

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, 2018 and December 31, 2017 and for the years ended December 31, 2018, 2017 and 2016 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, 2018, 2017 and 2016, we reported revenue of \$346 million, \$329 million and \$190 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, 2018, Ting mobile managed mobile telephony services for approximately 163,000 subscribers and had approximately 296,000 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 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 brand is to offer affordable roaming service to international travellers.

Domain Services

Domain Services include wholesale and retail domain name registration services, value added services and portfolio services derived through our OpenSRS, eNom 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 and eNom, derives revenue from its Domain Service and from providing Value-added services. The OpenSRS and eNom Domain Services manage 23.3 million domain names under the Tucows and eNom ICANN registrar accreditations and for other registrars under their own accreditations, which has decreased by 4.4 million domain names since December 31, 2017. The reduction from prior year is primarily due to the bulk transfer of approximately 2.8 million domain names to Namecheap's credentials, which occurred in several bulk transfers throughout 2018. As a result of the bulk transfers of domain names to Namecheap the Company recognized, on an accelerated basis, \$16.9 million of revenue and \$16.7 million of cost of revenues sold related to previously deferred revenue and deferred prepaid registry fees. The remaining domain names to be transferred to Namecheap, as defined under a settlement agreement between the Company and Namecheap, are expected to be transferred to Namecheap in the first quarter of 2019.

In addition, one of the resellers for which the Company registered domain names using the reseller's accreditation, was acquired and the registrations were moved to the acquiring reseller, resulting in approximately 0.5 million domains being transferred in the first quarter of 2018. As the Company does not defer revenue associated with hosted registry services, there was no impact on deferred revenue as a result of the transfer.

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 37,000 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. We also generate advertising revenue from our portfolio.

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.

Network Access Services

	Year ended December 31, ⁽¹⁾		
	2018	2017	2016
	(in ‘000’s)		
Ting Mobile subscribers under management ⁽²⁾	163	166	147
Ting Mobile devices under management	296	282	245

- (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.
- (2) Subsequent to a review of our subscriber base in the first quarter of 2018, our comparative 2017 and 2016 accounts under management were reduced by approximately 6 and 4 respectively.

Domain Services

	Year ended December 31, ⁽¹⁾		
	2018	2017	2016
	(in ‘000’s)		
Total new, renewed and transferred-in domain name registrations provisioned	17,358	19,361	9,950
Domain names under management			
Registered using Registrar Accreditation belonging to the Tucows Group	18,537	22,300	11,356
Registered using Registrar Accreditations belonging to Resellers	4,772	5,400	3,547
Total domain names under management ⁽²⁾	23,309	27,700	14,903

- (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 2.8 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 year. 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.

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.

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 ratably 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. With the acquisition of eNom and its 24,000-reseller network, 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 primarily from Internet hosting services, advertising from 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

We derive revenue from our portfolio of domain names parking monetization, whereby the Company contracts with third-party Internet advertising publishers to direct web traffic from the Company's domain expiry stream domains and Internet portfolio domains to advertising websites. Compensation from Internet advertising publishers is calculated variably on a cost-per-action basis based on the number of advertising links that have been visited in a given month.

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. 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.

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” in the Notes to the Consolidated Financial Statements for the year ended December 31, 2018 (“Fiscal 2018”) 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 investments, 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, domain sale contracts, and other advertising revenue. 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 18 – Segment reporting 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 ratably 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.

Advertising revenue is derived through domain parking monetization, whereby the Company contracts with third-party Internet advertising publishers to direct web traffic from the Company's domain expiry stream domains and Internet portfolio domains to advertising websites. Compensation from Internet advertising publishers is calculated variably on a cost-per-action basis based on the number of advertising links that have been visited in a given month. Given that the variable consideration is calculated and paid on a monthly basis, no estimation of variable consideration is required.

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, 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. At December 31, 2017, we had \$90.1 million in goodwill related to our acquisitions and \$58.4 million in intangible assets comprised of indefinite life intangibles of \$12.8 million and finite life intangible assets of \$45.7 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-four percent of intangible assets relate to our Domain Services operating segment and 6% 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 and \$0.1 million in 2018 and 2017 respectively and less than \$0.1 million in 2016.

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 2018, 2017 or 2016.

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 2018, 2017 or 2016.

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, 2018, the valuation allowance of \$4.1 million was related to foreign tax credits and net operating losses that we are not expected to realize.

