

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The following discussion and analysis should be read together with the audited consolidated financial statements of Tucows Inc. (the "Company", "we", "us", "Tucows" or "our") as at December 31, 2019 and December 31, 2018 and for the years ended December 31, 2019, 2018 and 2017 and accompanying notes set forth elsewhere in this report. All financial information is presented in U.S. dollars.

Some of the statements set forth in this section are forward-looking statements relating to our future results of operations. Accordingly, reference is made to "Part I. Item 1A. Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements," which describe important factors that could cause actual results to differ from expectations and non-historical information contained herein.

OVERVIEW

Our mission is to provide simple useful services that help people unlock the power of the Internet.

We accomplish this by reducing the complexity of our customers' experience as they access the Internet (at home or on the go) and while using Internet services such as domain name registration, email, and other Internet services. We are organized, managed and report our financial results as two segments, Network Access Services and Domain Services, which are differentiated primarily by their services, the markets they serve and the regulatory environments in which they operate.

Our principal place of business is located in Canada. We manage our business as segments, Network Access Services, which primarily derives revenue from the sale of retail mobile phones, telephony services and high-speed Internet access to individuals and small businesses, and Domain Services, which derives revenue from three distinct service offerings – wholesale, retail and portfolio. To assist us in forecasting growth and to help us monitor the effectiveness of our operational strategies, our management regularly reviews revenue and cost of revenues for each of our segments in order to gain more depth and understanding of the key business metrics driving our business.

For the years ended December 31, 2019, 2018 and 2017, we reported revenue of \$337 million, \$346 million and \$329 million, respectively.

Network Access Services

Network Access Services derives revenue from the sale of retail mobile phones and services to individuals and small businesses through the Ting website, as well as from providing high speed Internet access, and network consulting services to customers in select cities in the United States. Ting provides its mobile and internet customers with access to our provisioning and management tools to enable them, via the ting.com website, to purchase retail mobile phones and services nationally and fixed Internet access in select cities. Revenues are generated in the United States and are provided on a monthly basis with no fixed contract term. As of December 31, 2019, Ting mobile managed mobile telephony services for approximately 160,000 subscribers and had approximately 289,000 devices under management.

Our primary distribution channel for Ting Internet services is through our website, ting.com. We strive to meet or exceed our Network Access Service customers' needs by providing them with superior services, easy-to-use interfaces and proactive and attentive customer service.

The Company also operates other MVNO brands, Zipsim and Always Online Wireless brands (collectively referred to as "Roam Mobility brands"). Roam Mobility brands operates as a MVNO on the same nationwide Global System for Mobile communications ("GSM") network as Ting Mobile and distributes through third-party retail stores and product branded websites. The primary focus of the Roam Mobility brands is to offer affordable roaming service to international travelers.

Domain Services

Domain Services include wholesale and retail domain name registration services, value added services and portfolio services derived through our OpenSRS, eNom, Ascio and Hover brands. We earn revenues primarily from the registration fees charged to resellers in connection with new, renewed and transferred domain name registrations. In addition, we earn revenues from the sale of retail domain name registration and email services to individuals and small businesses; and by making our portfolio of domain names available for sale or lease. Domain Services revenues are attributed to the country in which the contract originates, primarily Canada and the United States.

Our wholesale domain name registration service, primarily branded as OpenSRS, eNom and Ascio, derives revenue from its Domain Service and from providing Value-added services. The OpenSRS, eNom and Ascio Domain Services manage 23.8 million domain names under the Tucows, eNom and Ascio ICANN registrar accreditations and for other registrars under their own accreditations, which has increased by 0.5 million domain names since December 31, 2018. The increase from prior year is primarily due to the acquisition of 1.9 million names acquired in the Ascio acquisition on March 18, 2019. The increase was offset by the decrease of 0.9 million domain names is related to the bulk transfer domain names in the third quarter of 2019, which were registered to a single, low margin hosted customer. A further decrease of 0.5 million domain names was related to the erosion of registrations related to non-core customers.

Our value-added services include hosted email which provides email delivery and webmail access to millions of mailboxes, Internet security services, Internet hosting, WHOIS privacy, publishing tools and other value-added services. All of these services are made available to end-users through a network of 36,000 web hosts, ISPs and other resellers around the world. In addition, we also derive revenue by monetizing domain names which are near the end of their lifecycle through advertising revenue or auction sale.

Our retail domain name registration service, primarily the Hover and eNom portfolio of websites, including eNom, eNom Central and Bulkregister, derive revenues from the sale of domain name registration and email services to individuals and small businesses. Retail domain service also includes our Personal Names Service – based on over 36,000 surname domains – that allows roughly two-thirds of Americans to purchase an email address based on their last name.

Portfolio generates revenue by offering names in our domain portfolio for resale through a number of distribution channels, and our reseller network.

KEY BUSINESS METRICS and Non-GAAP Measure

We regularly review a number of business metrics, including the following key metrics and non-GAAP measure, to assist us in evaluating our business, measure the performance of our business model, identify trends impacting our business, determine resource allocations, formulate financial projections and make strategic business decisions. The following tables set forth the key business metrics which we believe are the primary indicators of our performance for the periods presented:

Adjusted EBITDA

Tucows reports all financial information in accordance with United States generally accepted accounting principles (“GAAP”). Along with this information, to assist financial statement users in an assessment of our historical performance, we typically disclose and discuss a non-GAAP financial measure, adjusted EBITDA, on investor conference calls and related events that exclude certain non-cash and other charges as we believe that the non-GAAP information enhances investors’ overall understanding of our financial performance. Please see discussion of adjusted EBITDA in the Results of Operations section below.

Ting Mobile

	For the year ended December 31, ⁽¹⁾		
	2019	2018	2017
	(in '000's)		
Ting mobile accounts under management	160	163	166
Ting mobile subscribers under management	289	296	282

(1) For a discussion of these period-to-period changes in subscribers and devices under management and how they impacted our financial results, see the Net Revenues discussion below.

Ting Internet

	For the year ended December 31,		
	2019	2018	2017
	(in '000's)		
Ting Internet accounts under management	10	7	N/A
Ting Internet serviceable addresses ⁽¹⁾	36	28	N/A

(1) Defined as premises to which Ting has the capability to provide a customer connection in a service area.

Domain Services

	For the year ended December 31, ⁽¹⁾		
	2019	2018	2017
	(in 000's)		
Total new, renewed and transferred-in domain name registrations provisioned ⁽²⁾	17,285	17,358	19,361
Domains under management			
Registered using Registrar Accreditation belonging to the Tucows Group	19,233	18,537	22,300
Registered using Registrar Accreditation belonging to Resellers	4,540	4,772	5,400
Total domain names under management ⁽²⁾	23,773	23,309	27,700

(1) For a discussion of these period-to-period changes in the domains provisioned and domains under management and how they impacted our financial results see the Net Revenues discussion below.

(2) Throughout 2018, the Company completed bulk transfers of 2.89 million names, for domain names under management related to Namecheap.

OPPORTUNITIES, CHALLENGES AND RISKS

As a MVNO our Ting Mobile service is reliant on our Mobile Network Operators (“MNOs”) providing competitive networks. Our MNOs each continue to invest in network expansion and modernization to improve their competitive positions. Deployment of new and sophisticated technology on a very large-scale entails risks. Should they fail to implement, maintain and expand their network capacity and coverage, adapt to future changes in technologies and continued access to and deployment of adequate spectrum successfully, our ability to provide wireless services to our subscribers, to retain and attract subscribers and to maintain and grow our subscriber revenues could be adversely affected, which would negatively impact our operating margins.

Ting Mobile enjoyed rapid growth in its first four years of operation with the growth slowing for the past two years. During the rapid growth phase, we were able to continue to grow gross customer additions and maintain a consistent churn rate, which allowed us to maintain net new customer additions despite the impact of churn on a fast-growing customer base. We have also been able to supplement organic growth with bulk migrations of customer bases of other MVNOs. We expect price competition to grow more intense in the industry which could result in increased customer churn or reductions of customer acquisition rates either of which could result in a further slowing growth rate or in certain cases, our ability to maintain growth.

On June 6, 2018, our current MNOs, T-Mobile and Sprint, submitted a formal merger application to the Federal Communications Commission (“FCC”), which has since been approved. As of February 11, 2020, the merger between T-Mobile and Sprint is expected to be finalized as early as April 1, 2020, subject also to resolution of a lawsuit filed by certain state attorneys general. If T-Mobile and Sprint successfully consummate the merger, the consolidation of our MNOs could hinder our ability in the future to negotiate favourable rates and access to mobile services. On July 9, 2019, the Company announced that it will offer service with a new MNO partner, Verizon.

As an ISP, we have invested and expect to continue to invest in new fiber to the home (“FTTH”) deployments in select markets in the United States. The investments are a reflection of our ongoing efforts to build FTTH network via public-private partnerships in communities we identify as having strong, unmet demand for FTTH services. Given the significant upfront build and operational investments for these FTTH deployments, there is risk that future technological and regulatory changes as well as competitive responses from incumbent local providers, may result in us not fully recovering these investments.

The communications industry continues to compete on the basis of network reach and performance, types of services and devices offered, and price.

The increased competition in the market for Internet services in recent years, which we expect will continue to intensify in the short and long term, poses a material risk for us. As new registrars are introduced, existing competitors expand service offerings and competitors offer price discounts to gain market share, we face pricing pressure, which can adversely impact our revenues and profitability. To address these risks, we have focused on leveraging the scalability of our infrastructure and our ability to provide proactive and attentive customer service to aggressively compete to attract new customers and to maintain existing customers.

Substantially all of our Domain Services revenue is derived from domain name registrations and related value-added services from wholesale and retail customers using our provisioning and management platforms. The market for wholesale registrar services is both price sensitive and competitive and is evolving with the introduction of new gTLDs, particularly for large volume customers, such as large web hosting companies and owners of large portfolios of domain names. We have a relatively limited ability to increase the pricing of domain name registrations without negatively impacting our ability to maintain or grow our customer base. Growth in our Domain Services revenue is dependent upon our ability to continue to attract and retain customers by maintaining consistent domain name registration and value-added service renewal rates and to grow our customer relationships through refining, evolving and improving our provisioning platforms and customer service for both resellers and end-users. In addition, we also generate revenue through pay-per-click advertising and the sale of names from our portfolio of domain names and through the OpenSRS Domain Expiry Stream. The revenue associated with names sales and advertising has recently experienced flat to declining trends due to the uncertainty around the implementation of ICANN’s New gTLD Program, lower traffic and advertising yields in the marketplace, which we expect to continue.

From time-to-time certain of our vendors provide us with market development funds to expand or maintain the market position for their services. Any decision by these vendors to cancel or amend these programs for any reason may result in payments in future periods not being commensurate with what we have achieved during past periods.

Sales of domain names from our domain portfolio have a negative impact on our advertising revenue as these names are no longer available for advertising purposes. In addition, the timing of larger domain names portfolio sales is unpredictable and may lead to significant quarterly and annual fluctuations in our Portfolio revenue. In the fourth quarter of 2019, the Company disposed of its remaining domain portfolio, excluding surname domains used in the Realnames email service. The Company expects portfolio revenue to materially decline in Fiscal 2020 and thereafter.

Our revenue is primarily realized in U.S. dollars and a major portion of our operating expenses are paid in Canadian dollars. Fluctuations in the exchange rate between the U.S. dollar and the Canadian dollar may have a material effect on our business, financial condition and results from operations. In particular, we may be adversely affected by a significant weakening of the U.S. dollar against the Canadian dollar on a quarterly and an annual basis. Our policy with respect to foreign currency exposure is to manage our financial exposure to certain foreign exchange fluctuations with the objective of neutralizing some or all of the impact of foreign currency exchange movements by entering into foreign exchange forward contracts to mitigate the exchange risk on a portion of our Canadian dollar exposure. We may not always enter into such forward contracts and such contracts may not always be available and economical for us. Additionally, the forward rates established by the contracts may be less advantageous than the market rate upon settlement.

