G (average useful life = 8.2 years)



2.5G (average useful life = 7.9 years)



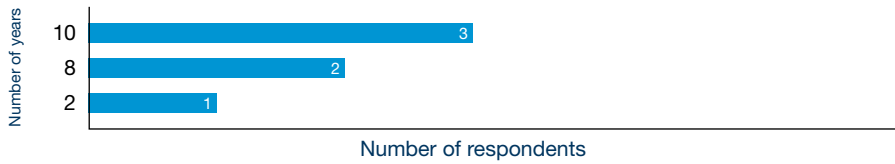
3.0G (average useful life = 7.2 years)



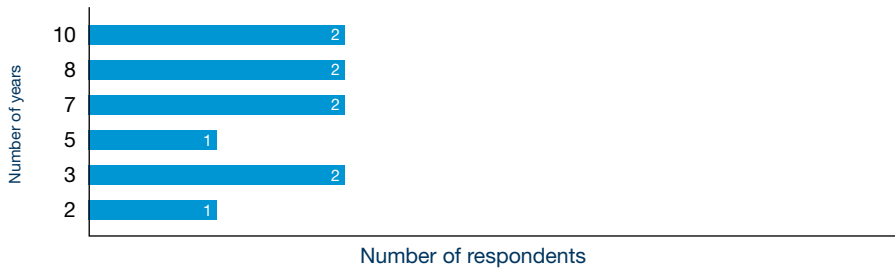
Property, plant and equipment

Radios (RF) and related equipment—Software

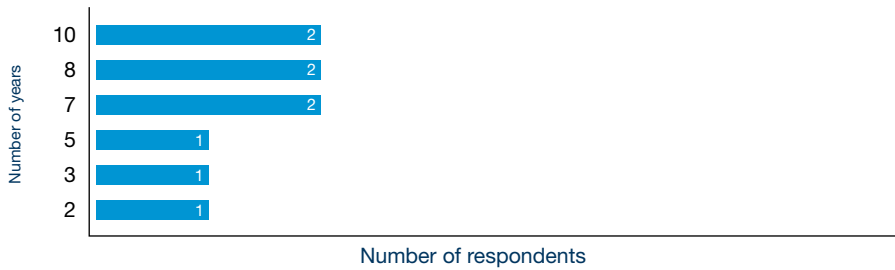
2.0G (average useful life = 8.0 years)



2.5G (average useful life = 6.3 years)

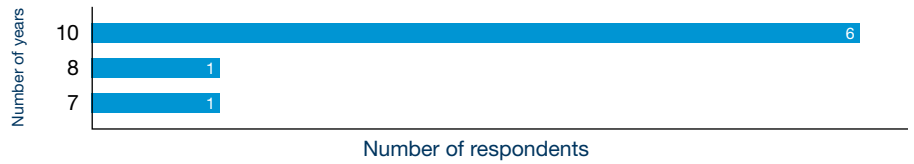


3.0G (average useful life = 6.7 years)

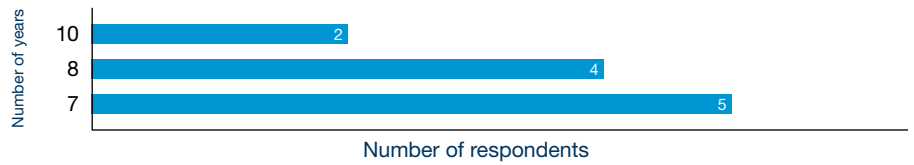


Switch—Hardware

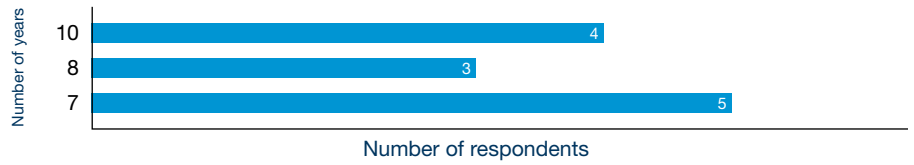
2.0G (average useful life = 9.4 years)



2.5G (average useful life = 7.9 years)



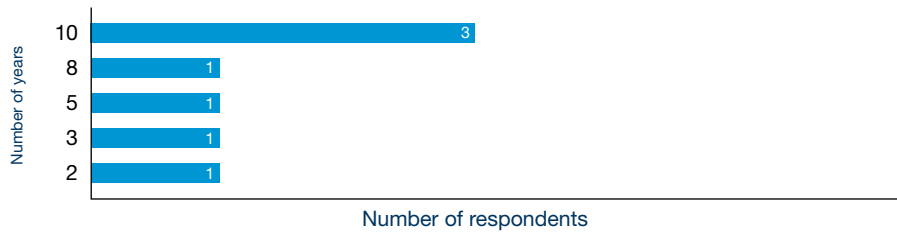
3.0G (average useful life = 8.3 years)



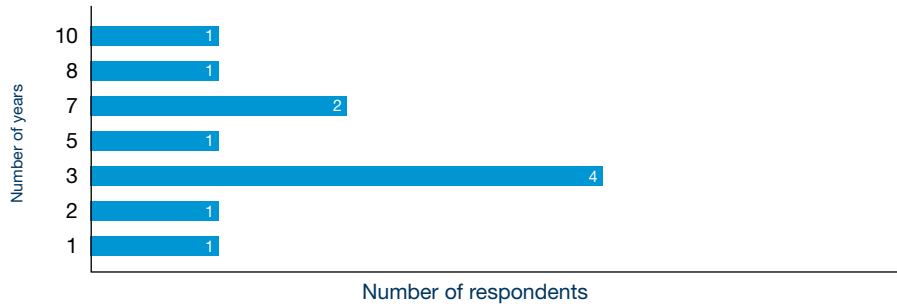
Property, plant and equipment

Switch—Software

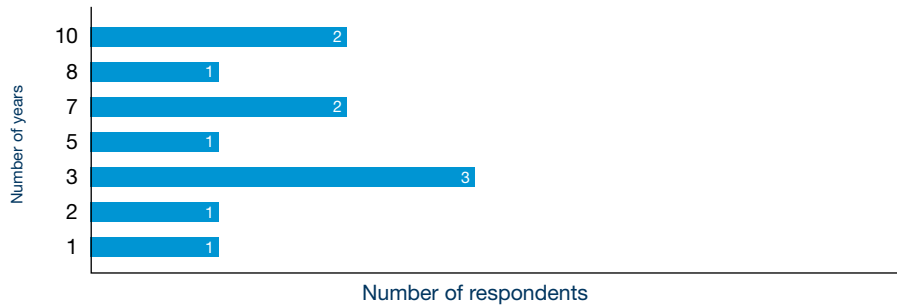
2.0G (average useful life = 6.9 years)



2.5G (average useful life = 4.7 years)

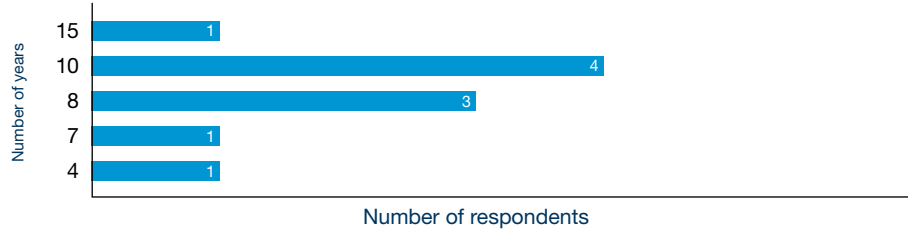


3.0G (average useful life = 5.4 years)

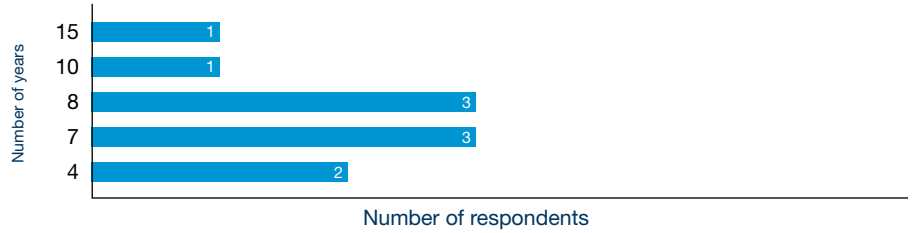


Antenna

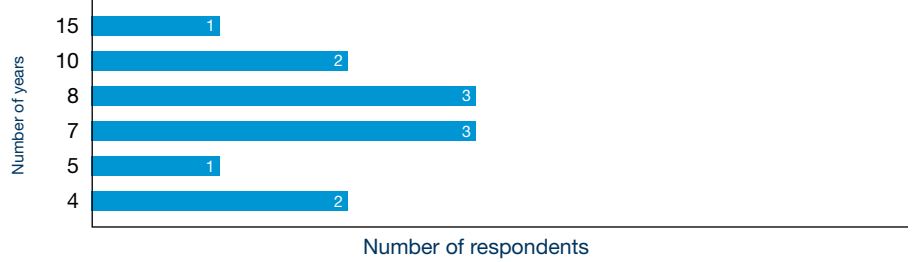
2.0G (average useful life = 9.0 years)



2.5G (average useful life = 7.8 years)