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 addition, 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 Fiscal 2018, 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. Based on the Company's examination of administrative practices and precedents by the IRS, 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. In addition, we opted to utilize our 2017 foreign taxes paid as a deduction rather than a credit, the net negative impact of which was \$2.9 million, as we have insufficient foreign sourced income 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, 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
<u>Network Access Services:</u>		
Mobile Services	\$ 89,340	\$ 83,885
Other Services	7,984	5,567
Total Network Access Services	97,324	89,452
<u>Domain Services:</u>		
Wholesale		
Domain Services	189,434	183,731
Value Added Services	17,756	17,832
Total Wholesale	207,190	201,563
Retail	34,524	31,649
Portfolio	6,975	6,757
Total Domain Services	248,689	239,969
	\$ 346,013	\$ 329,421
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	28%	27%
Domain Services:		
Wholesale		
Domain Services	55%	56%
Value Added Services	5%	5%
Total Wholesale	60%	61%
Retail		
Retail	10%	10%
Portfolio	2%	2%
Total Domain Services	72%	73%
	100%	100%

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 2.8 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. We expect continued expansions in our existing Ting towns as well as new builds in the Raleigh-Durham region and other communities to be announced to contribute revenue growth in 2019.

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

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. As the total names in our portfolio continue to grow, this cost will become a more significant component of our cost of revenues. 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,	
	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	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	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.

Excluding movements in exchange rates, we expect sales and marketing expenses for the fiscal year ending December 31, 2019 ("Fiscal 2019") 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,	
	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.

Excluding movements in exchange rates, we expect technical operations and development expenses for Fiscal 2019, in absolute dollars, to increase when compared to Fiscal 2018 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,	
	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.

Excluding movements in exchange rates, we expect general and administrative expenses for Fiscal 2019, in absolute dollars, to increase when compared to Fiscal 2018 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,	
	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. 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,	
	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	34%	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 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,		
	2018 (unaudited)	2017 (unaudited)	2016 (unaudited)
Net income for the period	\$ 17,135	\$ 22,327	\$ 16,067
Depreciation of property and equipment	5,722	3,728	1,824
Amortization of intangible assets	9,243	8,400	953
Impairment of intangible assets	-	111	43
Interest expense, net	3,687	3,567	450
Provision for income taxes	9,020	1,748	9,046
Stock-based compensation	2,574	1,457	799
Unrealized loss (gain) on change in fair value of forward contracts	207	17	(323)
Unrealized loss (gain) on foreign exchange revaluation of foreign denominated monetary assets and liabilities	943	(805)	829
Acquisition and other costs ¹	1,526	806	442
Adjusted EBITDA	<u>\$ 50,057</u>	<u>\$ 41,356</u>	<u>\$ 30,130</u>

¹ Acquisition and other costs represents transaction-related expenses, transitional expenses, such as duplicative post-acquisition expenses, related to our acquisition of eNom in January 2017. 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, 2018 increased by \$8.7 million, or 21% to \$50.1 million when compared to the year ended December 31, 2017 with the increase primarily driven by an increase in gross margin compared to 2017 which is related to the fact that eNom's deferred revenue was recorded at fair value at the acquisition date which was approximately 10% lower than the historical cost basis of eNom. Adjusted EBITDA also increased due to the full year impact of the acquisition of eNom and to a lesser extent growth in domain services and Ting Mobile. Adjusted EBITDA for the year ended December 31, 2017 increased by \$11.2 million, or 37% to \$41.3 million when compared to the year ended December 31, 2016 with the increase primarily driven by the acquisition of eNom and to a lesser extent growth in domain services and Ting Mobile.

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.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2017 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2016
NET REVENUES

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.

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

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

	Year ended December 31,	
	2017	2016
Network Access Services:		
Mobile Services	\$ 83,885	\$ 70,127
Other Services	5,567	4,179
Total Network Access Services	89,452	74,306
Domain Services:		
Wholesale		
Domain Services	183,731	89,010
Value Added Services	17,832	8,642
Total Wholesale	201,563	97,652
Retail	31,649	14,630
Portfolio	6,757	3,231
Total Domain Services	239,969	115,513
	\$ 329,421	\$ 189,819
Increase over prior period	\$ 139,602	
Increase - percentage	74%	