Net Revenues

Network Access Services

The Company generates Network Access Services revenues primarily through the provisioning of mobile services. Other sources of revenue include the provisioning of fixed high-speed Internet access as well as billing solutions to ISPs.

Mobile

Ting Mobile wireless usage contracts grant customers access to standard talk, text and data mobile services. Ting Mobile contracts are billed based on the actual amount of monthly services utilized by each customer during their billing cycle and charged to customers on a postpaid basis. Voice minutes, text messages and megabytes of data are each billed separately based on a tiered pricing program. The Company recognizes revenue for Ting Mobile usage based on the actual amount of monthly services utilized by each customer.

Ting Mobile services are primarily contracted through the Ting website, for one month at a time and contain no commitment to renew the contract following each customer's monthly billing cycle. The Company's billing cycle for all Ting Mobile customers is computed based on the customer's activation date. In order to recognize revenue as the Company satisfies its obligations, we compute the amount of revenues earned but not billed from the end of each billing cycle to the end of each reporting period. In addition, revenues associated with the sale of wireless devices and accessories are recognized when title and risk of loss is transferred to the customer and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

Our Roam Mobility brands also offer standard talk, text and data mobile services. Roam customers prepay for their usage through the Roam Mobility website. When prepayments are received the amount is deferred, and subsequently recognized as the Company satisfies its obligation to provide mobile services. In addition, revenues associated with the sale of SIM cards are recognized when title and risk of loss is transferred to the subscriber and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

Other services

Other services derive revenues from providing Ting Internet to individuals and small businesses in select cities. In addition, we provide billing, provisioning and customer care software solutions to Internet Service Providers ("ISPs") through our Platypus billing software. Ting Internet access contracts provide customers Internet access at their home or business through the installation and use of our fiber optic network. Ting Internet contracts are generally prepaid and grant customers with unlimited bandwidth based on a fixed price per month basis. Since consideration is collected before the service period, revenue is initially deferred and recognized as the Company performs its obligation to provide Internet access.

Ting Internet services are primarily contracted through the Ting website, for one month at a time and contain no commitment to renew the contract following each customer's monthly billing cycle. The Company's billing cycle for all Ting Internet access customers is computed based on the customer's activation date. In order to recognize revenue as the Company satisfies its obligations, we compute the amount of revenues earned but not billed from the end of each billing cycle to the end of each reporting period. In addition, revenues associated with the sale of Internet hardware to subscribers are recognized when title and risk of loss is transferred to the subscriber and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

In those cases, where payment is not received at the time of sale, revenue is not recognized until contract inception unless the collection of the related accounts receivable is reasonably assured. The Company records costs that reflect expected refunds, rebates and credit card charge-backs as a reduction of revenues at the time of the sale based on historical experiences and current expectations.

Domain Services

Wholesale

Domain registration contracts, which can be purchased for terms of one to ten years, provide our resellers and retail registrant customers with the exclusive right to a personalized internet address from which to build an online presence. The Company enters into domain registration contracts in connection with each new, renewed and transferred-in domain registration. At the inception of the contract, the Company charges and collects the registration fee for the entire registration period. Though fees are collected upfront, revenue from domain registrations are recognized rateably over the registration period as domain registration contracts contain a ‘right to access’ license of IP, which is a distinct performance obligation measured over time. The registration period begins once the Company has confirmed that the requested domain name has been appropriately recorded in the registry under contractual performance standards.

Historically, our wholesale domain service has constituted the largest portion of our business and encompasses all of our services as an accredited registrar related to the registration, renewal, transfer and management of domain names. In addition, this service fuels other revenue categories as it often is the initial service for which a reseller will engage us, enabling us to follow on with other services and allowing us to add to our portfolio by purchasing names registered through us upon their expiration. Domain services will continue to be the largest portion of our business and will further fuel our ability to sell add-on services.

The Company is an ICANN accredited registrar. Thus, the Company is the primary obligor with our reseller and retail registrant customers and is responsible for the fulfillment of our registrar services to those parties. As a result, the Company reports revenue in the amount of the fees we receive directly from our reseller and retail registrant customers. Our reseller customers maintain the primary obligor relationship with their retail customers, establish pricing and retain credit risk to those customers. Accordingly, the Company does not recognize any revenue related to transactions between our reseller customers and their ultimate retail customers.

Wholesale – Value-Added Services

We derive revenue from domain related value-added services like digital certifications, WHOIS privacy and hosted email and by providing our resellers and retail registrant customers with tools and additional functionality to be used in conjunction with domain registrations. All domain related value-added services are considered distinct performance obligations which transfer the promised service to the customer over the contracted term. Fees charged to customers for domain related value-added services are collected at the inception of the contract, and revenue is recognized on a straight-line basis over the contracted term, consistent with the satisfaction of the performance obligations.

We also derive revenue from other value-added services, which primarily consists of Internet hosting services on the OpenSRS and eNom domain expiry streams.

Retail

We derive revenues from Hover and eNom’s retail properties through the sale of retail domain name registration and email services to individuals and small businesses.

Portfolio

The Company sells the rights to its portfolio domains or names acquired through the Company’s domain expiry stream. Revenue generated from sale of domain name contracts, containing a distinct performance obligation to transfer the domain name rights under the Company’s control, is generally recognized once the rights have been transferred and payment has been received in full. Domain portfolio names are sold through our premium domain name service, auctions or in negotiated sales. The size of our domain name portfolio varies over time, as we acquire and sell domains on a regular basis to maximize the overall value and revenue generation potential of our portfolio. In evaluating names for sale, we consider the potential foregone revenue from pay-per-click advertising, as well as other factors. The name will be offered for sale if, based on our evaluation, the name is deemed non-essential to our business and management believes that deriving proceeds from the sale is strategically more beneficial to the Company. In the fourth quarter of 2019, the Company disposed of its entire domain portfolio, excluding surname domains used in the Realnames email service. The Company expects portfolio revenue to materially decline in Fiscal 2020 and thereafter.

Critical Accounting Policies

The following is a discussion of our critical accounting policies and methods. Critical accounting policies are defined as those that are both important to the portrayal of our financial condition and results of operations and are reflective of significant judgments and uncertainties made by management that may result in materially different results under different assumptions and conditions. “Note 2 – Significant Accounting Policies” of the Notes to the Consolidated Financial Statements for the year ended December 31, 2019 (“Fiscal 2019”) included in Part II, Item 8 of this Annual Report, includes further information on the significant accounting policies and methods used in the preparation of our consolidated financial statements.

The preparation of our consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate the application of these estimates, including those related to the recoverability of useful lives and valuation of intangible assets, valuation of goodwill, fair value measurement of assets and liabilities, product development costs, revenue recognition and deferred revenue and accounting for income taxes. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual amounts could differ significantly from these estimates.

Revenue Recognition Policy

The Company's revenues are derived from (a) the provisioning of mobile and fiber Internet services; and from (b) domain name registration contracts, other domain related value-added services and domain sale contracts. Amounts received in advance of meeting the revenue recognition criteria described below are recorded as deferred revenue. All products are generally sold without the right of return or refund.

Revenue is measured based on consideration specified in a contract with a customer and excludes any sales incentives and amounts collected on behalf of third parties. The Company recognizes revenue when it satisfies a performance obligation by transferring control over a product or service to a customer.

Nature of goods and services

The following is a description of principal activities – separated by reportable segments – from which the Company generates its revenue. For more detailed information about reportable segments. See “Note 19 – Segment Reporting” of the Notes to the Consolidated Financial Statements included in this report for more information.

(a) Network Access Services

The Company generates Network Access Services revenues primarily through the provisioning of mobile services (“Ting Mobile”). Other sources of revenue include the provisioning of fixed high-speed Internet access (“Ting Internet”) as well as billing solutions to ISPs.

Ting Mobile wireless usage contracts grant customers access to standard talk, text and data mobile services. Ting Mobile contracts are billed based on the actual amount of monthly services utilized by each customer during their billing cycle and charged to customers on a postpaid basis. Voice minutes, text messages and megabytes of data are each billed separately based on a tiered pricing program. The Company recognizes revenue for Ting Mobile usage based on the actual amount of monthly services utilized by each customer.

Ting Internet contracts provide customers Internet access at their home or business through the installation and use of our fiber optic network. Ting Internet contracts are generally prepaid and grant customers with unlimited bandwidth based on a fixed price-per-month basis. Because consideration is collected before the service period, revenue is initially deferred and recognized as the Company performs its obligation to provide Internet access.

Both Ting Mobile and Ting Internet access services are primarily contracted through the Ting website, for one month at a time and contain no commitment to renew the contract following each customer's monthly billing cycle. The Company's billing cycle for all Ting Mobile and Ting Internet customers is computed based on the customer's activation date. In order to recognize revenue as the Company satisfies its obligations, we compute the amount of revenues earned but not billed from the end of each billing cycle to the end of each reporting period. In addition, revenues associated with the sale of wireless devices and accessories and Internet hardware to subscribers are recognized when title and risk of loss is transferred to the subscriber and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

Our Roam Mobility brands also offer standard talk, text and data mobile services. Roam customers prepay for their usage through the Roam Mobility website. When prepayments are received the amount is deferred, and subsequently recognized as the Company satisfies its obligation to provide mobile services. In addition, revenues associated with the sale of SIM cards are recognized when title and risk of loss is transferred to the subscriber and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

In those cases, where payment is not received at the time of sale, revenue is not recognized at contract inception unless the collection of the related accounts receivable is reasonably assured. The Company records costs that reflect expected refunds, rebates and credit card charge-backs as a reduction of revenues at the time of the sale based on historical experiences and current expectations.

(b) Domain Services

Domain registration contracts, which can be purchased for terms of one to ten years, provide our resellers and retail registrant customers with the exclusive right to a personalized internet address from which to build an online presence. The Company enters into domain registration contracts in connection with each new, renewed and transferred-in domain registration. At the inception of the contract, the Company charges and collects the registration fee for the entire registration period. Though fees are collected upfront, revenue from domain registrations are recognized rateably over the registration period as domain registration contracts contain a ‘right to access’ license of IP, which is a distinct performance obligation measured over time. The registration period begins once the Company has confirmed that the requested domain name has been appropriately recorded in the registry under contractual performance standards.

Domain related value-added services like digital certifications, WHOIS privacy and hosted email provide our resellers and retail registrant customers tools and additional functionality to be used in conjunction with domain registrations. All domain related value-added services are considered distinct performance obligations which transfer the promised service to the customer over the contracted term. Fees charged to customers for domain related value-added services are collected at the inception of the contract, and revenue is recognized on a straight-line basis over the contracted term, consistent with the satisfaction of the performance obligations.

The Company is an ICANN accredited registrar. Thus, the Company is the primary obligor with our reseller and retail registrant customers and is responsible for the fulfillment of our registrar services to those parties. As a result, the Company reports revenue in the amount of the fees we receive directly from our reseller and retail registrant customers. Our reseller customers maintain the primary obligor relationship with their retail customers, establish pricing and retain credit risk to those customers. Accordingly, the Company does not recognize any revenue related to transactions between our reseller customers and their ultimate retail customers.

The Company also sells the rights to the Company's portfolio domains or names acquired through the Company's domain expiry stream. Revenue generated from sale of domain name contracts, containing a distinct performance obligation to transfer the domain name rights under the Company's control, is generally recognized once the rights have been transferred and payment has been received in full.