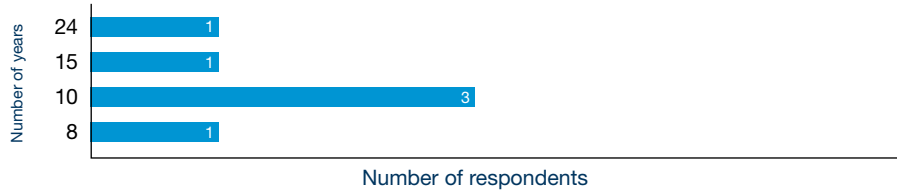
3.0G (average useful life = 7.8 years)



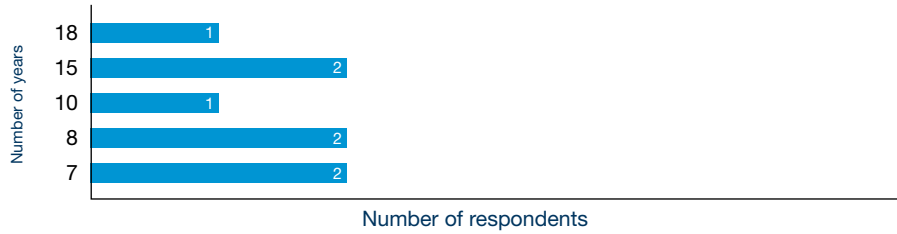
Property, plant and equipment

Cabling

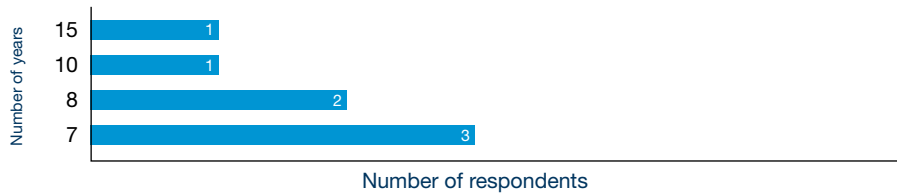
2.0G (average useful life = 12.2 years)



2.5G (average useful life = 11.0 years)

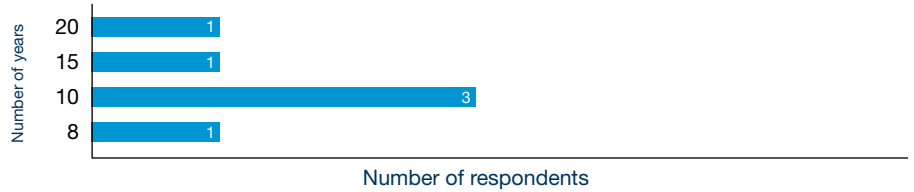


3.0G (average useful life = 8.9 years)

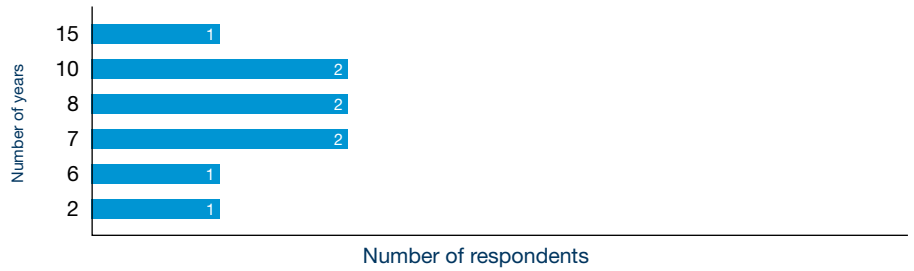


Microwave equipment

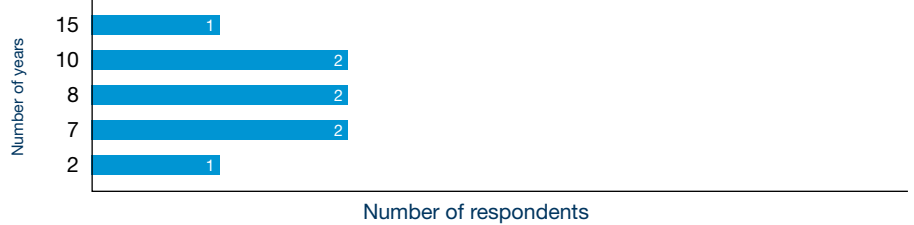
2.0G (average useful life = 12.2 years)



2.5G (average useful life = 8.1 years)



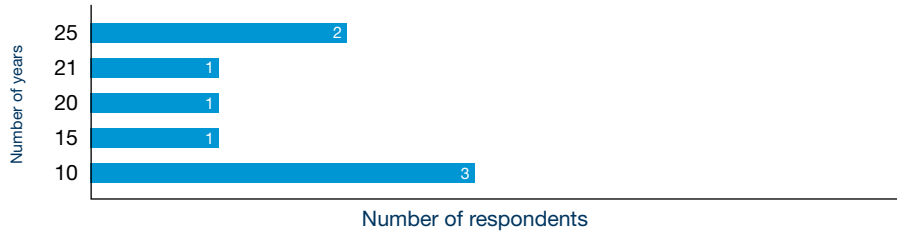
3.0G (average useful life = 8.4 years)



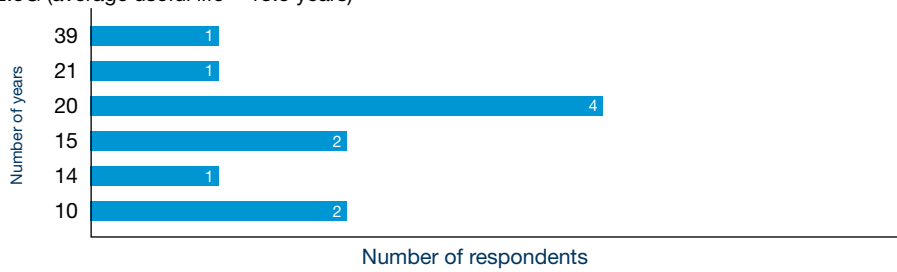
Property, plant and equipment

Shelters/Buildings

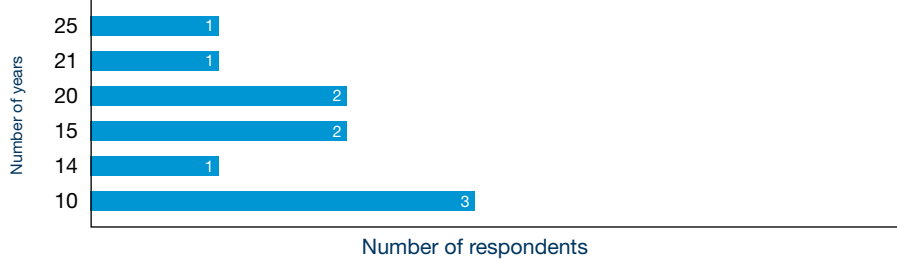
2.0G (average useful life = 17.0 years)



2.5G (average useful life = 18.5 years)

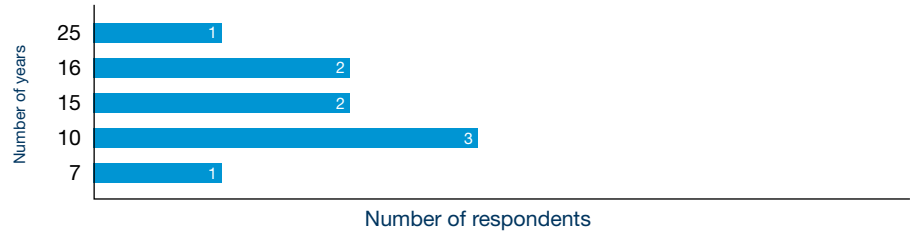


3.0G (average useful life = 16.0 years)

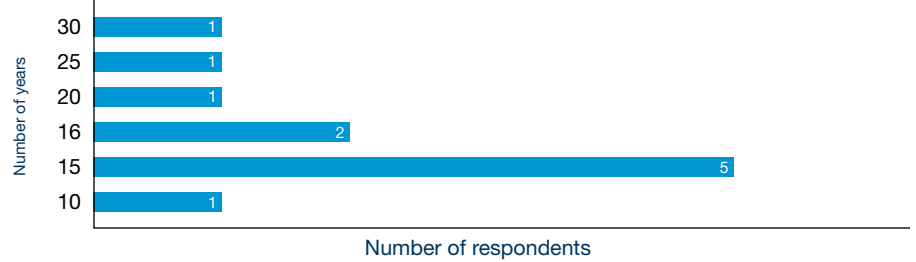


Towers/Base stations

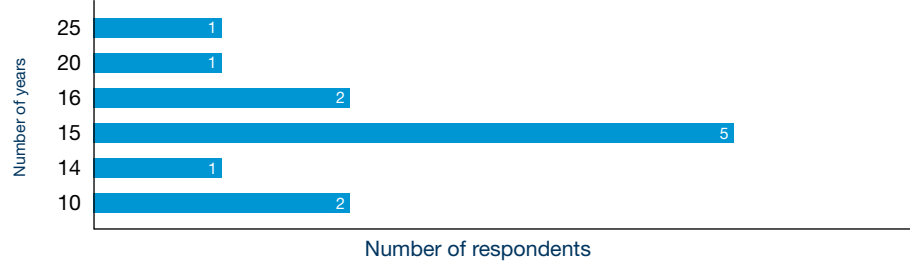
2.0G (average useful life = 13.8 years)



2.5G (average useful life = 17.5 years)