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

	Year ended December 31,	
	2017	2016
Network Access Services:		
Mobile Services	25%	37%
Other Services	2%	2%
Total Network Access Services	27%	39%
Domain Services:		
Wholesale		
Domain Services	56%	46%
Value Added Services	5%	5%
Total Wholesale	61%	51%
Retail	10%	8%
Portfolio	2%	2%
Total Domain Services	73%	61%
	100%	100%

Total net revenues for Fiscal 2017 increased by \$139.6 million, or 74%, to \$329.4 million from \$189.8 million for the fiscal year ended December 31, 2016 ("Fiscal 2016"). Deferred revenue from domain name registrations and other Internet services at December 31, 2017 increased to \$160.6 million from \$77.8 million at December 31, 2016.

No customer accounted for more than 10% of revenue during Fiscal 2017 or Fiscal 2016, and no customers accounted for more than 10% of accounts receivable as of December 31, 2017 and 2016. 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 Ting Mobile phone equipment and services for Fiscal 2017, as compared to Fiscal 2016, increased by \$13.8 million or 20% to \$83.9 million. This increase primarily reflects the impact the larger Ting subscriber base is having on Ting Mobile service revenue which grew by \$11.1 million to \$73.6 million as compared to Fiscal 2016 as well as the acquisition of the consumer related mobile roaming assets from Otono Networks Inc. ("Otono") in September 2017. Revenues from the sale of mobile hardware and related accessories increased slightly by \$2.7 million to \$10.3 million in Fiscal 2017. This increase was due to increased mix of higher priced devices attributed to the increased sales of new Apple mobile devices under the direct supply agreement signed in the second quarter of 2017.

High speed Internet access, and network consulting services generated \$5.6 million in revenue during Fiscal 2017, up \$1.4 million from Fiscal 2016. Growth in High speed Internet access revenues was as a result of the increased Ting Fiber Internet footprint in Holly Springs, NC and Westminster, MD in Fiscal 2017. We expect continued expansions in Westminster, MD, Holly Springs, NC and Charlottesville, VA as well as new builds in Sandpoint, ID and Centennial, CO to contribute to revenue growth in 2018.

As of December 31, 2017, Ting Mobile had 166,000 mobile subscribers and 282,000 mobile devices under its management compared to 147,000 subscribers and 245,000 devices under its management as of December 31, 2016.

Domain Services

Wholesale

During Fiscal 2017, domain services revenue increased by \$94.7 million to \$183.7 million and the number of transactions from all new, renewed and transferred-in domain name registrations that we processed increased to 19.4 million from 9.9 million when compared to Fiscal 2016. These increases were primarily due to the acquisition of eNom and to a lesser extent the acquisition of the international reseller channel of Melbourne IT on April 1, 2016. Our gross margins 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 from the acquisition was somewhat impacted by the continued and ongoing migration of a few large, low margin customers. These customers have been moving their domain management and domain transaction processing to their own accreditations and in-house systems. 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. Primarily for the same factors impacting domain transactions mentioned above, total domains that we manage under our own accreditation increased to 22.3 million as of December 31, 2017, when compared to 11.4 million at December 31, 2016. In January 2018, the Company transferred on a bulk basis 2.65 million names under management for Namecheap. Also, as of December 31, 2017, total domains that we manage on behalf of other accredited registrars who use our technical systems to process domain registrations with their own accreditation, increased to 5.4 million when compared to 3.5 million at the end of December 31, 2016, primarily as a result of the acquisition of eNom.

Value-added services increased by \$9.2 million to \$17.8 million when compared to Fiscal 2016. This increase was primarily due to the acquisition of eNom. Our gross margins 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 basis of eNom.

Retail

Net revenues from retail for Fiscal 2017, as compared to Fiscal 2016, increased by \$17.0 million to \$31.6 million. This increase was primarily due to the acquisition of eNom and to a lesser extent growth in our incumbent retail operations, Hover. Our gross margins 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 basis of eNom.

Portfolio

Net revenues from portfolio for Fiscal 2017, as compared to Fiscal 2016, increased by \$3.5 million to \$6.8 million. The increase is primarily due to a large bulk sale of names in the fourth quarter of 2017.