Valuation of Goodwill, Intangible Assets and Long-Lived Assets

The excess of the purchase price over the fair values of the identifiable assets and liabilities from our acquisitions is recorded as goodwill. At December 31, 2019, we had \$109.8 million in goodwill related to our acquisitions and \$57.7 million in intangible assets comprised of indefinite life intangibles of \$12.3 million and finite life intangible assets of \$45.4 million. At December 31, 2018, we had \$90.1 million in goodwill related to our acquisitions and \$49.4 million in intangible assets comprised of indefinite life intangibles of \$12.4 million and finite life intangible assets of \$37.0 million. We report our financial results as two operating segments, Domain Services, being wholesale and retail domain name registration services, value added services and portfolio, and Network Access which derives revenue from the sale of retail mobile phones, telephony services, fixed high speed internet access, Internet hosting and network consulting services. Ninety-eight percent of goodwill relates to our Domain Services operating segment and 2% of goodwill relates to our Network Access segment. Of our goodwill balance, \$81.0 million is not deductible for tax purposes. Ninety percent of intangible assets relate to our Domain Services operating segment and 10% of intangible assets relate to our Network Access operating segment.

We account for goodwill and indefinite life intangible assets in accordance with the Financial Accounting Standards Board's ("FASB's") authoritative guidance, which requires that goodwill and indefinite life intangible assets are not amortized, but are subject to an annual impairment test. We complete our impairment test on an annual basis, during the fourth quarter of our fiscal year, or more frequently, if changes in facts and circumstances indicate that impairment indicators are present.

Our indefinite life intangible assets consist of surname domain names and direct navigation domain names. In order to maintain our rights to these domain names, we pay annual renewal fees to the applicable domain name registries. Over the course of time, we sometimes decide not to renew certain under-performing domain names and incur an impairment charge associated with such non-renewal. We recorded an impairment charge of nil for both 2019 and 2018 respectively and \$0.1 million in 2017.

With regard to long-lived assets comprised of property and equipment and finite life intangible assets, we continually evaluate whether events or circumstances have occurred that indicate the remaining estimated useful lives of our definite-life intangible assets may warrant revision or whether the carrying amount of such assets may not be recoverable and exceed their fair value. We use an estimate of the related undiscounted cash flows over the remaining life of the asset in measuring whether the asset is recoverable. There was no impairment recorded on definite-life intangible assets and property and equipment during 2019, 2018 or 2017.

We performed a qualitative assessment to determine whether there were events or circumstances which would lead to a determination, whether it is more likely than not, that goodwill and indefinite life intangible assets have been impaired. In performing the qualitative testing, we made an evaluation of the impact of various factors to the expected future cash flows attributable to our operating segments and to the assumed discount rate which would be used to present value those cash flows. Consideration was given to factors such as macro-economic, industry and market conditions including the capital markets and the competitive environment amongst others. We concluded that there were no indications of impairment under the qualitative approach. The analysis was consistent with the approach we utilized in our analysis performed in prior years.

Any changes to our key assumptions about our businesses and our prospects, or changes in market conditions, could cause the fair value of our operating segments to fall below its carrying value, resulting in a potential impairment charge. In addition, changes in our organizational structure or how our management allocates resources and assesses performance, could result in a change in our operating segments, requiring a reallocation and updated impairment analysis of goodwill and indefinite life intangible assets. A goodwill or intangible asset impairment charge could have a material effect on our consolidated financial statements because of the significance of goodwill and intangible assets to our consolidated balance sheet. There was no further impairment of goodwill or intangible assets as a result of the annual impairment tests completed during the fourth quarters of 2019, 2018 or 2017.

Accounting for Income Taxes

We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. We apply a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if on the weight of available evidence, it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit that is more than 50% likely to be realized upon settlement.

Although we believe we have adequately reserved for our uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate based on new information that may become available. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made.

As we account for income taxes under the asset and liability method, we recognize deferred tax assets or liabilities for the anticipated future tax effects of temporary differences between the financial statement basis and the tax basis of our assets and liabilities. We record a valuation allowance to reduce the net deferred tax assets when it is more likely than not that the benefit from the deferred tax assets will not be realized. In assessing the need for a valuation allowance, historical and future levels of income, expectations and risks associated with estimates of future taxable income and ongoing tax planning strategies are considered. In the event that it is determined that the deferred tax assets to be realized in the future would be in excess of the net recorded amount, an adjustment to the deferred tax asset valuation allowance would be recorded. This adjustment would increase income in the period that such determination was made. Likewise, should it be determined that all or part of a recorded net deferred tax asset would not be realized in the future, an adjustment to increase the deferred tax asset valuation allowance would be charged to income in the period that such determination would be made. At December 31, 2019, the valuation allowance of \$9.4 million was related to foreign tax credits, R&D tax credits and net operating losses that we are not expected to realize.

On a periodic basis, we evaluate the probability that our deferred tax asset balance will be recovered to assess its realizability. To the extent we believe it is more likely than not that some portion of our deferred tax assets will not be realized, we will increase the valuation allowance against the deferred tax assets. Realization of our deferred tax assets is dependent primarily upon future taxable income. Our judgments regarding future profitability may change due to future market conditions, changes in U.S. or international tax laws and other factors. These changes, if any, may require possible material adjustments to these deferred tax assets, impacting net income or net loss in the period when such determinations are made.

In connection with the eNom acquisition in 2017, we acquired deferred tax liabilities primarily composed of prepaid registry fees. As a result, we aligned our tax methodology pertaining to the deductibility of prepaid registry fees for our legacy domain services. In the first quarter of 2019, we determined that we were in technical violation with respect to the administrative application of the accounting method change relating to the deductibility of prepaid registry fees. In the fourth quarter of 2019, the Internal Revenue Service granted the Company relief with respect to the technical violation to the administrative application of the accounting method change. Based on the Company's filing position on the accounting method change itself, relating to the deductibility of prepaid registry fees, we believe that on a more likely than not basis that our tax position will be sustained. If the position is not sustained, then the accounting method change would be deferred into the following taxation period and we may be subject to incremental taxes as well as interest and penalties.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "Act") was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. For the year ended December 31, 2017, we recorded in our provision for income taxes a net \$5.8 million reduction to income tax expense related to the implementation impact of the Act. The net positive impact amount related to the remeasurement of certain deferred tax assets and liabilities, based on the rates at which they are expected to reverse in the future, was \$10.0 million. This positive impact was offset by us recording a valuation allowance of \$1.3 million related to prior year foreign tax credits as we have determined there is insufficient foreign source income projected to utilize these credits. The amount related to the one-time transition tax on the mandatory deemed repatriation of foreign earnings was less than \$0.1 million.

Recently Issued Accounting Standards

See "Note 2 – Significant Accounting Policies" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report for information regarding recently issued accounting standards.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2019 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2018

The Company has initially applied Accounting Standard Update (“ASU”) No. 2016-02, *Leases (Topic 842)* on January 1, 2019, which was adopted using the modified retrospective basis. Accordingly, comparative figures have not been restated.

NET REVENUES

The following table presents our net revenues, by revenue source:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Network Access Services:		
Mobile Services	\$ 84,657	\$ 89,340
Other Services	11,006	7,984
Total Network Access Services	95,663	97,324
Domain Services:		
Wholesale		
Domain Services	182,957	189,434
Value Added Services	18,922	17,756
Total Wholesale	201,879	207,190
Retail		
Portfolio	4,817	6,975
Total Domain Services	241,482	248,689
	\$ 337,145	\$ 346,013
(Decrease) increase over prior period	\$ (8,868)	
(Decrease) increase - percentage		(3)%

The following table presents our revenues, by revenue source, as a percentage of total revenues:

	Year ended December 31,	
	2019	2018
Network Access Services:		
Mobile Services	25%	26%
Other Services	3%	2%
Total Network Access Services	28%	28%
Domain Services:		
Wholesale		
Domain Services	55%	55%
Value Added Services	6%	5%
Total Wholesale	61%	60%
Retail		
Portfolio	10%	10%
Portfolio	1%	2%
Total Domain Services	72%	72%
	100%	100%

Total net revenues for Fiscal 2019 decreased by \$8.9 million, or 3%, to \$337.1 million from \$346.0 million for the fiscal year ended December 31, 2019 (“Fiscal 2019”). The overall decrease in revenue was primarily driven by the \$16.9 million acceleration of revenue related to the Namecheap bulk transfer of 2.89 million names throughout Fiscal 2018. Wholesale and domain revenue decreased a further \$5.8 million during Fiscal 2019 related an erosion in Wholesale domain registrations by non-core customers. Ting Mobile handset and mobile usage revenue decreased \$4.6 million due to a decrease in mobile subscribers, and portfolio revenue decreased \$2.2 million. The decreases in revenues were offset by a \$17.4 million increase related to the acquisition of Ascio, a domain registrar business acquired on March 18, 2019, an increase in Wholesale domain revenue related to price increases, as well as a \$3.0 million increase in revenue related to the expanding Ting Internet footprint. Deferred revenue from domain name registrations and other Internet services at December 31, 2019 increased to \$149.3 million from \$143.7 million at December 31, 2018, primarily due to the acquisition of Ascio.

No customer accounted for more than 10% of revenue during Fiscal 2019 or Fiscal 2018, and no customers accounted for more than 10% of accounts receivable as of December 31, 2019 and 2018. Management judgment is required at the time of recording of revenue to assess whether the collection of the resulting receivables is reasonably assured. On an ongoing basis, we assess the ability of our customers to make required payments. Based on this assessment, we expect the carrying amount of our outstanding receivables, net of allowance for doubtful accounts, to be fully collected.

Network Access Services

Mobile and Other Services

Net revenues from mobile phone equipment and services for Fiscal 2019, as compared to Fiscal 2018, decreased by \$4.6 million or 5% to \$84.7 million. The overall decrease in revenue was primarily related to a decline in mobile service revenue, which decreased by \$2.2 million compared to Fiscal 2018, to \$78.2 million, as a result of a decline in mobile subscribers. Revenues from the sale of mobile hardware and related accessories decreased by \$2.4 million compared to Fiscal 2018, to \$6.5 million. The decrease in device revenue was primarily driven by reduced demand for higher-priced devices compared to Fiscal 2018.

Other revenues from Ting Internet and billing solutions generated \$11.0 million in revenue during Fiscal 2019, up \$3.0 million or 38% compared to Fiscal 2018. Growth in Ting Internet revenues was as a result of the increased Ting Internet footprint in existing Ting towns throughout the United States, as well as the addition of Fuquay-Varina, NC in the first quarter of 2019.

As of December 31, 2019, Ting Mobile had 160,000 mobile subscribers and 289,000 mobile devices under its management compared to 163,000 subscribers and 296,000 devices under its management as of December 31, 2018.

As of December 31, 2019, Ting Internet had access to 36,000 serviceable addresses and 10,000 active accounts under its management compared to having access to 28,000 serviceable addresses and 7,000 active accounts under its management as of December 31, 2018.

Domain Services

Wholesale

During Fiscal 2019, Wholesale domain services revenue decreased by \$6.4 million or 3% to \$183.0 million. The decrease in revenue compared to Fiscal 2018 was primarily driven by the \$16.9 million acceleration of revenue related to the Namecheap bulk transfer of 2.89 million domain names during 2018. Wholesale domain revenue decreased a further \$10.1 million related to the erosion of registrations by non-core customers during Fiscal 2019. The overall decrease in Wholesale domain revenues was partially offset by a \$17.4 million increase in revenue related to the acquisition of Ascio and a \$3.2 million increase in revenue related to price increases.

The number of overall transactions from new, renewed and transferred-in domain name registrations for Fiscal 2019, as compared to Fiscal 2018, decreased by 0.1 million to 17.3 million. The decrease was primarily driven by the departure of a few large, low margin customers, including Namecheap. The overall decrease was partially offset by an increase in new, renewed and transferred-in domain name registrations related to the acquisition of Ascio. While we anticipate that the number of new, renewed and transferred-in domain name registrations will continue to incrementally increase in the long term, the volatility of these factors could affect the growth of domain names that we manage.

Net revenues from value-added services increased by \$1.1 million to \$18.9 million compared to Fiscal 2018. The increase in value-added service revenue over Fiscal 2018 was primarily driven by an increase in expiry stream revenue.