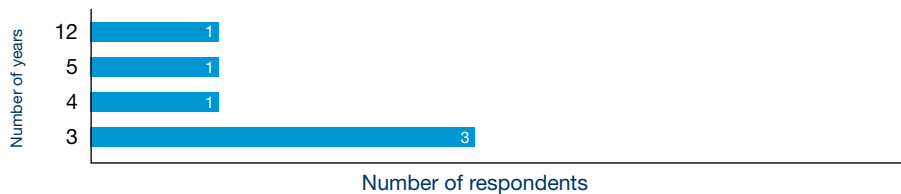
3.0G (average useful life = 15.5 years)



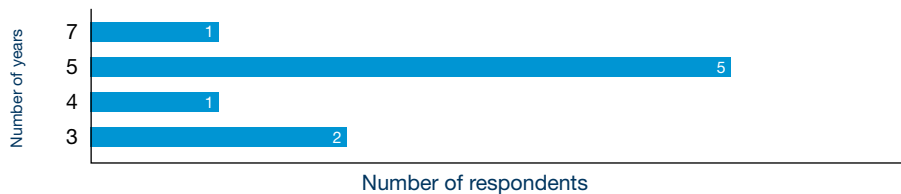
Property, plant and equipment

Test equipment

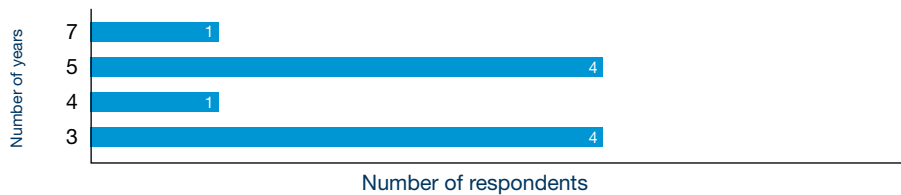
2.0G (average useful life = 5.0 years)



2.5G (average useful life = 4.7 years)



3.0G (average useful life = 4.3 years)

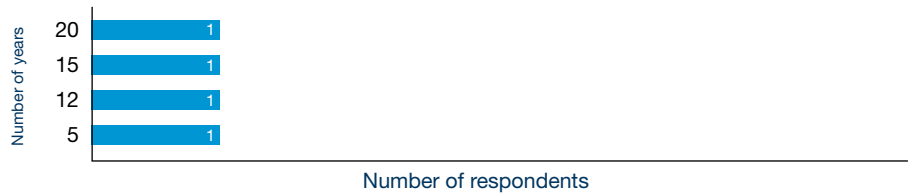


Land improvements—Leased land

2.0G (average useful life = 8.5 years)



2.5G (average useful life = 13.0 years)



3.0G (average useful life = 10.7 years)



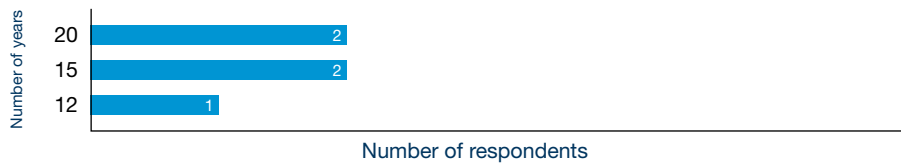
Property, plant and equipment

Land improvements—Owned land

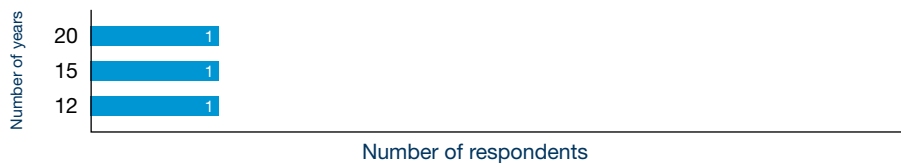
2.0G (average useful life = 12.0 years)



2.5G (average useful life = 16.4 years)

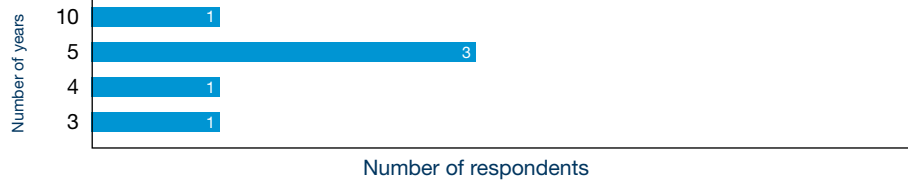


3.0G (average useful life = 15.7 years)

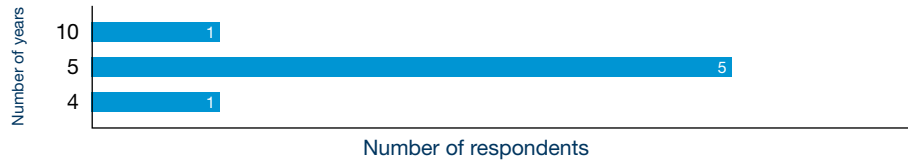


Leasehold improvements

2.0G (average useful life = 5.3 years)



2.5G (average useful life = 5.6 years)



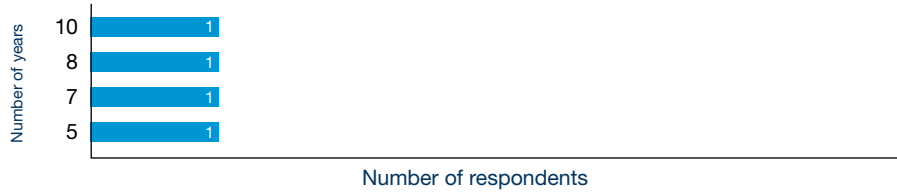
3.0G (average useful life = 6.0 years)



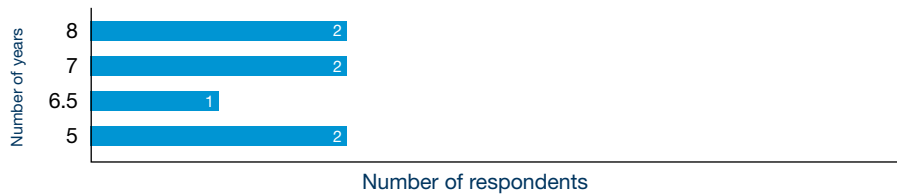
Property, plant and equipment

Channel cards

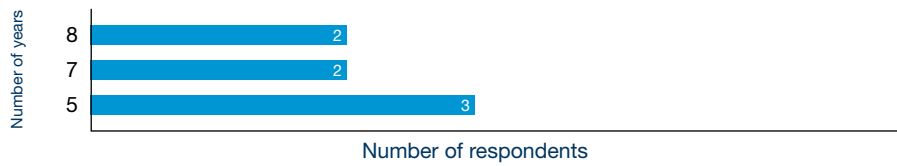
2.0G (average useful life = 7.5 years)



2.5G (average useful life = 6.6 years)

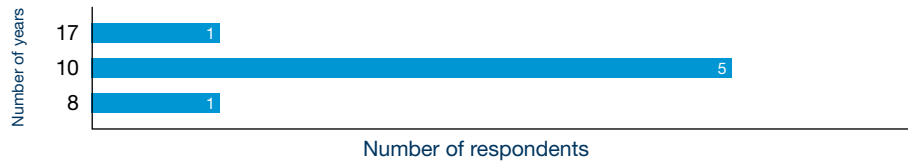


3.0G (average useful life = 6.4 years)

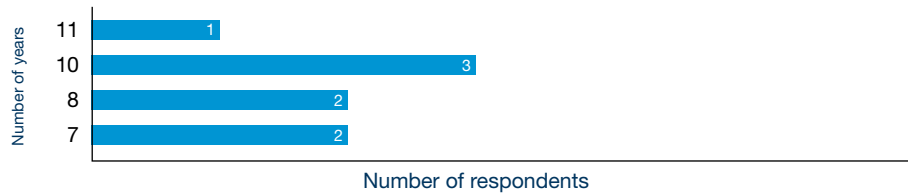


Power equipment

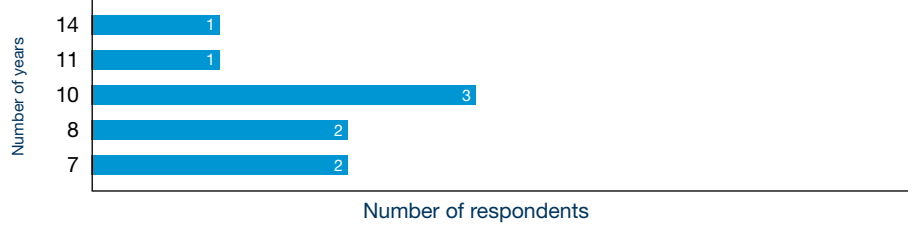
2.0G (average useful life = 10.7 years)



2.5G (average useful life = 8.9 years)



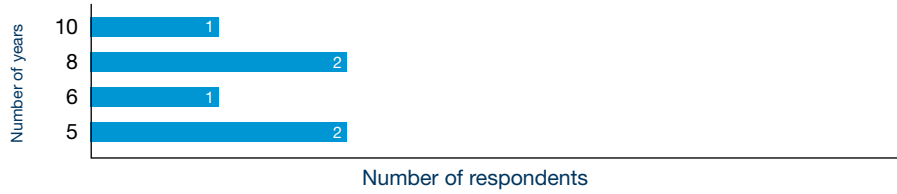
3.0G (average useful life = 9.4 years)