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,	
	2017	2016
Network Access Services:		
Mobile Services	\$ 45,335	\$ 35,915
Other Services	3,305	1,910
Total Network Access Services	48,640	37,825
Domain Services:		
Wholesale		
Domain Services	161,013	72,948
Value Added Services	2,450	2,032
Total Wholesale	163,463	74,980
Retail	17,346	6,766
Portfolio	1,151	616
Total Domain Services	181,960	82,362
Network Expenses:		
Network, other costs	9,324	5,210
Network, depreciation and amortization costs	4,976	1,368
	14,300	6,578
	\$ 244,900	\$ 126,765
Increase over prior period	\$ 118,135	
Increase - percentage	93%	

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

	Year ended December 31,	
	2017	2016
Network Access Services:		
Mobile Services	19%	28%
Other Services	1%	2%
Total Network Access Services	20%	30%
Domain Services:		
Wholesale		
Domain Services	66%	59%
Value Added Services	1%	2%
Total Wholesale	67%	61%
Retail	7%	5%
Portfolio	0%	0%
Total Domain Services	74%	66%
Network Expenses:		
Network, other costs	4%	3%
Network, depreciation and amortization costs	2%	1%
	6%	4%
	100%	100%

Total cost of revenues for Fiscal 2017 increased by \$118.1 million, or 93%, to \$244.9 million from \$126.8 million in Fiscal 2016. This increase primarily resulted from the acquisition of eNom on January 20, 2017, acquisition of the international reseller channel of Melbourne IT on April 1, 2016 and the impact Ting's larger subscriber base has on network access service costs. Prepaid domain registration and other Internet services fees as of December 31, 2017 increased by \$66.6 million, or 110%, to \$127 million from \$60.4 million at December 31, 2016.

Network Access Services

Mobile and Other Services

Cost of revenues from Ting Mobile phone equipment and services for Fiscal 2017, as compared to Fiscal 2016, increased by \$9.4 million or 26% to \$45.3 million. This increase primarily reflects the impact the larger subscriber base had on Ting Mobile service cost of revenue as well as the acquisition of the mobile roaming assets from Otono Networks in September 2017 which combined grew by \$5.7 million to \$34.1 million as compared to Fiscal 2016. Mobile hardware, shipping and related accessories costs increased \$3.7 million to \$11.2 million reflecting an increased mix of higher cost devices attributed to the increased sales of new Apple mobile devices under the direct supply agreement signed in the second quarter of 2017.

In addition, in Fiscal 2017, we incurred costs of \$3.3 million in provisioning high speed Internet access and network consulting services as compared to \$1.9 million during Fiscal 2016. The increase in costs was primarily due to the expansion of the Ting Fiber foot print and increasing subscriber base.

Domain Services

Wholesale

Costs for wholesale domain and value-added services for Fiscal 2017 increased by \$88.5 million to \$163.5 million, when compared to Fiscal 2016. These increases were due to the acquisition of eNom and to a lesser extent acquisition of the international reseller channel of Melbourne IT in 2016.

Retail

Costs for retail for Fiscal 2017 increased by \$10.6 million, to \$17.3 million, when compared to Fiscal 2016. These increases resulted primarily from the acquisition of eNom and to a lesser extent the increased cost of additional volume in Hover services.

Portfolio

Costs for portfolio increased by \$0.5 million for Fiscal 2017, to \$1.2 million when compared to Fiscal 2016, primarily as a result of a bulk sale of names in the fourth quarter 2017 acquired in the June 2006 acquisition of Mailbank.com Inc.

Network Expenses

Network costs for Fiscal 2017 increased by \$7.7 million to \$14.3 million when compared to Fiscal 2016. The increase is primarily due to the acquisition of eNom, including acquired developed platform technology.

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,	
	2017	2016
Sales and marketing	\$ 29,423	\$ 20,755
Increase over prior period	\$ 8,668	
Increase - percentage	42%	
Percentage of net revenues	9%	11%

Sales and marketing expenses for Fiscal 2017 increased by \$8.7 million, or 42%, to \$29.4 million as compared to Fiscal 2016. This increase primarily related to a \$6.6 million increase in workforce, travel and other workforce related costs driven by the growth in network access initiatives and the acquisition of eNom. In addition, marketing and other expenses increased \$2.1 million largely to support and acquire Ting Mobile and fixed Ting 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. All technical operations and development costs are expensed as incurred.

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

	Year ended December 31,	
	2017	2016
Technical operations and development	\$ 7,258	\$ 4,495
Increase over prior period	\$ 2,763	
Increase - percentage	61%	
Percentage of net revenues	2%	2%

Technical operations and development expenses for Fiscal 2017 increased by \$2.8 million, or 61%, to \$7.3 million due to mainly to the acquisition of eNom.