Retail

Net revenues from retail increased by \$0.3 million to \$34.8 million compared to Fiscal 2018. Revenue increased, because Fiscal 2018 revenue was negatively impacted by the fair value effect of deferred revenue acquired in the eNom acquisition to a greater extent than in Fiscal 2019.

Portfolio

Portfolio revenues decreased by \$2.2 million to \$4.8 million compared to Fiscal 2018. The decrease is due to a decrease in the volume of portfolio sales in Fiscal 2019. In the fourth quarter of 2019, the Company disposed of its entire domain portfolio, excluding surname domains used in the Realnames email service. The Company expects portfolio revenue to materially decline in Fiscal 2020 and thereafter.

COST OF REVENUES

Network Access Services

Mobile

Cost of revenues for mobile services includes the costs of provisioning mobile services, which is primarily our customers' voice, messaging, data usage provided by our Network Operators, and the costs of providing mobile phone hardware, which is the cost of mobile phone devices and SIM cards sold to our customers, order fulfillment related expenses, and inventory write-downs.

Other Services

Cost of revenues for other services primarily includes the costs for provisioning high speed Internet access, which is comprised of network access fees and software licenses and the costs of providing hardware. Hardware costs are comprised of network routers sold to our customers, order fulfillment related expenses, inventory write-downs and fees paid to third-party service providers primarily for printing services in connection with billing services to ISPs.

Wholesale

Domain Service

Cost of revenues for domain registrations represents the amortization of registry and accreditation fees on a basis consistent with the recognition of revenues from our customers, namely rateably over the term of provision of the service. Registry fees, the primary component of cost of revenues, are paid in full when the domain is registered, and are initially recorded as prepaid domain registry fees. This accounting treatment reasonably approximates a recognition pattern that corresponds with the provision of the services during the period. Market development funds that do not represent a payment for distinct goods or services provided by the Company, and thus do not meet the criteria for revenue recognition under ASU 2014-09, are reflected as cost of goods sold and are recognized as earned.

Value-Added Services

Costs of revenues for value-added services include licensing and royalty costs related to the provisioning of certain components of related to hosted email and fees paid to third-party hosting services. Fees payable for trust certificates are amortized on a basis consistent with the provision of service, generally one year, while email hosting fees and monthly printing fees are included in cost of revenues in the month they are incurred.

Retail

Costs of revenues for our provision and management of Internet services through our retail sites, Hover.com and the eNom branded sites, include the amortization of registry fees on a basis consistent with the recognition of revenues from our customers, namely rateably over the term of provision of the service. Registry fees, the primary component of cost of revenues, are paid in full when the domain is registered, and are recorded as prepaid domain registry fees.

Portfolio

Costs of revenues for our portfolio represent the amortization of registry fees for domains added to our portfolio over the renewal period, which is generally one year, the value attributed under intangible assets to any domain name sold and any impairment charges that may arise from our assessment of our domain name intangible assets. Payments for domain registrations are payable for the full term of service at the time of activation of service and are recorded as prepaid domain registry fees and are expensed rateably over the renewal term.

Network expenses

Network expenses include personnel and related expenses, depreciation and amortization, communication costs, equipment maintenance, stock-based compensation and employee and related costs directly associated with the management and maintenance of our network. Communication costs include bandwidth, co-location and provisioning costs we incur to support the supply of all our services.

The following table presents our cost of revenues, by revenue source:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Network Access Services:		
Mobile Services	\$ 44,415	\$ 46,061
Other Services	3,928	3,994
Total Network Access Services	<u>48,343</u>	<u>50,055</u>
Domain Services:		
Wholesale		
Domain Services	148,530	160,216
Value Added Services	2,986	3,154
Total Wholesale	<u>151,516</u>	<u>163,370</u>
Retail		
Portfolio	17,093	17,725
Total Domain Services	<u>627</u>	<u>953</u>
	<u>169,236</u>	<u>182,048</u>
Network Expenses:		
Network, other costs	9,190	9,846
Network, depreciation and amortization costs	9,599	7,294
	<u>18,789</u>	<u>17,140</u>
	<u>\$ 236,368</u>	<u>\$ 249,243</u>
(Decrease) increase over prior period	\$ (12,875)	
(Decrease) increase - percentage	-5%	

The following table presents our cost of revenues, as a percentage of total cost of revenues for the periods presented:

	Year ended December 31,	
	2019	2018
Network Access Services:		
Mobile Services	19%	18%
Other Services	2%	2%
Total Network Access Services	<u>21%</u>	<u>20%</u>
Domain Services:		
Wholesale		
Domain Services	63%	65%
Value Added Services	1%	1%
Total Wholesale	<u>64%</u>	<u>66%</u>
Retail		
Portfolio	7%	7%
Total Domain Services	<u>0%</u>	<u>0%</u>
	<u>71%</u>	<u>73%</u>
Network Expenses:		
Network, other costs	4%	4%
Network, depreciation and amortization costs	4%	3%
	<u>8%</u>	<u>7%</u>
	<u>100%</u>	<u>100%</u>

Total cost of revenues for Fiscal 2019 decreased by \$12.8 million, or 5%, to \$236.4 million from \$249.2 million in Fiscal 2018. The decrease was primarily driven by the \$16.8 million acceleration of costs related to the Namecheap bulk transfer of 2.89 million names during Fiscal 2018. Wholesale domain and value added service costs decreased a further \$9.9 million related to an erosion in registrations by non-core customers. Retail domain costs decreased \$0.6 million related to the churn of low margin customers and portfolio costs decreased by \$0.4 million. Cost of revenue decreased a further \$1.7 million due to a decline in mobile subscribers. The overall decrease in cost of revenue was offset by an increase of \$14.8 million of costs related to the acquisition of Ascio, and an increase of \$1.7 million in Network Expenses associated with the expanding Ting Internet footprint. Prepaid domain registration and other Internet services fees as of December 31, 2019 increased by \$2.7 million, or 3%, to \$109.2 million from \$106.5 million at December 31, 2018 primarily from the acquisition of Ascio.

Network Access Services

Mobile and Other Services

Cost of revenues from mobile phone equipment and services for Fiscal 2019, as compared to Fiscal 2018, decreased by \$1.7 million or 4% to \$44.4 million. The decrease in mobile usage charges was primarily driven by a decrease in Roam Mobility brands related costs of \$1.8 million related to lower network operator costs in the current period and restructuring charges that were incurred during Fiscal 2018. The decrease was also driven by lower mobile hardware and related accessories costs, which decreased \$2.1 million as compared to Fiscal 2018. The decrease in hardware sales was primarily driven by reduced demand for higher-priced devices compared to Fiscal 2018. The decrease in mobile usage costs were offset by an increase in Ting mobile service related costs of \$2.2 million related to increased minimum charges with network operators.

In Fiscal 2019, costs related to provisioning high speed Internet access and billing solutions decreased \$0.1, or 3%, to \$3.9 million as compared to \$4.0 million during Fiscal 2018. The decrease in costs was primarily due to the fact that overhead resources have been increasingly focused on capital activities as compared to Fiscal 2018.

Domain Services

Wholesale

Domain Service

Costs for wholesale domain services for Fiscal 2019 decreased by \$11.7 million to \$148.5 million, when compared to Fiscal 2018. The decrease was primarily driven by the accelerated recognition of \$16.8 million domains revenue associated with the Namecheap bulk transfer of 2.89 million names throughout Fiscal 2018. Wholesale domain costs decreased a further \$9.7 million related to an erosion in registrations by non-core customers. The decreases were partially offset by a \$14.8 million increase related to the acquisition of Ascio.

Value-Added Services

Costs for wholesale value-added services for Fiscal 2019 decreased by \$0.2 million to \$3.0 million, when compared to Fiscal 2018. The decrease in cost of revenue is primarily related to an overall decline in certification and email sales during Fiscal 2018.

Retail

Costs for retail for Fiscal 2019 decreased by \$0.6 million, to \$17.1 million, when compared to Fiscal 2018. The decrease was a result of an overall declining volume of transactions related to certain retail brands.

Portfolio

Costs for portfolio decreased by \$0.4 million for Fiscal 2019, to \$0.6 million when compared to Fiscal 2018, the decrease in cost is primarily driven by a lower volume of portfolio sales compared to Fiscal 2018. In the fourth quarter of 2019, the Company disposed of its entire domain portfolio, excluding surname domains used in the Realnames email service. The Company expects portfolio cost of revenue to materially decline in Fiscal 2020 and thereafter inline with the expected decline in revenue.

Network Expenses

Network costs for Fiscal 2019 increased by \$1.7 million to \$18.8 million when compared to Fiscal 2018, which is primarily driven by the increase in network costs and depreciation of the fiber assets associated with the continuing expansion of the Ting Fiber footprint.

SALES AND MARKETING

Sales and marketing expenses consist primarily of personnel costs. These costs include commissions and related expenses of our sales, product management, public relations, call center, support and marketing personnel. Other sales and marketing expenses include customer acquisition costs, advertising and other promotional costs.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Sales and marketing	\$ 34,270	\$ 33,063
Increase over prior period	\$ 1,207	
Increase - percentage	4%	
Percentage of net revenues	10%	10%

Sales and marketing expenses for Fiscal 2019 increased by \$1.2 million, or 4%, to \$34.3 million as compared to Fiscal 2018. This increase primarily related to a \$1.3 million increase in people costs acquired in the acquisition of Ascio in the first quarter of 2019. Stock-based compensation expenses also increased \$0.2 million in Fiscal 2019 to attract and retain labor. The overall increase in sales and marketing expense was partially offset by a decrease in other marketing expenses of \$0.3 million.

Excluding movements in exchange rates, we expect sales and marketing expenses for the fiscal year ending December 31, 2020 ("Fiscal 2020") to increase in absolute dollars, as we adjust our marketing programs and sales and customer support personnel costs to support our network access services marketing and customer service needs.

TECHNICAL OPERATIONS AND DEVELOPMENT

Technical operations and development expenses consist primarily of personnel costs and related expenses required to support the development of new or enhanced service offerings and the maintenance and upgrading of existing infrastructure. This includes expenses incurred in the research, design and development of technology that we use to register domain names, network access services, email, retail, domain portfolio and other Internet services, as well as to distribute our digital content services. Editorial costs relating to the rating and review of the software content libraries are included in the costs of product development. All technical operations and development costs are expensed as incurred.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Technical operations and development	\$ 9,717	\$ 8,748
Increase over prior period	\$ 969	
Increase - percentage	11%	
Percentage of net revenues	3%	3%

Technical operations and development expenses for Fiscal 2019 increased by \$1.0 million, or 11%, to \$9.7 million. The increase in costs relates primarily to a \$0.7 million increase related to the Ascio acquisition, with a further increase of \$0.3 million related to increased salaries and benefits driven by an expanding workforce and wage inflation.

Excluding movements in exchange rates, we expect technical operations and development expenses for Fiscal 2020, in absolute dollars, to increase when compared to Fiscal 2019 to support the ongoing growth in our operations.

GENERAL AND ADMINISTRATIVE

General and administrative expenses consist primarily of compensation and related costs for managerial and administrative personnel, fees for professional services, public listing expenses, rent, foreign exchange and other general corporate expenses.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
General and administrative	\$ 17,880	\$ 17,710
Increase over prior period	\$ 170	
Increase - percentage	1%	
Percentage of net revenues	5%	5%

General and administrative expenses for Fiscal 2019 increased by \$0.2 million, or 1%, to \$17.9 million as compared to Fiscal 2018. The overall increase in general and administrative expense was primarily driven by a \$0.7 million increase related to Ascio expenses. The overall increase in general and administrative expenses was partially offset by a foreign exchange gain of \$0.5 million.

Excluding movements in exchange rates, we expect general and administrative expenses for Fiscal 2020, in absolute dollars, to increase when compared to Fiscal 2019 largely to support the growth of our business.