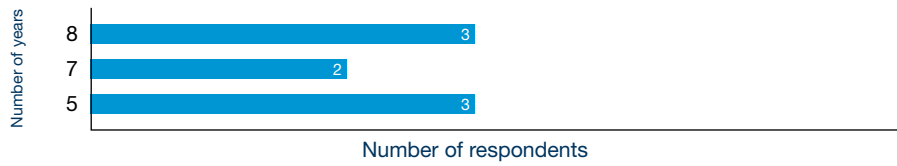
Property, plant and equipment

Voicemail equipment

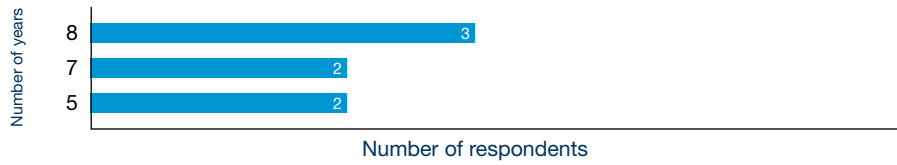
2.0G (average useful life = 7.0 years)



2.5G (average useful life = 6.6 years)

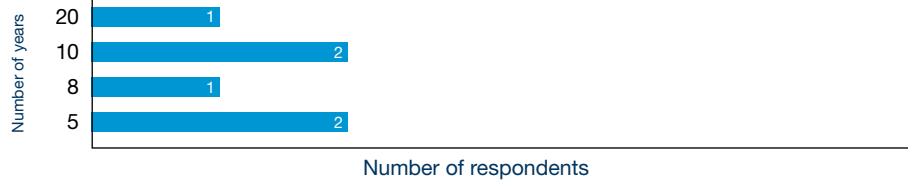


3.0G (average useful life = 6.9 years)

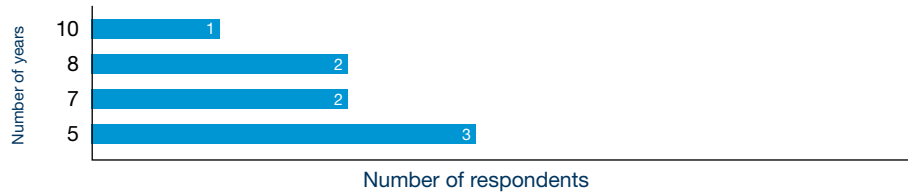


Data network

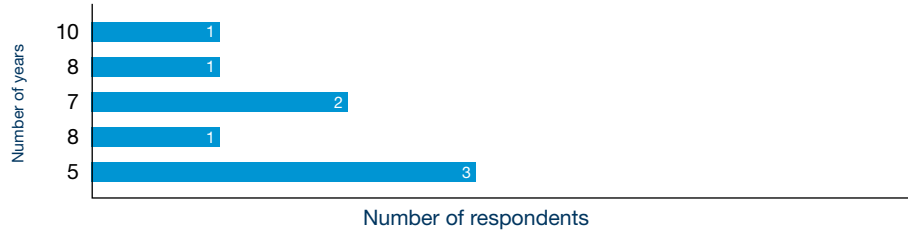
2.0G (average useful life = 9.0 years)



2.5G (average useful life = 6.9 years)



3.0G (average useful life = 6.7 years)



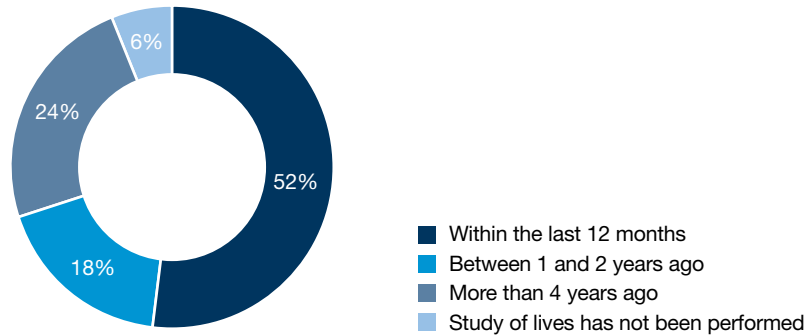
Property, plant and equipment

Responding companies were asked if they changed any of their fixed asset useful lives during the past year. Fifty-nine percent (59%) of the respondents indicated that they have had a change in the useful lives of their fixed assets. Sixty percent (60%) of the respondents who indicated that they have changed their fixed asset useful lives during the past year stated that the change generally increased depreciation expense.

The respondents were also asked what triggered the change in the assessment of the fixed asset useful lives. Responses include technology developments, company-specific replacement of assets, and third-party asset review.

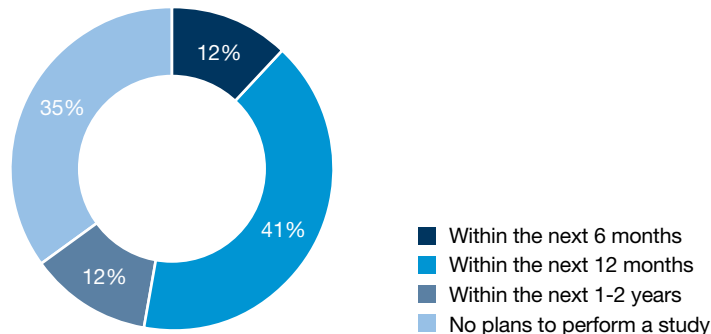
The chart below illustrates the last time the respondents performed a full study of their fixed asset useful lives.

Most recent fixed asset useful life study



The respondents were asked when they plan to perform their next study of asset lives and the chart below illustrates the responses. Forty-one percent (41%) of the respondents plan to perform a study of asset lives within the next 12 months.

Next planned fixed asset useful life study



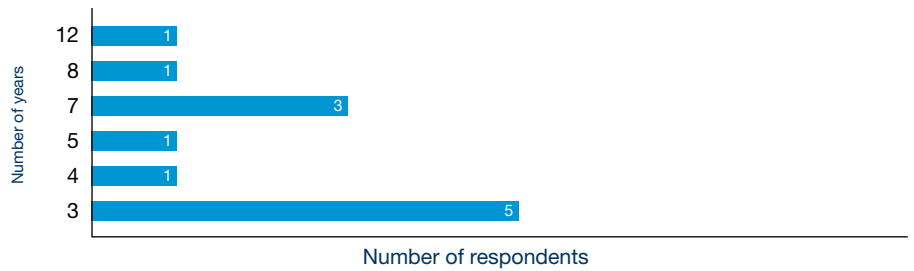
Taxes and tax useful lives

The charts below represent the useful lives for tax purposes of the fixed asset components utilized by the respondents.

Radio (RF) and related equipment—Hardware (tax average useful life = 6.6 years)



Radio (RF) and related equipment—Software (tax average useful life = 5.4 years)



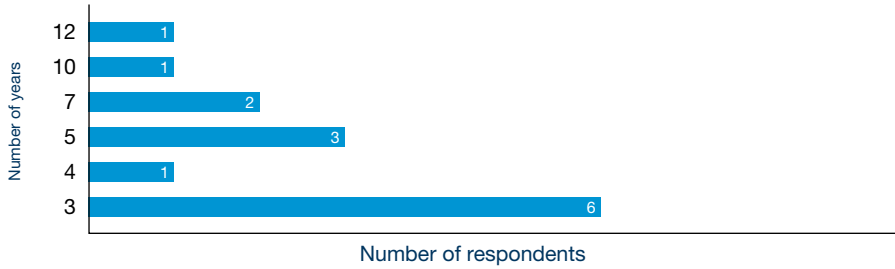
Switch—Hardware (tax average useful life = 8.9 years)



Property, plant and equipment

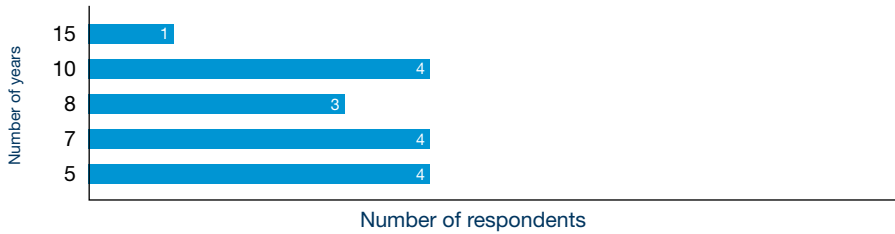
Switch—Software

(tax average useful life = 5.2 years)



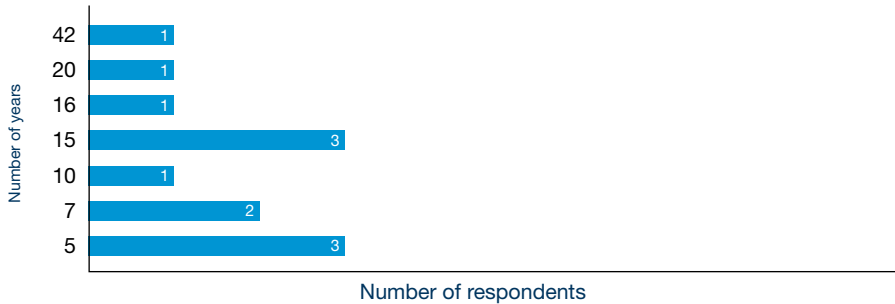
Antenna

(tax average useful life = 7.9 years)