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,	
	2017	2016
General and administrative	\$ 13,594	\$ 11,405
Decrease over prior period	\$ 2,189	
Decrease - percentage	19%	
Percentage of net revenues	4%	6%

General and administrative expenses for Fiscal 2017 increased by \$2.2 million, or 19%, to \$13.6 million as compared to Fiscal 2016. This was primarily the result of professional fees increase of \$0.8 million related to the acquisition of eNom and the Namecheap litigation. Workforce related costs increased \$1.0 million due mainly to the acquisition of eNom. Credit card processing fees, facilities costs and other expenses increased \$1.2 million primarily to support growth of network access and also due to the acquisition of eNom. These increases were offset by a reduction expenses due to foreign exchange gains as the Company experienced a foreign exchange gain of \$0.7 million in Fiscal 2017 as compared to a \$0.1 million loss in Fiscal 2016.

DEPRECIATION OF PROPERTY AND EQUIPMENT

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

	Year ended December 31,	
	2017	2016
Depreciation of property and equipment	\$ 585	\$ 504
Decrease over prior period	\$ 82	
Decrease - percentage	16%	
Percentage of net revenues	0%	0%

Depreciation costs for Fiscal 2017 increased to \$0.6 million when compared to \$0.5 million for Fiscal 2016 driven primarily by the acquisition of eNom.

AMORTIZATION OF INTANGIBLE ASSETS

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

	Year ended December 31,	
	2017	2016
Amortization of intangible assets	\$ 6,566	\$ 905
Increase over prior period	\$ 5,661	
Increase - percentage	625%	
Percentage of net revenues	2%	0%

Amortization of intangible assets increased \$5.7 million for Fiscal 2017, to \$6.6 million. The increase in amortization reflects the impact of the acquisition of eNom. In the acquisition, the Company acquired intangible assets related to brand and customer relationships totaling \$40.4 million.

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, and eNom in January 2017 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,	
	2017	2016
Impairment of indefinite life intangible assets	\$ 111	\$ 43
Increase over prior period	\$ 69	
Increase - percentage	161%	
Percentage of net revenues	0%	0%

As part of our normal renewal process during Fiscal 2017 and Fiscal 2016, we assessed that certain domain names acquired in the June 2006 acquisition of Mailbank.com Inc. should not be renewed and were allowed to expire. Accordingly, these domain names, with a book value of \$0.1 million and less than \$0.1 million have been written off and recorded as impairment of indefinite life intangible assets for Fiscal 2017 and Fiscal 2016, respectively.

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,	
	2017	2016
Loss (gain) on currency forward contracts	\$ (98)	\$ (99)
Increase over prior period	\$ 1	
Increase - percentage	(1)%	
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 2017. The impact of the fair value adjustment on outstanding contracts for Fiscal 2017 was a net loss of less than \$0.1 million compared to net gain of \$0.3 million for Fiscal 2016. The impact of the fair value adjustment on outstanding contracts was decreased by a realized gain upon settlement of currency forward contracts of \$0.1 million for Fiscal 2017 compared to a realized loss of \$0.2 million for Fiscal 2016.

At December 31, 2017, we did not hold any forward contracts.

OTHER INCOME AND (EXPENSES)

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

	Year ended December 31,	
	2017	2016
Other income (expense), net	\$ (3,007)	\$ 66
Increase over prior period	\$ (3,073)	
Increase - percentage	(4,630)%	
Percentage of net revenues	(1)%	0%

Other income decreased by \$3.1 million when compared to Fiscal 2016 primarily due to interest incurred on our credit facility with the majority of the borrowings on the credit facility to support the acquisition of eNom. Within Other income 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 2016.

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,	
	2017	2016
Provision for income taxes	\$ 1,748	\$ 9,046
Decrease in provision over prior period	\$ (7,298)	
Decrease - percentage	(81)%	
Effective tax rate	7.3%	36.0%

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 2017 includes tax on profits of \$24.1 million compared to \$25.1 million for Fiscal 2016. Our Fiscal 2017 income tax expense benefited from a net \$5.8 million positive implementation impact from the Act, 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.