DEPRECIATION OF PROPERTY AND EQUIPMENT

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Depreciation of property and equipment	\$ 486	\$ 424
Increase over prior period	\$ 62	
Increase - percentage	15%	
Percentage of net revenues	0%	0%

Depreciation costs for Fiscal 2019 increased to \$0.5 million when compared to \$0.4 million for Fiscal 2018. The increase is driven by an increase in computer hardware assets, compared to Fiscal 2018.

LOSS ON DISPOSAL OF PROPERTY AND EQUIPMENT

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Loss on disposition of property and equipment	\$ 73	\$ -
Increase over prior period	\$ 73	
Increase - percentage	N/A	
Percentage of net revenues	0%	-%

Loss on disposal costs were \$0.1 million during the Fiscal 2019 related to equipment disposal from the Kirkland office.

AMORTIZATION OF INTANGIBLE ASSETS

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Amortization of intangible assets	\$ 9,209	\$ 7,247
Increase over prior period	\$ 1,962	
Increase - percentage	27%	
Percentage of net revenues	3%	2%

Amortization of intangible assets increased \$2.0 million for Fiscal 2019, to \$9.2 million. The increase is primarily driven by the acquisition of Ascio.

Network rights, brand and customer relationships acquired in connection with the acquisitions eNom in January 2017, Roam Mobility brands in September of 2017 and Ascio in March of 2019 are amortized on a straight-line basis over a range of two to seven years.

LOSS (GAIN) ON CURRENCY FORWARD CONTRACTS

Although our functional currency is the U.S. dollar, a major portion of our fixed expenses are incurred in Canadian dollars. Our goal with regard to foreign currency exposure is, to the extent possible, to achieve operational cost certainty, manage financial exposure to certain foreign exchange fluctuations and to neutralize some of the impact of foreign currency exchange movements. Accordingly, we enter into foreign exchange contracts to mitigate the exchange rate risk on portions of our Canadian dollar exposure.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Loss (gain) on currency forward contracts	\$ (198)	\$ 254
Decrease over prior period	\$ (452)	
Decrease - percentage	178%	
Percentage of net revenues	0%	0%

We have entered into certain forward exchange contracts that do not comply with the requirements of hedge accounting to meet a portion of our future Canadian dollar requirements through December 2019. During Fiscal 2019, the Company recorded a net gain of \$0.3 million on the change in fair value of outstanding contracts as well as a \$0.1 million realized loss on matured contracts. In Fiscal 2018 the Company recorded a net loss of \$0.2 million for the change in fair value of outstanding contracts and a loss of less than \$0.1 million of settlements of contracts not designated as hedges.

At December 31, 2019, our balance sheet reflects a derivative instrument asset of \$0.7 million as a result of our existing foreign exchange contracts. Until their respective maturity dates, these contracts will fluctuate in value in line with movements in the Canadian dollar relative to the U.S. dollar.

OTHER INCOME (EXPENSES)*(Dollar amounts in thousands of U.S. dollars)*

	Year ended December 31,	
	2019	2018
Other income (expense), net	\$ (4,769)	\$ (3,169)
Increase over prior period	\$ (1,600)	
Increase - percentage	50%	
Percentage of net revenues	1%	1%

Other expenses increased by \$1.6 million when compared to Fiscal 2018 primarily due to interest incurred on our credit facility with the majority of the borrowings on the credit facility to support the build-out of the Ting Fiber network. Other expense consists primarily of the interest we incur in connection with our Amended 2019 Credit Facility. The interest incurred primarily relates to our loan balances obtained to fund the acquisition of eNom, the acquisition of Ascio and funding for expenditures associated with the Company's Fiber to the Home program. Costs in 2018 were partially offset by income of \$0.5 million from the amortization of a \$1.5 million Joint Marketing Agreement commencing in November 2015, which fully amortized in the fourth quarter of 2018.

INCOME TAXES

The following table presents our provision for income taxes for the periods presented:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Provision for income taxes	\$ 9,173	\$ 9,020
Increase in provision over prior period	\$ 153	
Increase - percentage	2%	
Effective tax rate	37%	34%

We operate in various tax jurisdictions, and accordingly, our income is subject to varying rates of tax. Losses incurred in one jurisdiction cannot be used to offset income taxes payable in another jurisdiction. Our ability to use income tax loss carry forwards and future income tax deductions is dependent upon our operations in the tax jurisdictions in which such losses or deductions arise. Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement carrying values and tax base of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Fiscal 2019 includes tax on profits of \$24.6 million compared to \$26.2 million for Fiscal 2018. Our Fiscal 2019 income tax expense benefited from the inclusion of a \$0.6 million tax recovery related to the adoption of ASU 2016-09, which requires all excess tax benefits and tax deficiencies related to employee share-based payments to be recognized through income tax expense on a prospective basis. The Fiscal 2018 tax recovery related to excess tax benefits related to employee share-based compensation was \$0.7 million.

On December 22, 2017, the Act was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S international taxation from a worldwide tax system to a territorial system, bonus depreciation that will allow for full expensing of qualified property, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings.

In Fiscal 2019, the Company was able to utilize the bonus depreciation with respect to its continued investment in the Ting Internet business. The impact of this, together with the reduction in tax rate to 21%, make it unlikely we will ultimately be able to fully claim the Fiscal 2019 foreign taxes paid in future years. As such, we have taken a valuation allowance for foreign tax credits and R&D tax credits not utilized for 2019 income tax purposes and net operating losses not expected to be utilized in the future, the net negative effect of which is a \$5.3 million addition to income tax expense, as compared to \$2.8 million additional tax expense in Fiscal 2018.

A reconciliation of the federal statutory income tax rate to our effective tax rate is set forth in "Note 9 – Income Taxes" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

ADJUSTED EBITDA

We believe that the provision of this supplemental non-GAAP measure allows investors to evaluate the operational and financial performance of our core business using similar evaluation measures to those used by management. We use adjusted EBITDA to measure our performance and prepare our budgets. Since adjusted EBITDA is a non-GAAP financial performance measure, our calculation of adjusted EBITDA may not be comparable to other similarly titled measures of other companies; and should not be considered in isolation, as a substitute for, or superior to measures of financial performance prepared in accordance with GAAP. Because adjusted EBITDA is calculated before recurring cash charges, including interest expense and taxes, and is not adjusted for capital expenditures or other recurring cash requirements of the business, it should not be considered as a liquidity measure. See the Consolidated Statements of Cash Flows included in the attached financial statements. Non-GAAP financial measures do not reflect a comprehensive system of accounting and may differ from non-GAAP financial measures with the same or similar captions that are used by other companies and/or analysts and may differ from period to period. We endeavor to compensate for these limitations by providing the relevant disclosure of the items excluded in the calculation of adjusted EBITDA to net income based on U.S. GAAP, which should be considered when evaluating the Company's results. Tucows strongly encourages investors to review its financial information in its entirety and not to rely on a single financial measure.

Our adjusted EBITDA definition excludes depreciation, amortization of intangible assets, income tax provision, interest expense (net), stock-based compensation, asset impairment, gains and losses from unrealized foreign currency transactions and infrequently occurring items. Gains and losses from unrealized foreign currency transactions removes the unrealized effect of the change in the mark-to-market values on outstanding unhedged foreign currency contracts, as well as the unrealized effect from the translation of monetary accounts denominated in non-U.S. dollars to U.S. dollars.

The following table reconciles net income to adjusted EBITDA:

Reconciliation of Net income to Adjusted EBITDA (In Thousands of US Dollars) (unaudited)	Twelve months ended December 31,		
	2019 (unaudited)	2018 (unaudited)	2017 (unaudited)
Net income for the period	\$ 15,398	\$ 17,135	\$ 22,327
Depreciation of property and equipment	8,961	5,722	3,728
Loss on disposition of property and equipment	73	-	-
Amortization of intangible assets	10,333	9,243	8,400
Impairment of intangible assets	-	-	111
Interest expense, net	4,769	3,687	3,567
Provision for income taxes	9,173	9,020	1,748
Stock-based compensation	2,876	2,574	1,457
Unrealized loss (gain) on change in fair value of forward contracts	(313)	207	17
Unrealized loss (gain) on foreign exchange revaluation of foreign denominated monetary assets and liabilities	(581)	940	(805)
Acquisition and other costs ¹	1,216	1,526	806
Adjusted EBITDA	\$ 51,905	\$ 50,054	\$ 41,356

¹Acquisition and other costs represents transaction-related expenses, transitional expenses, such as duplicative post-acquisition expenses, primarily related to our acquisition of eNom in January 2017 and Ascio in March 2019. Expenses include severance or transitional costs associated with department, operational or overall company restructuring efforts, including geographic alignments.

Adjusted EBITDA for the year ended December 31, 2019 increased by \$1.8 million, or 4% to \$51.9 million when compared to the year ended December 31, 2018. The increase in adjusted EBITDA from period-to-period was primarily driven by an increase in contribution from eNom, which is the result of increased operating cost synergies realized during Fiscal 2019, as well as an increased contribution from Ting Fiber. The overall increase in EBITDA was partially offset by a lower contribution from Ting Mobile, related to a decreasing subscriber base and minimum carrier fees, as well as a decreased contribution from domain Portfolio sales.

OTHER COMPREHENSIVE INCOME (LOSS)

To mitigate the impact of the change in fair value of our foreign exchange contracts on our financial results, in October 2012 we begun applying hedge accounting for the majority of the contracts we need to meet our Canadian dollar requirements on a prospective basis. The impact of the fair value adjustment on outstanding hedged contracts for Fiscal 2019 was a net gain in other comprehensive income of \$1.3 million compared to a net loss of \$0.8 million for Fiscal 2018.

The following table presents other comprehensive income for the periods presented:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2019	2018
Other comprehensive income (loss)	\$ 1,283	\$ (810)
Increase over prior period	\$ 2,093	
Increase - percentage	(258)%	
Percentage of net revenues	0%	(0)%

The impact of the fair value adjustments on outstanding hedged contracts during 2019 was a gain in OCI of \$1.1 million as compared to a loss of \$1.0 million during 2018.

The net amount reclassified to earnings during 2019 was a loss of \$0.2 million compared to a loss of \$0.2 million during 2018.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2018 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2017

The Company has reclassified certain prior year income statement amounts to conform the current year presentation. As a result of these reclassifications, there were no changes to previously reported net income, comprehensive income and income from operations.

The Company has initially applied ASC 2014-09 (Topic 606) on January 1, 2018 using the modified retrospective method. Under this method, the comparative information is not restated.

NET REVENUES

The following table presents our net revenues, by revenue source:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Network Access Services:		
Mobile Services	\$ 89,340	\$ 83,885
Other Services	7,984	5,567
Total Network Access Services	<u>97,324</u>	<u>89,452</u>
Domain Services:		
Wholesale		
Domain Services	189,434	183,731
Value Added Services	17,756	17,832
Total Wholesale	<u>207,190</u>	<u>201,563</u>
Retail		
Portfolio	34,524	31,649
Total Domain Services	<u>6,975</u>	<u>6,757</u>
	<u>248,689</u>	<u>239,969</u>
	<u>\$ 346,013</u>	<u>\$ 329,421</u>
Increase over prior period	\$ 16,592	
Increase - percentage		5%

The following table presents our revenues, by revenue source, as a percentage of total revenues:

	Year ended December 31,	
	2018	2017
Network Access Services:		
Mobile Services	26%	25%
Other Services	2%	2%
Total Network Access Services	<u>28%</u>	<u>27%</u>
Domain Services:		
Wholesale		
Domain Services	55%	56%
Value Added Services	5%	5%
Total Wholesale	<u>60%</u>	<u>61%</u>
Retail		
Portfolio	10%	10%
Total Domain Services	<u>2%</u>	<u>2%</u>
	<u>72%</u>	<u>73%</u>
	<u>100%</u>	<u>100%</u>

Total net revenues for Fiscal 2018 increased by \$16.6 million, or 5%, to \$346.0 million from \$329.4 million for the fiscal year ended December 31, 2017 ("Fiscal 2017"). The overall increase in revenue was primarily driven by full year impact of the 2017 acquisitions of Enom and Roam Mobility, the expanding footprint of Ting Internet, organic growth in both Ting Mobile services and wholesale domain services and the \$16.9 million acceleration of revenue related to the Namecheap bulk transfer of 2.89 million names throughout 2018, a portion of which would have otherwise been recognized after Fiscal 2018. Revenue also increased as compared to fiscal 2017 because eNom revenues 2017 were negatively impacted by amortizing into revenue, deferred revenue that was recorded at fair value at the acquisition date which was approximately 10% lower than the historical cost basis of eNom. The increase in revenue was partially offset by a subsequent decline in ongoing domain registrations related to the departure of Namecheap and lower mobile device sales due to reduced demand for higher priced devices. Deferred revenue from domain name registrations and other Internet services at December 31, 2018 decreased to \$143.7 million from \$160.6 million at December 31, 2017, primarily due to the bulk transfers discussed above.