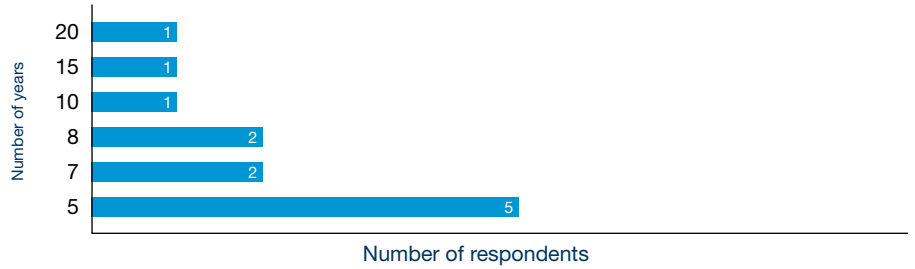


Cabling

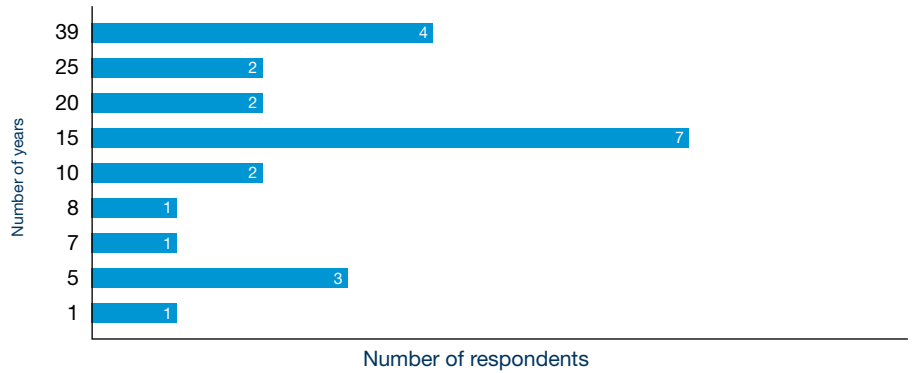
(tax average useful life = 13.5 years)



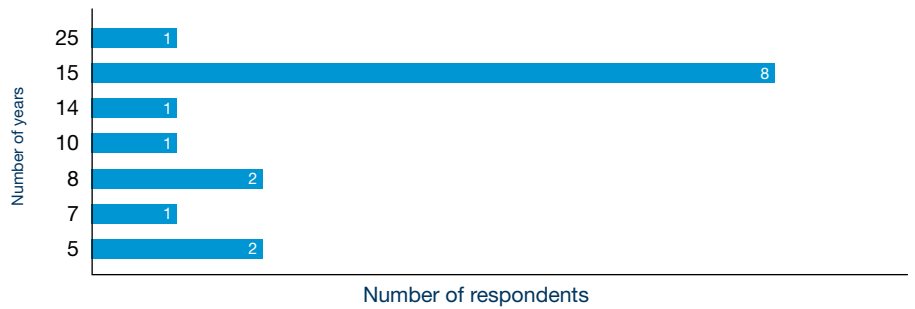
Microwave equipment
 (tax average useful life = 8.3 years)



Shelters/Buildings
 (tax average useful life = 17.5 years)



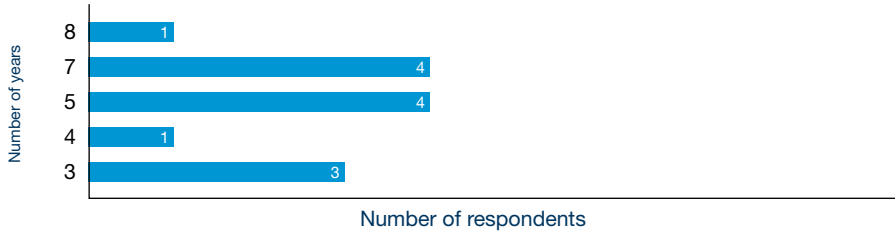
Towers/Base stations
 (tax average useful life = 12.6 years)



Property, plant and equipment

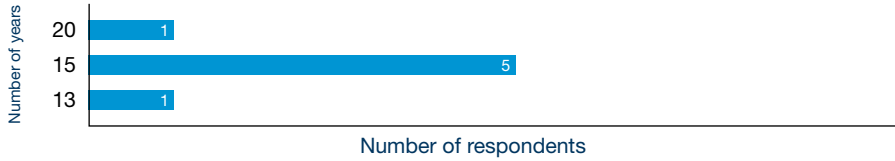
Text equipment

(tax average useful life = 5.3 years)



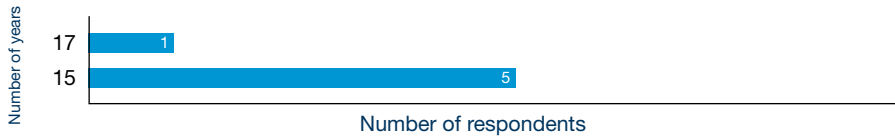
Land improvements—Leased land

(tax average useful life = 15.4 years)



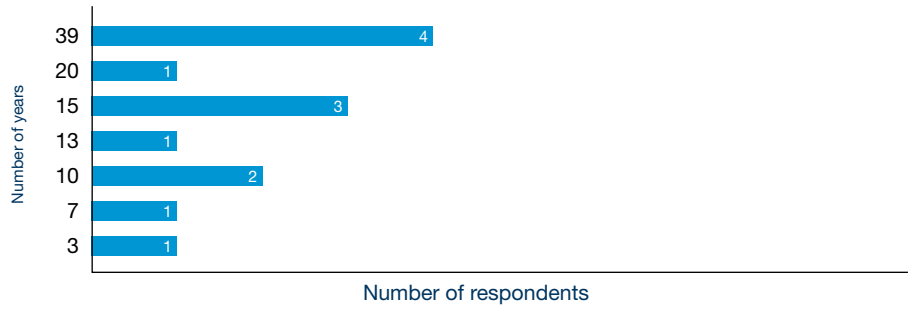
Land improvements—Owned land

(tax average useful life = 15.3 years)



Leasehold improvements

(tax average useful life = 20.3 years)



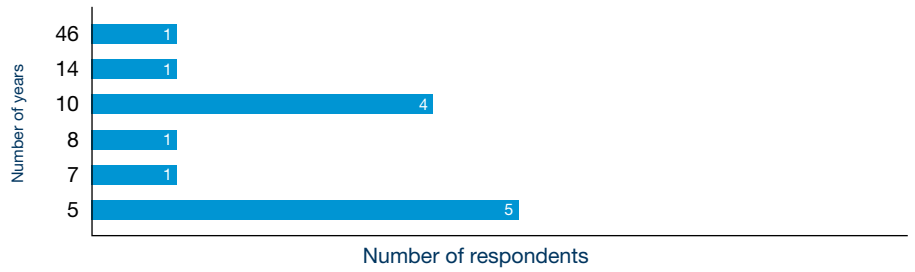
Channel cards

(tax average useful life = 5.6 years)



Power equipment

(tax average useful life = 10.8 years)



Property, plant and equipment

Voicemail equipment

(tax average useful life = 5.4 years)



Data network

(tax average useful life = 6.8 years)



The respondents were asked whether or not they have an integrated fixed asset system that links book basis and tax basis calculations for recording additions, disposals, transfers, etc. Fifty percent (50%) of the respondents indicated that they have an integrated fixed asset system.

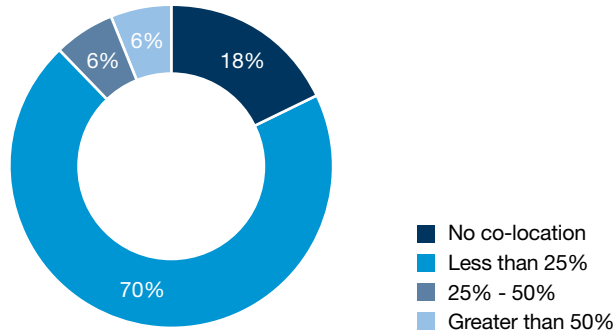
The remaining 50% of the respondents that do not have an integrated fixed asset system stated that they utilize two fixed asset systems.

The respondents were asked when they last reconciled their fixed-asset tax basis and book basis differences. Ninety-four percent (94%) indicated that they have performed such reconciliation within the last 12 months, and, of those companies, 44% perform the reconciliation regularly (at least semi-annually).

Co-location

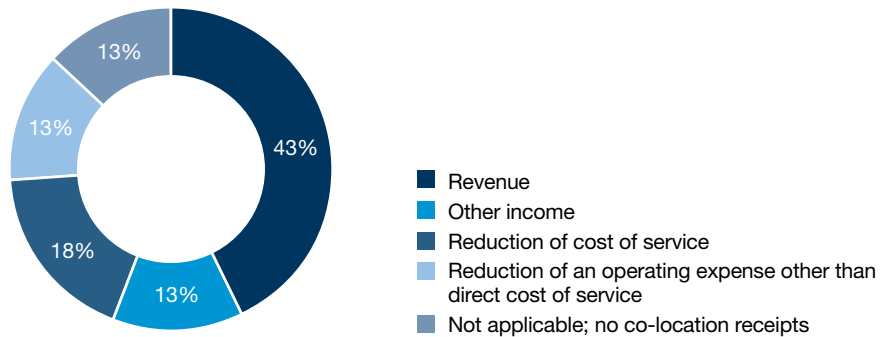
The chart below depicts approximately what percentages of the respondents' total cell sites generate co-location receipts.

Co-location receipts



The chart below depicts where the respondents record co-location receipts on their income statements. Forty-three percent (43%) record their co-location receipts on the revenue section of their income statements.