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, and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We have calculated our best estimate of the impact of the Act in our year end income tax provision in accordance with our understanding of the Act and guidance available as of the date of this filing and as a result have recorded \$5.8 million in reduced income tax expense in the fourth quarter of 2017, the period in which the legislation was enacted. The provisional 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 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 because the tax rate in the jurisdiction where these Foreign Tax Credits is generated is higher than the 21% corporate tax rate. In addition, in connection with the eNom acquisition, 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. The impact of this together with the reduction in tax rate to 21% make it unlikely we will 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 is a \$2.9 million addition to income tax expense. The provisional amount related to the one-time transition tax on the mandatory deemed repatriation of foreign earnings was less than \$0.1 million.

We had approximately \$15,000 of total gross unrecognized tax benefit as of December 31, 2017 compared to \$0.1 million as of December 31, 2016 which if recognized would favorably affect our income tax rate in future periods. The unrecognized tax benefit relates primarily to insignificant U.S. state taxes.

A reconciliation of the federal statutory income tax rate to our effective tax rate is set forth in “Note 9 – Income Taxes” of Notes to 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 began 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 2017 was a net loss in other comprehensive income of \$0.1 million compared to a net gain of \$1.2 million for Fiscal 2016.

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

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

	Year ended December 31,	
	2017	2016
Other comprehensive income (loss)	\$ (99)	\$ 1,209
Decrease over prior period	\$ (1,308)	
Decrease - percentage	(108)%	
Percentage of net revenues	(0)%	1%

Liquidity and capital resources

As of December 31, 2018, our cash and cash equivalents balance decreased \$5.4 million when compared to December 31, 2017. Our principal uses of cash were \$19.6 million in loan repayments, \$1.2 million for the remaining 10% interest in Ting Virginia, LLC, \$0.3 million of other costs including tax payment associated with stock option exercises net of proceeds, \$0.6 million of acquisitions of customer relationships and continued investment in property and equipment of \$27.9 million. These uses of cash were offset by proceeds from an advances of \$7.0 million from our 2017 Amended Credit Facility (defined below) to fund Fiber to the Home program (“FTTH”) and cash provided by operating activities of \$37.2 million.

2017 Amended Credit Facility

On January 20, 2017, the Company and certain of its subsidiaries entered into a First Amended and Restated Credit Agreement (the “2017 Amended Credit Agreement”) with Bank of Montreal (“BMO”), Royal Bank of Canada (“RBC”) and Bank of Nova Scotia (the “Lenders”) under which the Company increased its access to funds to an aggregate of \$140 million. The 2017 Amended Credit Agreement amends and restates the Company’s Credit Agreement, dated as of August 18, 2016, with BMO and RBC (the “2016 Credit Agreement”). The 2017 Amended Credit Agreement, among other things, reduced the existing Tucows non-revolving facility (such existing non-revolving facility, together with other existing facilities, the “Existing Facilities”) from \$40.0 million to \$35.5 million, and established a new non-revolving credit facility of \$85 million (the “New Facility”, and together with the Existing Facilities, the “2017 Amended Credit Facility”). The obligations of the Company under the 2017 Amended Credit Agreement are secured by a first priority lien on substantially all of the personal property and assets of the Company.

Borrowings under the 2017 Amended Credit Agreement accrue interest and standby fees at variable rates based on borrowing elections by the Company and the Company’s total funded debt to EBITDA as described below and set forth in more detail in the 2017 Amended Credit Agreement. The table below summarizes the details of the 2017 Amended Credit Facility.

Facility	Purpose	Repayment Terms	Amortization Terms
Facility A	General working capital and general corporate requirements	Monthly interest payments; final principal payment due upon maturity	n/a
Facility B	Share repurchases, acquisitions, and capital expenditures associated with FTTH program	Outstanding balances as of December 31 drawn during year payable on quarterly basis beginning in first quarter of following year for applicable period of amortization	Four to seven years depending on purpose of draw
Facility C	Share repurchases, acquisitions, and capital expenditures associated with FTTH program	Each draw payable beginning the first full quarter post-initial draw for applicable period of amortization	Four to seven years depending on purpose of draw
Facility D (1)	eNom acquisition	Each draw payable beginning the first full quarter post-initial draw for applicable period of amortization	Five years

(1) Contemporaneously with entering into the 2017 Amended Credit Agreement, the Company drew down \$84.5 million to fund the acquisition of eNom. The unused portion of the New Facility, approximately \$0.5 million was cancelled in accordance with the terms of the 2017 Amended Credit Agreement.