No customer accounted for more than 10% of revenue during Fiscal 2018 or Fiscal 2017, and no customers accounted for more than 10% of accounts receivable as of December 31, 2018 and 2017. Management judgment is required at the time of recording of revenue to assess whether the collection of the resulting receivables is reasonably assured. On an ongoing basis, we assess the ability of our customers to make required payments. Based on this assessment, we expect the carrying amount of our outstanding receivables, net of allowance for doubtful accounts, to be fully collected.

Network Access Services

Mobile and Other Services

Net revenues from mobile phone equipment and services for Fiscal 2018, as compared to Fiscal 2017, increased by \$5.5 million or 7% to \$89.3 million. This increase primarily reflects the growth in service revenue, which grew by \$6.9 million to \$80.4 million as compared to Fiscal 2017. Revenues from the sale of mobile hardware and related accessories decreased by \$1.4 million to \$8.9 million in Fiscal 2018. The decrease in device revenue was primarily driven by reduced demand for higher-priced devices compared to the Fiscal 2017.

High speed Internet access, and network consulting services generated \$8.0 million in revenue during Fiscal 2018, up \$2.4 million from Fiscal 2017. Growth in Ting Internet revenues was as a result of the increased Ting Internet footprint in Charlottesville, VA, Westminster, MD and Holly Springs, NC. The Company began offering Ting Internet in Sandpoint, ID in the second quarter of 2018 and in Centennial, CO in the third quarter of 2018.

As of December 31, 2018, Ting Mobile had 163,000 mobile subscribers and 296,000 mobile devices under its management compared to 166,000 subscribers and 282,000 devices under its management as of December 31, 2017.

Domain Services

Wholesale

During Fiscal 2018, wholesale domain services revenue increased by \$5.7 million to \$189.4 million. The increase was driven by the accelerated recognition of \$16.9 million in domain revenue associated with the Namecheap bulk transfer of 2.8 million names during 2018, of which approximately \$5.0 million would have been otherwise recognized after Fiscal 2018. The increase in wholesale domain revenue was also driven by the organic growth and price increases associated with the Company's existing customer base of \$4.9 million. Revenue also increased compared to Fiscal 2017 because eNom revenues and gross margins in 2017 were negatively impacted by amortizing into revenue, deferred revenue that was recorded at fair value at the acquisition date which was approximately 10% lower than the historical cost basis of eNom. The increase in revenue was partially offset by a decrease in revenue associated with a decline in the number of overall transactions from new, renewed and transferred-in domain name registrations, which has decreased to 17.4 million from 19.4 million when compared to Fiscal 2017. The overall decrease in new, renewed and transferred-in domain name registrations was primarily driven by the migration of Namecheap, a low margin customer who moved their domain management and domain transaction processing to their own accreditation and in-house system. We anticipate that the number of new, renewed and transferred-in domain name registrations will continue to be impacted by decisions that large volume customers make with regard to acquiring their own accreditations, as well as the impact on the market, of the significant expansion in the number of new gTLDs added pursuant to the implementation of ICANN's new gTLD Program. While we anticipate that the number of new, renewed and transferred-in domain name registrations will continue to incrementally increase in the long term, the volatility of these factors could affect the growth of domain names that we manage.

Value-added services decreased by \$0.1 million to \$17.8 million when compared to Fiscal 2017. The decrease in revenue from Fiscal 2017 was primarily driven by decreased expiry stream revenue.

Retail

Net revenues from retail for Fiscal 2018, as compared to Fiscal 2017, increased by \$2.9 million to \$34.5 million. This increase was primarily due to the full year impact of the acquisition of eNom and to a lesser extent growth in our incumbent retail operations, Hover.

Portfolio

Net revenues from portfolio for Fiscal 2018, as compared to Fiscal 2017, increased by \$0.2 million to \$7.0 million. The increase is primarily due to a large bulk sale of names in the fourth quarter of 2018.

COST OF REVENUES

The following table presents our cost of revenues, by revenue source:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Network Access Services:		
Mobile Services	\$ 46,061	\$ 45,335
Other Services	3,994	3,305
Total Network Access Services	50,055	48,640
Domain Services:		
Wholesale		
Domain Services	160,216	161,013
Value Added Services	3,154	2,450
Total Wholesale	163,370	163,463
Retail		
Portfolio	17,725	17,346
	953	1,151
Total Domain Services	182,048	181,960
Network Expenses:		
Network, other costs	9,846	9,324
Network, depreciation and amortization costs	7,294	4,976
	17,140	14,300
	\$ 249,243	\$ 244,900
Increase over prior period	\$ 4,343	
Increase - percentage		2%

The following table presents our cost of revenues, as a percentage of total cost of revenues for the periods presented:

	Year ended December 31,	
	2018	2017
Network Access Services:		
Mobile Services	18%	19%
Other Services	2%	1%
Total Network Access Services	20%	20%
Domain Services:		
Wholesale		
Domain Services	65%	66%
Value Added Services	1%	1%
Total Wholesale	66%	67%
Retail		
Portfolio	7%	7%
	0%	0%
Total Domain Services	73%	74%
Network Expenses:		
Network, other costs	4%	4%
Network, depreciation and amortization costs	3%	2%
	7%	6%
	100%	100%

Total cost of revenues for Fiscal 2018 increased by \$4.3 million, or 2%, to \$249.2 million from \$244.9 million in Fiscal 2017. This increase primarily resulted from the increase in network and people costs associated with the continuing expansion of the Ting Fiber footprint and to a lesser extent, restructuring charges associated with terminating an unfavourable Roam Mobility service supply contract. Prepaid domain registration and other Internet services fees as of December 31, 2018 decreased by \$20.5 million, or 16%, to \$106.5 million from \$127.0 million at December 31, 2017.

Network Access Services

Mobile and Other Services

Cost of revenues from mobile phone equipment and services for Fiscal 2018, as compared to Fiscal 2017, increased by \$0.7 million or 2% to \$46.1 million. This increase primarily reflects the impact of mobile service costs of revenue which grew by \$2.3 million to \$36.5 million as compared to Fiscal 2017. The increase in mobile service costs of revenue include restructuring charges associated with terminating an unfavourable Roam Mobility service supply contract for \$0.4 million. Mobile hardware, shipping and related accessories costs decreased \$1.6 million to \$9.6 million. The decrease in device cost of revenue was primarily driven by reduced demand for higher-priced devices compared to the Fiscal 2017.

In addition, in Fiscal 2018, we incurred costs of \$4.0 million in provisioning high speed Internet access and network consulting services as compared to \$3.3 million during Fiscal 2017. The increase in costs was primarily due to the expansion of the Ting Fiber foot print and increasing subscriber base.

Domain Services

Wholesale

Domain Service

Costs for wholesale domain services for Fiscal 2018 decreased by \$0.8 million to \$160.2 million, when compared to Fiscal 2017. The decrease was driven by a \$8.9 million decrease due to the decline in overall transactions from new, renewed and transferred-in domain name registrations to 17.4 million from 19.4 million when compared to Fiscal 2017. The overall decrease in new, renewed and transferred-in domain name registrations was primarily driven by the migration of Namecheap, a low margin customer who moved their domain management and domain transaction processing to their own accreditation and in-house system. The decrease was partially offset by the accelerated recognition of \$16.7 million in cost of revenue associated with the Namecheap bulk transfer of 2.8 million names during 2018, of which approximately \$4.9 million would have been otherwise recognized after Fiscal 2018. The decrease was also offset by organic growth in existing customers \$3.2 million.

Value-Added Services

Costs for wholesale value-added services for Fiscal 2018 increased by \$0.7 million to \$3.2 million, when compared to Fiscal 2017. The increase in cost of revenue is primarily related to organic growth in certification and email sales during Fiscal 2018.

Retail

Costs for retail for Fiscal 2018 increased by \$0.4 million, to \$17.7 million, when compared to Fiscal 2017. This increase was primarily due to the full year impact of the acquisition of eNom and to a lesser extent growth in our incumbent retail operations, Hover.

Portfolio

Costs for portfolio decreased by \$0.2 million for Fiscal 2018, to \$1.0 million when compared to Fiscal 2017, the decrease in cost is primarily driven by a lower cost per name sold as compared to Fiscal 2017.

Network Expenses

Network costs for Fiscal 2018 increased by \$2.8 million to \$17.1 million when compared to Fiscal 2017, which is primarily driven by the increase in network costs and depreciation of the fiber assets associated with the continuing expansion of the Ting Fiber footprint.

SALES AND MARKETING

Sales and marketing expenses consist primarily of personnel costs. These costs include commissions and related expenses of our sales, product management, public relations, call center, support and marketing personnel. Other sales and marketing expenses include customer acquisition costs, advertising and other promotional costs.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Sales and marketing	\$ 33,063	\$ 29,423
Increase over prior period	\$ 3,640	
Increase - percentage	12%	
Percentage of net revenues	10%	9%

Sales and marketing expenses for Fiscal 2018 increased by \$3.6 million, or 12%, to \$33.1 million as compared to Fiscal 2017. This increase primarily related to a \$3.3 million increase in workforce, travel, contract services and stock-based compensation, which was driven by the growth in network access initiatives. In addition, marketing and other expenses increased \$0.3 million largely to support and acquire Ting Mobile and fixed Internet access subscribers.

TECHNICAL OPERATIONS AND DEVELOPMENT

Technical operations and development expenses consist primarily of personnel costs and related expenses required to support the development of new or enhanced service offerings and the maintenance and upgrading of existing infrastructure. This includes expenses incurred in the research, design and development of technology that we use to register domain names, network access services, email, retail, domain portfolio and other Internet services, as well as to distribute our digital content services. Editorial costs relating to the rating and review of the software content libraries are included in the costs of product development. All technical operations and development costs are expensed as incurred.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Technical operations and development	\$ 8,748	\$ 7,258
Increase over prior period	\$ 1,490	
Increase - percentage	21%	
Percentage of net revenues	3%	2%

Technical operations and development expenses for Fiscal 2018 increased by \$1.5 million, or 21%, to \$8.7 million. The increase in costs relate primarily to the full year impact of the eNom acquisition, increased salaries and benefits, contract services and stock-based compensation driven by an expanding workforce and wage inflation.

GENERAL AND ADMINISTRATIVE

General and administrative expenses consist primarily of compensation and related costs for managerial and administrative personnel, fees for professional services, public listing expenses, rent, foreign exchange and other general corporate expenses.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
General and administrative	\$ 17,710	\$ 13,594
Increase over prior period	\$ 4,116	
Increase - percentage	30%	
Percentage of net revenues	5%	4%

General and administrative expenses for Fiscal 2018 increased by \$4.1 million, or 30%, to \$17.7 million as compared to Fiscal 2017. The increase was primarily the result of an increase in workforce, contract services and stock-based compensation related costs of \$3.8 million due to expanding workforce, unfavourable foreign exchange impacts and wage inflation. The increase was also related to an increase in credit card processing fees and other administrative costs of \$0.3 million.