Classification of co-location receipts on income statement

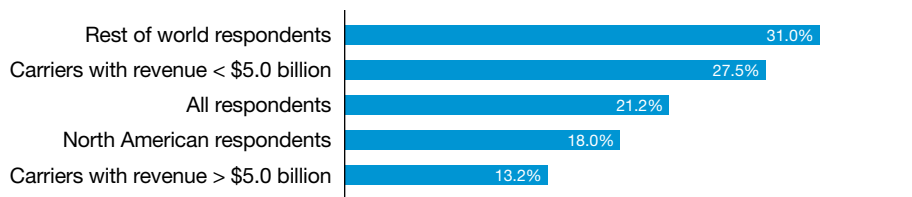


Property, plant and equipment

Fixed asset reporting

We asked the responding companies to report their capital expenditures as a percentage of service revenue, of gross fixed assets, and of net fixed assets for the last fiscal year. The results are illustrated in the following three charts for the different categories of responding companies.

Capital expenditures as a percentage of service revenue



Capital expenditures as a percentage of gross fixed assets

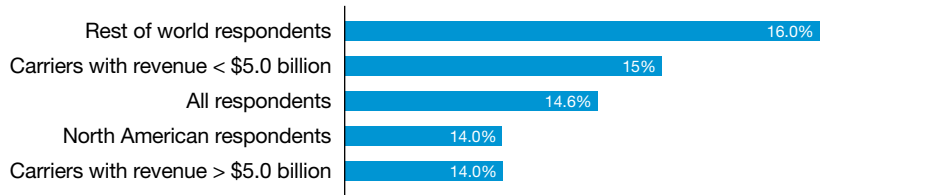


Capital expenditures as a percentage of net fixed assets

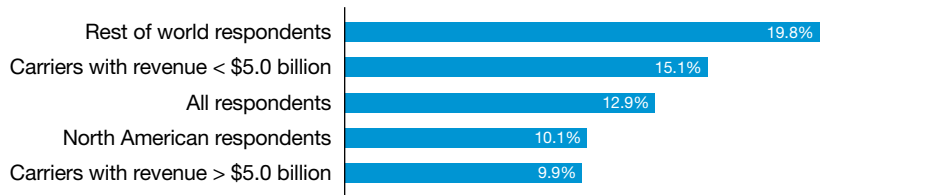


The charts below show the responding companies' depreciation expense as a percentage of service revenue and gross fixed assets for fiscal year 2007 for the different categories of responding companies.

Depreciation expense as a percentage of service revenue



Depreciation expense as a percentage of gross fixed assets



Property, plant and equipment

The charts below illustrate the capital expenditures per average POP, per average subscriber, and per average cell site for the different categories of responding companies.

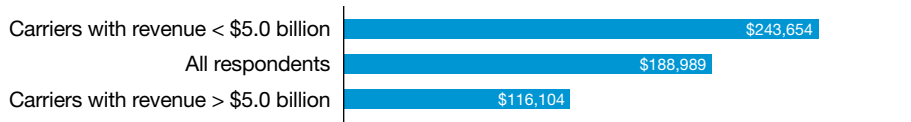
Capital expenditures per average POP



Capital expenditures per average subscriber



Capital expenditures per average cell site



The responding companies were asked what their depreciation expense per average POP, per average subscriber, and per average cell site was for fiscal year 2007. The results for the different categories of responding companies are shown in the following three charts.

Depreciation expense per average POP



Depreciation expense per average subscriber



Depreciation expense per average cell site





Legal and regulatory

The following pages discuss the continued compliance of Section 404 of the Sarbanes-Oxley Act and the financial reporting regulatory environment.

Section 404 of the Sarbanes-Oxley Act

SEC reviews

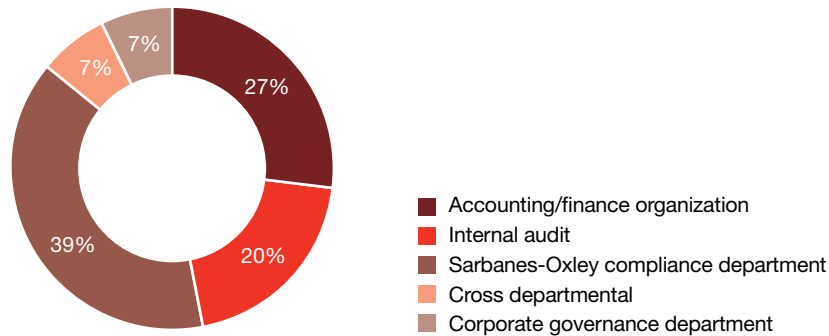
Legal and regulatory

Section 404 of the Sarbanes-Oxley Act

The majority of the responding companies (83%) are subject to complying with Section 404 of the Sarbanes-Oxley Act. Only 17% of the respondents are private and are not required to implement Section 404. Seventy-two percent (72%) of the companies have complied with Section 404 for at least two years and 11% implemented the requirements in 2007. None of the responding companies were required to comply with Section 404 for the first time in 2008 and no responding carriers are considering delisting to reduce the regulatory and financial burden of the Sarbanes-Oxley Act.

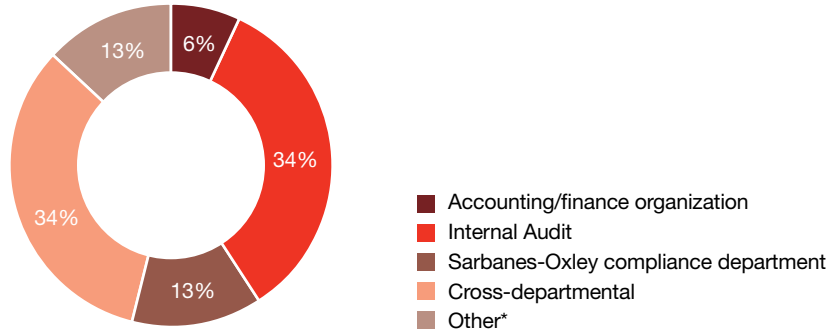
The majority of companies (72%) have completed at least two years of Section 404 compliance. Consequently, they have established long-term plans and assigned responsibilities. When asked which department will be responsible for Section 404 compliance in the long term, the majority of the respondents identified the Sarbanes-Oxley compliance department, the accounting/finance organization or internal audit. However, the responsibility has been shifted from both the Sarbanes-Oxley compliance department and internal audit to the accounting/finance organization.

Long-term responsibility for Section 404 compliance



The majority of the responding companies' assigned lead responsibilities for information technology general computer (ITGC) controls either cross-departmentally or to internal audit (33% and 34%, respectively). Eighty-seven percent (87%) of the respondents do not expect the department that leads the IT aspect of the Section 404 effort to change in the future. The chart below illustrates the departments within each responding company that led the Section 404 efforts in the areas of ITGC this past year.

Lead department for ITGC Controls



* Other includes corporate governance and IT organization.

Similar to the 2007 North American Wireless Survey, most of the responding companies (80%) indicated a continuing need for outside consultants to support Section 404 efforts in the future. Outside consultants are primarily used for direct testing and documentation assistance, yet assistance in remediation, identification and design control also plays a major role, as indicated in the chart below.

Areas of assistance provided by outside consultants

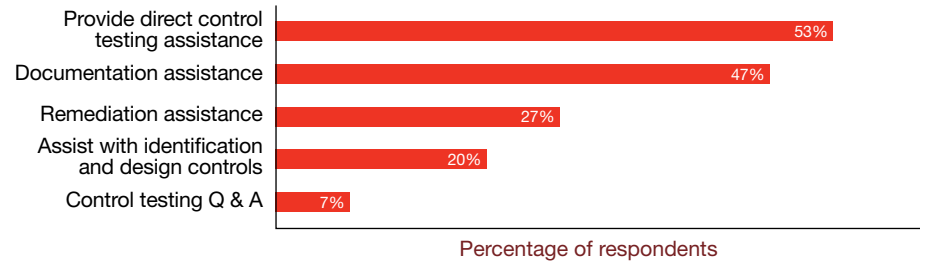


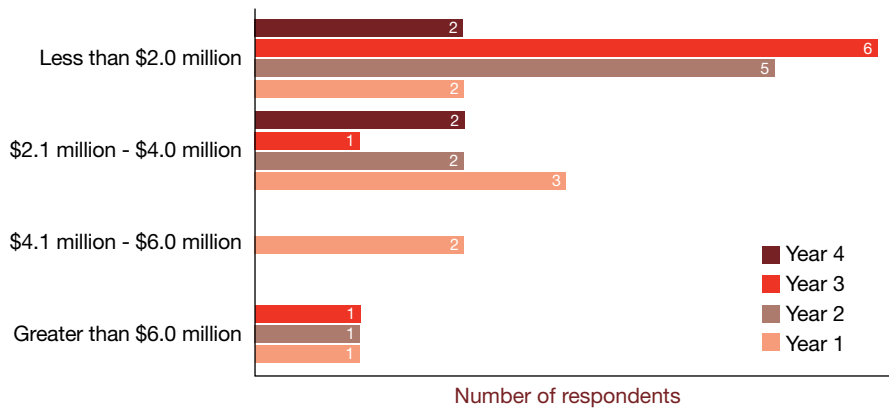
Chart sums to greater than 100% because multiple responses were allowed.

Legal and regulatory

As compared to the 2007 North American Wireless Survey, companies tend to use outside consultants less with respect to the areas of assistance in the identification and design of controls and direct control testing.

Compliance with Section 404 continues to be a significant expense for many carriers. These costs include internal resources, outsourced resources, software tools and systems, and additional external auditor fees. The chart below shows total external costs for Section 404 compliance for the first four years of implementation.

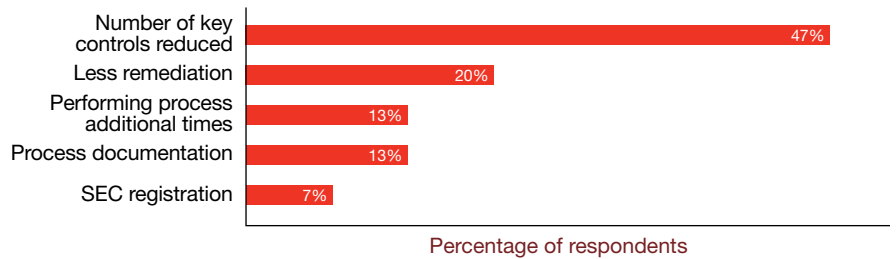
Section 404 costs



The number of respondents is not equal for each year due to required year of adoption of Section 404 compliance.

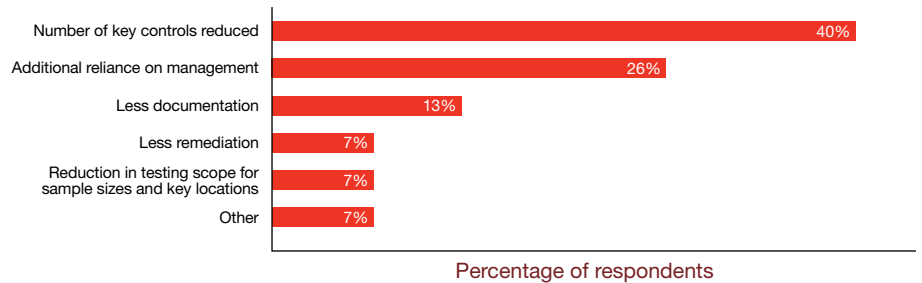
Despite significant internal and external costs related to Section 404, survey respondents continue to experience and expect efficiencies - even after four years of compliance. As companies are in different stages of Section 404 compliance, we asked the respondents to identify the area where they gained the most important efficiencies after the first year of implementation. For most of the companies, efficiencies were gained due to reducing the number of key controls.

Most important area of efficiency following Year 1 of Section 404



In addition, we asked the responding companies in which areas they perceive efficiencies due to external auditors. The results are illustrated in the chart below. Their answers indicate that auditors are helpful mainly in reducing the number of key controls tested.

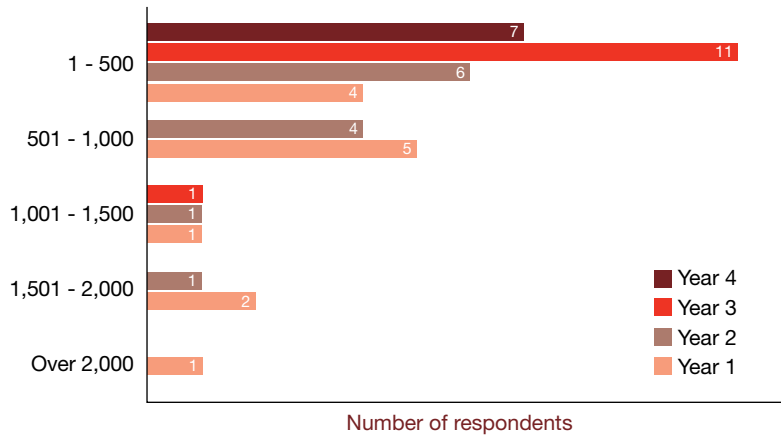
Most important area of external auditors' efficiencies following Year 1 of Section 404



Legal and regulatory

In prior years we asked respondents to report the total number of key controls identified across all financial reporting cycles, business processes and units. The results shown in the chart below indicates a clear and continual trend: Responding companies have reduced the number of key controls that are tested each year.

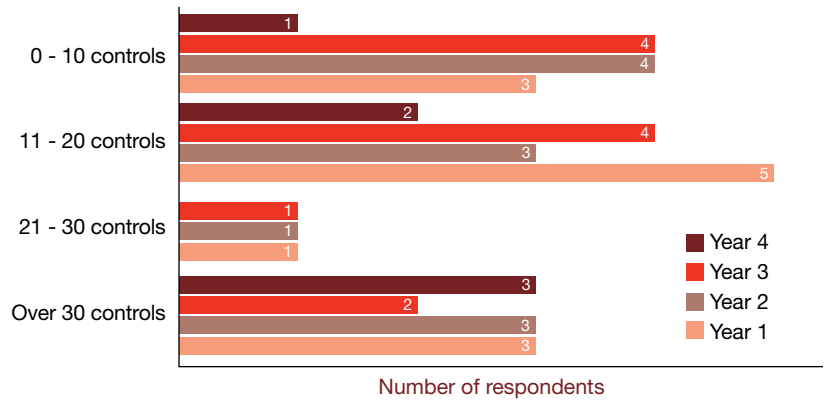
Total number of key controls



The number of respondents is not equal for each year due to required year of adoption for Section 404 compliance.

When the respondents were asked to identify the number of controls specific to income tax processes, the same trend held: The number of income tax-related controls decreased with each year of Section 404 compliance. The following chart depicts the trends for income tax controls by year of Section 404 compliance.

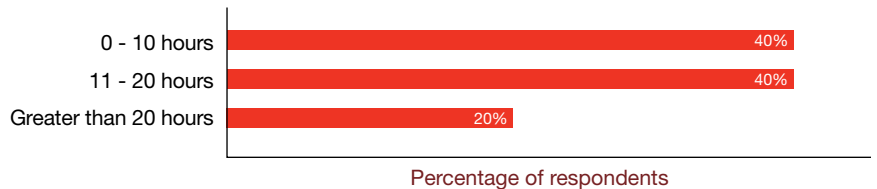
Number of key income tax controls (4-year comparison)



The number of respondents is not equal for each year due to required year of adoption for Section 404 compliance.

Similar to the 2007 North American Wireless Survey, we asked the responding companies how much internal time is required for testing manual/application, ITGC, and entity level controls testing, regardless of the year of Section 404 compliance. The majority of the respondents indicated that they devote the same amount of time to testing any control (an average of 14 hours). The chart below depicts the number of hours spent for each control.

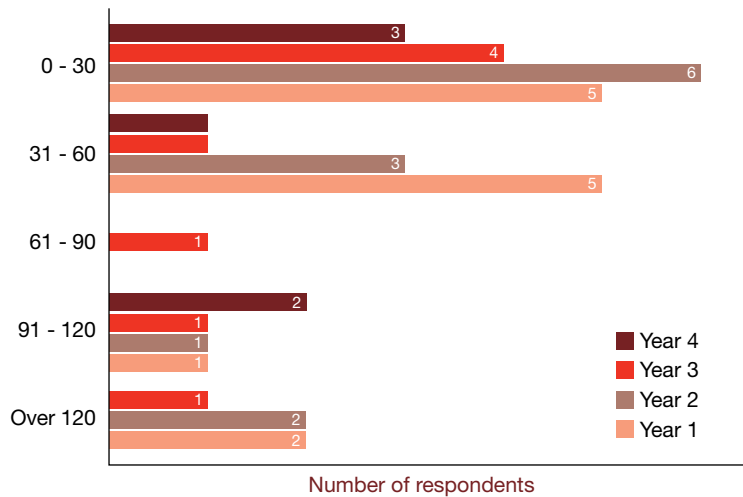
Hours required per control tested



Legal and regulatory

The following three charts compare the number of un-remediated control deficiencies, significant deficiencies, and material weaknesses that survey respondents reported for all years of Section 404 compliance. The charts show that only one carrier reported material weaknesses by the fourth year of Section 404 compliance. Although the trend was for carriers to report a decreasing total number of control deficiencies, they still had significant deficiencies by year three.

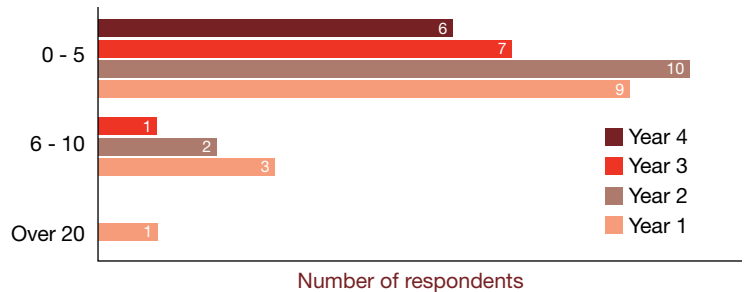
Control deficiencies (4-year comparison)



The number of respondents is not equal for each year due to required year of adoption of Section 404 compliance.

For companies with revenue greater than \$5.0 billion the average number of control deficiencies has decreased substantially each year. The average number of control deficiencies was 48, 51, 77 and 112 in years four, three, two and one, respectively.