DEPRECIATION OF PROPERTY AND EQUIPMENT

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Depreciation of property and equipment	\$ 424	\$ 585
Decrease over prior period	\$ (161)	
Decrease - percentage	(28)%	
Percentage of net revenues	0%	0%

Depreciation costs for Fiscal 2018 decreased to \$0.4 million when compared to \$0.6 million for Fiscal 2017. The decrease is driven by decreased purchases of equipment in 2018, compared to 2017 when the Company's purchased equipment increased due to the acquisition of eNom.

AMORTIZATION OF INTANGIBLE ASSETS

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Amortization of intangible assets	\$ 7,247	\$ 6,566
Increase over prior period	\$ 681	
Increase - percentage	10%	
Percentage of net revenues	2%	2%

Amortization of intangible assets increased \$0.7 million for Fiscal 2018, to \$7.2 million. The increase in amortization is primarily related to customer acquisitions totalling \$0.6 million throughout 2018 and the full year impact of acquisitions during 2017.

Network rights, brand and customer relationships acquired in connection with the acquisitions the BRI Group in February 2015, the international reseller channel of Melbourne IT in April 2016, eNom in January 2017, and Roam Mobility in September of 2017 and immaterial acquisitions in 2018 are amortized on a straight-line basis over seven years.

IMPAIRMENT OF INDEFINITE LIFE INTANGIBLE ASSETS

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Impairment of indefinite life intangible assets	\$ -	\$ 111
Decrease over prior period	\$ (111)	
Decrease - percentage	(100)%	
Percentage of net revenues	-%	0%

As part of our normal renewal process, we assess whether certain domain names acquired in the June 2006 acquisition of Mailbank.com Inc. should not be renewed and be allowed to expire. During Fiscal 2018, we renewed all of the acquired domain names. In Fiscal 2017, we assessed that that acquired domain names with a book value of less than \$0.1 million should be written off and accordingly, we recorded an impairment of indefinite life intangible assets.

LOSS (GAIN) ON CURRENCY FORWARD CONTRACTS

Although our functional currency is the U.S. dollar, a major portion of our fixed expenses are incurred in Canadian dollars. Our goal with regard to foreign currency exposure is, to the extent possible, to achieve operational cost certainty, manage financial exposure to certain foreign exchange fluctuations and to neutralize some of the impact of foreign currency exchange movements. Accordingly, we enter into foreign exchange contracts to mitigate the exchange rate risk on portions of our Canadian dollar exposure.

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Loss (gain) on currency forward contracts	\$ 254	\$ (98)
Increase over prior period	\$ 352	
Increase - percentage	359%	
Percentage of net revenues	0%	0%

We have entered into certain forward exchange contracts that do not comply with the requirements of hedge accounting to meet a portion of our future Canadian dollar requirements through December 2019. During Fiscal 2018, the Company recorded a net loss of \$0.2 million on the change in fair value of outstanding contracts as well as less than \$0.1 million realized loss on matured contracts. In Fiscal 2017 the Company recorded a net loss of less than \$0.1 million for the change in fair value of outstanding contracts and a gain \$0.1 million of settlements of contracts not designated as hedges.

At December 31, 2018, our balance sheet reflects a derivative instrument liability of \$1.3 million as a result of our existing foreign exchange contracts.

OTHER INCOME AND (EXPENSES)

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,	
	2018	2017
Other income (expense), net	\$ (3,169)	\$ (3,007)
Increase over prior period	\$ (162)	
Increase - percentage	5%	
Percentage of net revenues	1%	1%

Other expenses increased by \$0.2 million when compared to Fiscal 2017 primarily due to interest incurred on our credit facility with the majority of the borrowings on the credit facility to support the build-out of the Ting Fiber network. Within Other expense we also recognized \$0.5 million of a positive financial contribution from a Joint Marketing agreement that we entered into in February 2015 where we waived our rights under a proposed joint venture to operate the online registry. The recognition of this gain was consistent with the amount recognized in Fiscal 2017. The deferred gain has been fully recognized as of December 31, 2018.

INCOME TAXES

The following table presents our provision for income taxes for the periods presented:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,			
	2018		2017	
Provision for income taxes	\$	9,020	\$	1,748
Increase in provision over prior period	\$	7,272		
Increase - percentage		416%		
Effective tax rate		37%		7%

We operate in various tax jurisdictions, and accordingly, our income is subject to varying rates of tax. Losses incurred in one jurisdiction cannot be used to offset income taxes payable in another jurisdiction. Our ability to use income tax loss carry forwards and future income tax deductions is dependent upon our operations in the tax jurisdictions in which such losses or deductions arise. Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement carrying values and tax base of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Fiscal 2018 includes tax on profits of \$26.2 million compared to \$24.1 million for Fiscal 2017. Our Fiscal 2017 income tax expense benefited from a net \$5.8 million positive implementation impact from the Tax cuts and Jobs Act of 2017, more fully described below as well as the inclusion of a \$2.8 million tax recovery related to the adoption of ASU 2016-09 in Fiscal 2017, which requires all excess tax benefits and tax deficiencies related to employee share-based payments to be recognized through income tax expense on a prospective basis. The Fiscal 2018 tax recovery related to excess tax benefits related to employee share-based was \$0.7 million.

On December 22, 2017, the Act was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S international taxation from a worldwide tax system to a territorial system, bonus depreciation that will allow for full expensing of qualified property, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings.

In Fiscal 2018, the Company was able to utilize the bonus depreciation with respect to its continued investment in the Ting Internet business. The impact of this, together with the reduction in tax rate to 21%, make it unlikely we will ultimately be able to fully claim the Fiscal 2018 foreign taxes paid in future years. In addition, the Company generated net operating losses of \$0.2 million which it does not expect to be able to utilize in the future. As such, we have taken a valuation allowance for foreign tax credits not utilized for 2018 income tax purposes and net operating losses not expected to be utilized in the future, the net negative effect of which is a \$2.8 million addition to income tax expense.

In Fiscal 2017, we reflected a net \$5.8 million non-cash tax benefit through income from continuing operations for the re-measurement impact related to the changes in tax laws included in the Act. The primary driver of this re-measurement was the result of the reduction in the corporate tax rate from 35% to 21% which resulted in our recognizing, based on the rates at which they are expected to reverse in the future, a \$10.0 million non-cash tax benefit through income from continuing operations for the re-measurement of our deferred tax assets and liabilities. This amount was partially offset by our recording a valuation allowance of \$1.3 million related to prior year Foreign Tax Credits that we have determined are no longer more likely than not to be used as the tax rate in the jurisdiction where these Foreign Tax Credits is generated is higher than the 21% corporate tax rate. In addition, the impact of the prepaid registry fee deduction, more fully described below, together with the reduction in the tax rate to 21% made it unlikely we would be able to claim the Fiscal 2017 foreign taxes paid in future years and as such opted to utilize the foreign taxes paid as a deduction for 2017 income tax purposes, the net negative effect of which was a \$2.9 million addition to income tax expense.

We had approximately \$nil of total gross unrecognized tax benefit as of December 31, 2018 compared to \$15,000 as of December 31, 2017.

A reconciliation of the federal statutory income tax rate to our effective tax rate is set forth in “Note 9 – Income Taxes” of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

OTHER COMPREHENSIVE INCOME (LOSS)

To mitigate the impact of the change in fair value of our foreign exchange contracts on our financial results, in October 2012 we begun applying hedge accounting for the majority of the contracts we need to meet our Canadian dollar requirements on a prospective basis. The impact of the fair value adjustment on outstanding hedged contracts for Fiscal 2018 was a net loss in other comprehensive income of \$0.8 million compared to a net loss of \$0.1 million for Fiscal 2017.

The following table presents other comprehensive income for the periods presented:

(Dollar amounts in thousands of U.S. dollars)

	Year ended December 31,			
	2018		2017	
Other comprehensive income (loss)	\$	(810)	\$	(100)
Decrease over prior period	\$	(710)		
Decrease - percentage		710%		
Percentage of net revenues		0%		0%

The impact of the fair value adjustments on outstanding hedged contracts during 2018 was a loss in OCI of \$1.0 million as compared to a gain of \$0.5 million during 2017. The decrease in OCI is associated with the fact that at December 31, 2018, the Company had \$36.5 million outstanding hedged forward contracts, as compared to Fiscal 2017 the Company had nil outstanding hedged forward contracts.

The net amount reclassified to earnings during 2018 was a gain of \$0.2 million compared to a loss of \$0.6 million during 2017.

Liquidity and capital resources

As of December 31, 2019, our cash and cash equivalents balance increased \$7.8 million when compared to December 31, 2018. Our principal uses of cash were \$28.5 million for the Acquisition of Ascio Technologies, Inc. (“Ascio”), \$8.1 million in loan repayments, \$1.1 million of other costs, including tax payment associated with stock option exercises, \$5.0 million in stock repurchases, continued investment in property and equipment of \$44.1 million and \$3.6 million acquisition of customer relationships. These uses of cash were offset by proceeds from the exercise of stock options of \$0.4 million, advances of \$57.4 million from our 2019 Amended Credit Facility (defined below) to fund Fiber to the Home program (“FTTH”) and cash provided by operating activities of \$40.4 million. On January 1, 2020, the Company paid cash of \$9.0 million related to the acquisition of Cedar Holdings Group. See “Note 20 - Subsequent Events” for more detail.

Amended 2019 Credit Facility

On June 14, 2019, the Company and its wholly-owned subsidiaries, Tucows.com Co., Ting Fiber, Inc., Ting Inc., Tucows (Delaware) Inc. and Tucows (Emerald), LLC, entered into an Amended and Restated Senior Secured Credit Agreement with Royal Bank of Canada (“RBC”), as administrative agent, and lenders party thereto (collectively with RBC, the “Lenders”) under which the Company has access to an aggregate of up to \$240 million in funds, inclusive of a \$60 million accordion facility.

On November 27, 2019, the Company entered into Amending Agreement No. 1 to the Amended and Restated Senior Secured Credit Agreement (collectively with the Amended and Restated Senior Secured Credit Agreement, the “Amended 2019 Credit Facility”) to amend certain defined terms in connection with the Cedar acquisition.

In connection with the Amended 2019 Credit Facility, the Company incurred an additional \$0.3 million of fees paid to lenders and \$0.2 million of legal fees related to the debt issuance. Of these fees, \$0.4 million are debt issuance costs, which have been reflected as a reduction to the carrying amount of the loan payable and will be amortized over the term of the credit facility agreement and \$0.1 million have been recorded in General and administrative expenses.

The obligations of the Company under the Amended 2019 Credit Agreement are secured by a first priority lien on substantially all of the personal property and assets of the Company and has a four-year term.

2017 Amended Credit Facility

Prior to entering into the Amended 2019 Credit Facility, the Company had entered into a secured Credit Agreement (as amended, the “2017 Amended Credit Facility”) on January 20, 2017 with Bank of Montreal (“BMO”), RBC and Bank of Nova Scotia (collectively, the “Previous Lenders”) under which the Company had access to an aggregate of up to \$140 million in funds.

On March 18, 2019, the Company entered into the Second Amendment to the 2017 Credit Facility to provide the Previous Lenders’ consent for the acquisition of Ascio, advance the acquisition funding and to reallocate borrowing limits between loan facilities. We incurred costs associated with the Second Amendment to the 2017 Credit Facility of \$0.2 million, which were recorded as debt issuance costs.

The obligations of the Company under the 2017 Amended Credit Facility were secured by a first priority lien on substantially all of the personal property and assets of the Company and had a four-year term.