Significant deficiencies (4-year comparison)

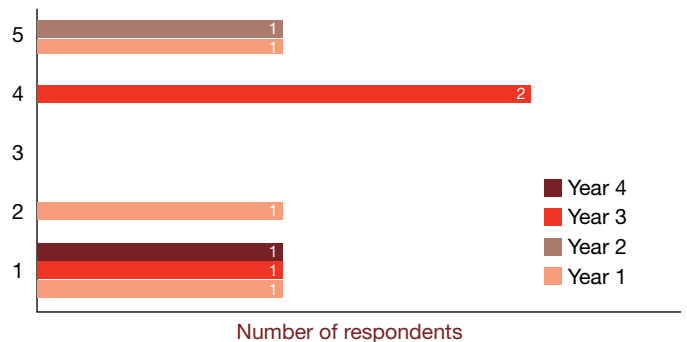


The number of respondents is not equal for each year due to required year of adoption of Section 404 compliance.

No responses were received in the 11 -15 and 16 - 20 categories

Also for companies with revenue greater than \$5.0 billion, the average number of significant deficiencies has decreased substantially each year. The average number of significant deficiencies was two, one, two, and nine in years four, three, two, and one, respectively. The number of significant deficiencies for companies with revenue of less than \$5.0 billion was three, three, two, and three in years four, three, two, and one, respectively.

Material weaknesses (4-year comparison)



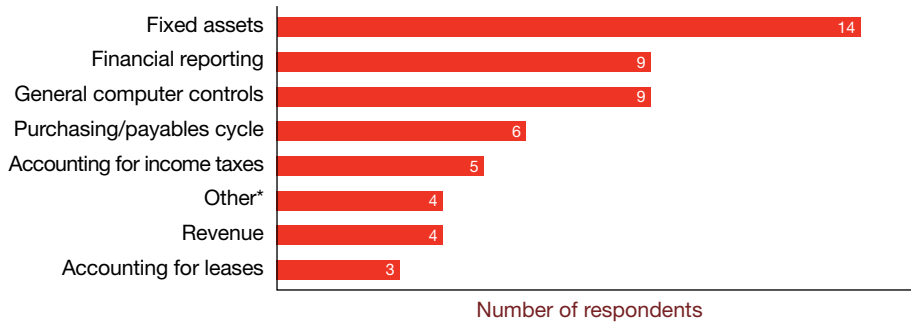
The number of respondents is not equal for each year due to required year of adoption of Section 404 compliance.

Legal and regulatory

Companies with revenue greater than \$5.0 billion reported no material weaknesses. The number of material weaknesses for companies with revenue less than \$5.0 billion was on average one, two, one and one in years four, three, two and one, respectively.

We also asked respondents to specify in which areas they reported significant deficiencies. Consistent with the 2007 North American Wireless Survey, the areas of fixed assets, financial reporting, and ITGCs continue to have significant deficiencies. The chart below illustrates areas of significant deficiencies for the responding companies.

Source of significant deficiencies

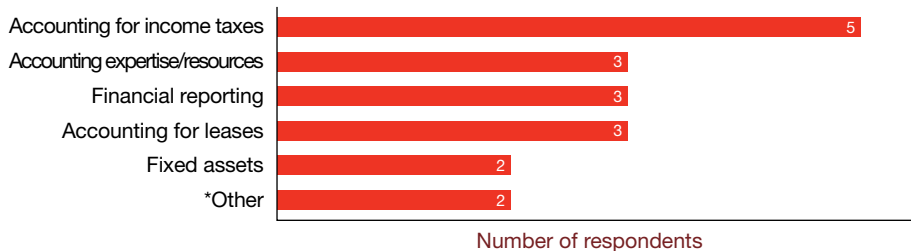


* Other includes payroll/commissions cycle, automated controls, and treasury cycle.

Chart sums greater than the number of respondents as multiple responses were allowed.

Regarding reported material weaknesses, the carriers reported deficiencies in the areas of income taxes, insufficient accounting staff, financial reporting, lease accounting and fixed assets. The chart below represents the sources that led to material weaknesses.

Source of material weaknesses

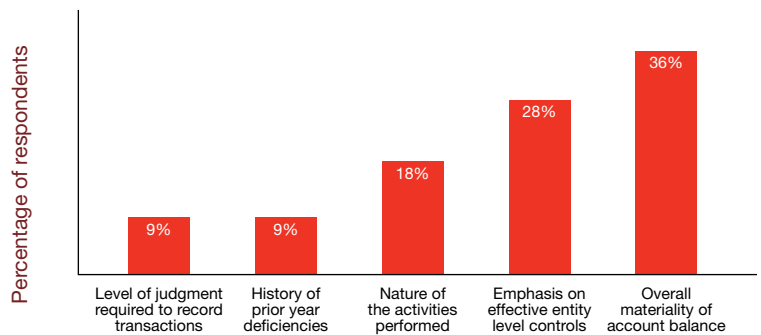


* Other includes ITGCs and revenues.

Chart sums greater than the number of respondents as multiple responses were allowed.

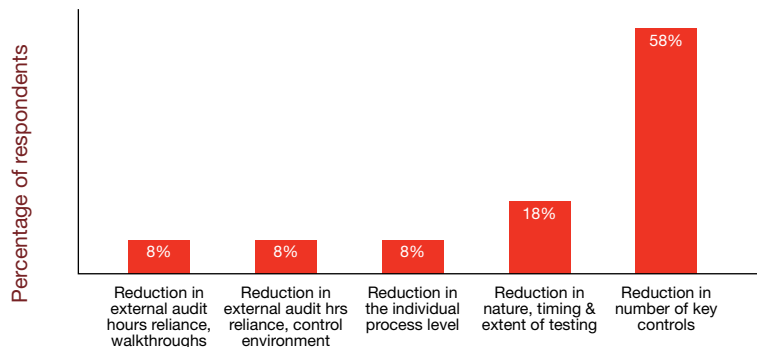
In the recent past, much discussion has been devoted to implementing AS 5, and to how the implementation of this auditing standard would impact the resources devoted to Section 404 compliance. In 2007, the Securities and Exchange Commission unanimously approved AS 5, as amended on May 24, 2007. The 2007 North American Wireless Survey asked respondents to rank the elements and factors related to AS 5 that would affect their approach to Section 404 compliance the most significantly. Conversely, this year we asked for the elements and factors that resulted in the largest change to the responding companies Section 404-approach. The outcomes are depicted in the chart below.

Change with largest impact due to AS 5



Last year, we asked wireless carriers in which areas they believed efficiency benefits from AS 5 would occur. Consequently, this year we asked how the responding companies realized efficiencies. The companies expected greater efficiency, but the reduction in the number of key controls was much greater than they expected. The chart below indicates the ranking in the areas of efficiency gains.

Most important source of realized AS 5 efficiencies



Legal and regulatory

SEC reviews

The Securities and Exchange Commissions' (SEC) Division of Corporate Finance continues to perform extensive reviews of regulatory filings. This year the survey results showed 47% of the responding and eligible wireless companies (the SEC registrants) received a comment letter from the SEC in the last three years. In the 2007 North American Wireless Survey approximately 85% of the responding companies had received a comment letter.

SFAS 144/IAS 36 (impairment of long-lived assets), revenue recognition, fair value measurement and stock-based compensation were among the accounting topics that the SEC addressed most frequently.

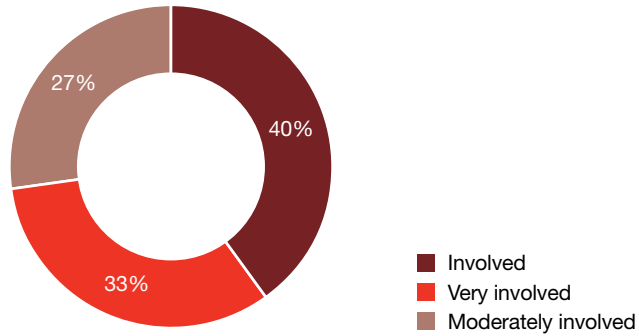
In addition, individual responding companies received comment letters related to the following topics:

- SFAS 142/IAS 38 or the equivalent—goodwill/intangible assets
- SFAS 143/IFRS 3 or the equivalent—asset retirement obligations
- GAAP/Non-GAAP measures
- Segment reporting
- Multiple elements or bundled arrangements
- Joint venture/variable interest entities (FIN 46)/consolidation
- Accounting for derivatives instruments
- Amortization of customer list
- IFRS/US GAAP differences
- Corporate disclosure policies
- Allowance for doubtful accounts/accounts receivable
- Management Discussion and Analysis (MD&A)
- Accelerated share repurchase

No responding companies had to restate related to these comment letters.

As depicted in the chart below, most respondents describe the regulatory oversight/regime in their home country to be at least moderately involved. In addition, most responding carriers feel that the regulatory oversight is consistent among competitors.

Description of the regulatory oversight in the country



Contact information

For more information about this publication or to inquire about participating in a future survey, please contact:

Pierre-Alain Sur, Partner
PricewaterhouseCoopers LLP
900 South Shackleford Road, Suite 505
Little Rock, AR 72211
501.907.8085
pierre-alain.sur@us.pwc.com

Paul Rees, Partner
PricewaterhouseCoopers LLP
1 Embankment Place
London, United Kingdom
44 (20) 7213 4644
paul.g.rees@uk.pwc.com

To request additional copies of this publication, contact Shara Slattery by e-mail at shara.slattery@us.pwc.com.

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Convergence monitor: Personal mobility

The third in a series of global surveys of PwC staff from 20 territories, the Convergence Monitor is aimed at understanding consumer preferences and interest in buying and using various converged services. The report focuses on which devices and applications people are using today, how they are using them, and what they would like to have in the future. To download the PDF, visit www.pwc.com/monitor.

How consumer conversation will transform business

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