Other Credit Facilities

Prior to the Company entering into the Amended 2019 Credit Facility and the 2017 Amended Credit Facility, the Company had credit agreements (collectively the “Prior Credit Facilities”) with BMO, which provided the Company with continued access to a treasury risk management facility and a credit card facility. All remaining credit facilities under the Prior Credit Facilities have been terminated.

The treasury risk management facility under the Prior Credit Facilities provides for a \$3.5 million settlement risk line to assist the Company with hedging Canadian dollar exposure through foreign exchange forward contracts and/or currency options. Under the terms of the Prior Credit Facilities, the Company may enter into such agreements at market rates with terms not to exceed 18 months. As of December 31, 2019, the Company held contracts in the amount of \$30.5 million to trade U.S. dollars in exchange for Canadian dollars.

Cash Flow from Operating Activities

Year ended December 31, 2019

Net cash inflows from operating activities were \$40.4 million, an increase of 9% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2019 was \$38.4 million, an increase of 8% when compared to the prior year. Net income included non-cash charges and recoveries of \$23.0 million such as depreciation, amortization, impairment of indefinite life intangible asset, excess tax benefits on stock-based compensation, stock-based compensation, the provision for unrealized losses on currency forward contracts and a recovery for deferred tax. This generation of cash from net income was further increased by a working capital change of \$2.0 million. We generated \$13.3 million from movements in inventory, prepaid registration costs, prepaid expenses and deposits, accrued liabilities and customer deposits. These positive contributions were offset by cash use of \$11.3 million to invest in accounts receivable, deferred revenue, income taxes recoverable, accounts payable, and accreditation fees.

Year ended December 31, 2018

Net cash inflows from operating activities were \$37.2 million, an increase of 17% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2018 was \$35.4 million, an increase of 18% when compared to the prior year. Net income included non-cash charges and recoveries of \$18.3 million such as depreciation, amortization, impairment of indefinite life intangible asset, excess tax benefits on stock-based compensation, stock-based compensation, the provision for unrealized losses on currency forward contracts and a recovery for deferred tax. This generation of cash from net income was further increased by our increasing working capital of \$1.8 million. We generated \$24.9 million from movements in accounts receivables, deferred registration costs, accounts payable and income taxes recoverable. These positive contributions were offset by cash use of \$23.1 million to invest in deferred revenue, accreditation fees, inventory, prepaid expenses and deposits, customer deposits and accrued liabilities.

Year ended December 31, 2017

Net cash inflows from operating activities were \$31.9 million, an increase of 42% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2017 was \$30.0 million, an increase of 43% when compared to the prior year. Net income included non-cash charges and recoveries of \$7.7 million such as depreciation, amortization, impairment of indefinite life intangible asset, excess tax benefits on stock-based compensation, stock-based compensation, the provision for unrealized losses on currency forward contracts and a recovery for deferred tax. This generation of cash from net income was further increased by our increasing working capital of \$1.9 million. We generated \$11.1 million from movements in accounts receivables, deferred revenue, deferred registration costs income taxes recoverable and customer deposits. These positive contributions were offset by cash use of \$9.2 million to invest in accounts payables, accreditation fees, inventory, prepaid expenses and deposits and accrued liabilities.

Cash Flow from Financing Activities

Year ended December 31, 2019

Net cash inflows from financing activities during Fiscal 2019 totaled \$43.5 million as compared to cash outflows of \$12.9 million during Fiscal 2018. Net cash inflows of \$57.4 million resulting from draws on the 2019 Amended Credit Facility to fund the FTTH capital expenditures, the acquisition of Ascio and general working capital requirements. These cash inflows were partially offset by outflows of \$8.1 million of principal repayments relating to our 2019 Credit Amended Credit Facility, \$5.0 million in stock repurchases, \$0.6 million of loan costs and \$0.2 million outflow from the net impact of exercise of stock options.

Year ended December 31, 2018

Net cash outflows from financing activities during Fiscal 2018 totaled \$12.9 million as compared to cash inflows of \$65.2 million during Fiscal 2017. Net cash inflows of \$7.0 million resulting from draws on the 2017 Amended Credit Facility to fund the FTTH capital expenditures and general working capital requirements. These cash inflows were partially offset by outflows of \$19.6 million of principal repayments relating to our 2017 Credit Amended Credit Facility, \$0.3 million outflow from the net impact of exercise of stock options.

Year ended December 31, 2017

Net cash inflows from financing activities during Fiscal 2017 totaled \$65.2 million as compared to cash outflows of \$0.7 million during Fiscal 2016. Net cash inflows of \$87.0 million resulting from draws on the 2017 Amended Credit Facility to fund the acquisition of eNom and to fund FTTH capital expenditures. These cash inflows were partially offset by outflows of \$20.0 million of principal repayments relating to our 2017 Credit Amended Credit Facility, \$1.2 million outflow from the net impact of exercise of stock options and \$0.6 million of debt issuance costs.

Cash Flow from Investing Activities

Year ended December 31, 2019

Investing activities during the Fiscal 2019 used net cash of \$76.1 million as compared to using \$29.7 million during Fiscal 2018.

Cash outflows of \$28.5 million related to the acquisition of Ascio Technologies, Inc., \$3.6 million related to the acquisition of intangible assets, of which \$3.5 million related to the acquisition of mobile subscribers of the FreedomPop and Unreal MVNO brands, and \$44.1 million of cash outflows was invested in property and equipment, primarily to support the continued expansion of our fiber footprint. The Company continues to invest in our existing Ting Towns of Charlottesville, VA, Holly Springs, NC and Westminster, MD as well ramping construction in Sandpoint, ID, Centennial, CO, and Fuquay Varina, NC, as we seek to extend both our current network and expand to new towns. We expect our capital expenditures on building and expanding our fiber network to continue to increase significantly during Fiscal 2019.

Year ended December 31, 2018

Investing activities during the Fiscal 2018 used net cash of \$29.7 million as compared to using \$94.1 million during Fiscal 2017.

In the second half of Fiscal 2018, the Company purchased customer relationships related to hosting and mobile services for \$0.6 million.

On February 14, 2018, the Company acquired the remaining 10% interest in Ting Virginia, LLC. for a consideration of \$1.2 million. The consideration was funded through cash flow from operations. See Note 3(a) of the Notes to the Consolidated Financial Statements included in this report.

In addition, the Company invested \$27.9 million in property and equipment, primarily to support the continued expansion of our fiber footprint. The Company continues to invest in our Ting towns of Charlottesville, VA, Holly Springs, NC and Westminster, MD. We expect our capital expenditures on building and expanding our fiber network to remain significant during Fiscal 2019, including construction of new networks in the greater Raleigh-Durham area.

Year ended December 31, 2017

Investing activities during the Fiscal 2017 used net cash of \$94.1 million as compared to using \$14.4 million during Fiscal 2016.

On January 20, 2017, the Company entered into a Stock Purchase Agreement (the "Purchase Agreement") with its indirect wholly owned subsidiary, Tucows (Emerald), LLC, Rightside Group, Ltd., and Rightside Operating Co., pursuant to which Tucows (Emerald), LLC purchased from Rightside Operating Co. all of the issued and outstanding capital stock of eNom, a domain name registrar business. The purchase price was \$76.2 million, net of cash of \$1.6 million and purchase price adjustments of \$5.7 million relating primarily to a working capital deficit. In 2017, the Company incurred acquisition related expenditures of \$0.3 million in connection with this acquisition. The purchase price and the majority of the related acquisition costs were financed through borrowings under Facility D of the 2017 Amended Credit Agreement. On June 13, 2017, the parties entered into an amendment to the Purchase Agreement, which, among other things, amended certain definitions contained in the Purchase Agreement.

On February 1, 2017, the Company acquired an additional 20% interest in Ting Virginia, LLC. for a consideration of \$2.0 million. The consideration was funded through cash flow from operations. For additional details, see "Note 3(a) – Acquisitions" to the Consolidated Financial Statements included in this report.

In the second half of Fiscal 2017, the Company purchased customer relationships related to shared hosting and domain services for \$0.3 million.

On September 19, 2017, the Company acquired the consumer related assets of Otono Networks Inc. for consideration of \$2.6 million and assumed working capital liabilities of \$1.4 million. The intangible assets acquired relate to customer relationships and are being amortized on a straight-line basis over a period of seven years.

In addition, the Company invested \$12.9 million in property and equipment, primarily to support the continued expansion of our fiber footprint. The Company continues to invest in our Ting towns of Charlottesville, VA, Holly Springs, NC and Westminster, MD. We expect our capital expenditures on building and expanding our fiber network to increase significantly during Fiscal 2018, including construction ramping in Sandpoint, ID and Centennial, CO, as we seek to extend both our current network and expand to new towns.

We may need additional funds or seek other financing arrangements to facilitate more rapid expansion, develop new or enhance existing products or services, respond to competitive pressures or acquire or invest in complementary businesses, technologies, services or products. We may also evaluate potential acquisitions of other businesses, products and technologies. We currently have no commitments or agreements regarding the acquisition of other businesses. If additional financing is required, we may need additional equity or debt financing and any additional financing may be dilutive to existing investors. We may not be able to raise funds on acceptable terms, or at all.

Off Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of December 31, 2019.

Contractual Obligations

For the purpose of the contractual obligations table below, contractual obligations for purchases of goods or services are defined as agreements that are enforceable and legally binding and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The expected timing of payment of the obligations discussed below is estimated based on information available to us as of December 31, 2019. Timing of payments and actual amounts paid may be different depending on the time of receipt of goods or services or changes to agreed-upon amounts for some obligations. The following table summarizes our contractual obligations at December 31, 2019 (Dollar amounts in thousands of US dollars):

<u>Contractual Obligations for the year ending December 31,</u>	<u>Contractual Lease Obligations ⁽¹⁾</u>	<u>Debt Obligations</u>	<u>Purchase Obligations ⁽²⁾</u>	<u>Total Obligations</u>
2020	\$ 2,248	\$ -	\$ 29,153	\$ 31,401
2021	1,824	-	12,638	14,462
2022	1,745	-	12,264	14,009
2023	1,708	114,400	13,584	129,692
2024	1,420	-	19,074	20,494
Thereafter	5,584	-	5,250	10,834
	<u>\$ 14,529</u>	<u>\$ 114,400</u>	<u>\$ 91,963</u>	<u>\$ 220,892</u>

⁽¹⁾ Contractual lease obligations include \$0.9 million in lease payments related to Fiber IRU contracts that have not yet commenced in Fiscal 2019.

⁽²⁾ Purchase obligations include all other legally binding service contracts for mobile telephone services and other operational agreements to be delivered during Fiscal 2020 and subsequent years. Note, Purchase Obligations do not include interest payments on the Company's credit facilities.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We develop products in Canada and sell these services in North America and Europe. Our sales are primarily made in U.S. dollars, while a major portion of expenses are incurred in Canadian dollars. Our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. Our interest income is sensitive to changes in the general level of Canadian and U.S. interest rates, particularly since the majority of our investments are in short-term instruments. Based on the nature of our short-term investments, we have concluded that there is no material interest rate risk exposure as of December 31, 2019. We are also subject to market risk exposure related to changes in interest rates under our 2019 Amended Credit Facility. We do not expect that any changes in interest rates will be material; however, fluctuations in interest rates are beyond our control. We will continue to monitor and assess the risks associated with interest expense exposure and may take additional actions in the future to mitigate these risks.

Although our functional currency is the U.S. dollar, a substantial portion of our fixed expenses are incurred in Canadian dollars. Our policy with respect to foreign currency exposure is to manage financial exposure to certain foreign exchange fluctuations with the objective of neutralizing some of the impact of foreign currency exchange movements. Exchange rates are, however, subject to significant and rapid fluctuations, and therefore we cannot predict the prospective impact of exchange rate fluctuations on our business, results of operations and financial condition. Accordingly, we have entered into foreign exchange forward contracts to mitigate the exchange rate risk on portions of our Canadian dollar exposure.