The 2017 Amended Credit Agreement includes an additional repayment mechanism that is triggered based on the Company’s total funded debt to EBITDA calculation at the end of each fiscal year. If total funded debt to EBITDA exceeds 2.25:1 at December 31 of each year during the term, the Company is obligated to make a repayment of 50% of excess cash flow, all as set forth in the 2017 Amended Credit Agreement.

The 2017 Amended Credit Agreement contains customary events of default and affirmative and negative covenants and restrictions, including certain financial maintenance covenants such as a maximum total funded debt to EBITDA ratio and a minimum fixed charge ratio. As of December 31, 2018, we were in compliance with all our covenants.

On June 6, 2017, the Company entered into the First Amendment to the 2017 Amended Credit Agreement (the “First Amendment”) with BMO and the Lenders. Among other things, the First Amendment (i) increases the amount available for borrowing under Facility C, a committed, non-revolving credit facility by \$502,500, which was the portion of Facility D which was not used by the Company to fund its acquisition of eNom and was cancelled in accordance with the Credit Agreement, (ii) allows the Company to maintain bank accounts with Commonwealth Bank of Australia, subject to certain restrictions, (iii) provides for an extension of time for the Company to transfer its bank accounts from Silicon Valley Bank, and (iv) amends certain definitions, including the definition of “EBITDA” to provide for an add-back in respect of certain liabilities.

On December 5, 2017, the Company entered into the Interim Amendment to the 2017 Amended Credit Agreement (the “Interim Amendment”) with BMO and the Lenders. The Interim Amendment provides that BMO and the Bank of Nova Scotia may establish corporate credit card facilities with the Company and amends the definition of “Obligations” to include an aggregate amount of up to \$5.0 million of the credit card facilities in the definition of Obligations.

On January 24, 2018, the Company entered into the Second Interim Amendment to the 2017 Amended Credit Agreement (the “Second Interim Amendment”) with BMO and the Lenders. The Second Interim Amendment provides that certain defined terms in Section 1.01 of the 2017 Amended Credit Agreement are added and updated to reflect the inclusion of liabilities to Sprint Mobile similar to the previous inclusion of T-Mobile liabilities. The Second Interim Amendment also permits Tucows to retain bank accounts with Silicon Valley Bank with the aggregate amount held in such accounts not to exceed \$3.0 million.

For more information on the 2017 Amended Credit Agreement, please see Note 8 -Loan Payable of the Notes to the Consolidated Financial Statements of the Company.

Other Credit Facilities

In addition to the 2017 Amended Credit Agreement, the Company is party to a Loan Agreement with BMO, as amended from time to time, most recently in June 2017 (the “2012 Amended Credit Agreement”), pursuant to which the Company currently maintains a treasury risk management facility and credit card facility.

The treasury risk management facility under the 2012 Amended Credit Agreement 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 2012 Amended Credit Agreement, the Company may enter into such agreements at market rates with terms not to exceed 18 months. As of December 31, 2018, the Company held contracts in the amount of \$40.5 million to trade U.S. dollars in exchange for Canadian dollars.

In the fourth quarter of 2017, the Company entered into a corporate credit card program with the Bank of Nova Scotia and the remaining Lenders. The program provides that BMO and the Bank of Nova Scotia may establish corporate credit card facilities with the Company in an amount of up to \$5 million.

The 2012 Amended Credit Agreement also provided the Company with access to two revolving demand loan facilities (the “2012 Demand Loan Facilities”), and an operating demand loan. In connection with entering into the 2016 Credit Agreement, the Company repaid its outstanding indebtedness of the 2012 Demand Loan Facilities. With the settlement of the outstanding indebtedness, the 2012 Demand Loan Facilities and the operating demand loan were simultaneously terminated and the outstanding balances were fully repaid through advances made under the 2016 Credit Agreement.

Cash Flow from Operating Activities

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.

Year ended December 31, 2016

Net cash inflows from operating activities were \$22.5 million, an increase of 34% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2016 was \$21.0 million, an increase of 20% when compared to the prior year. Net income included non-cash charges and recoveries of \$4.9 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 \$1.5 million. We generated \$11.4 million from movements in accounts payable, deferred revenue, income taxes recoverable, customer deposits and accrued liabilities. These positive contributions were offset by cash use of \$9.9 million to invest in deferred registration costs, accounts receivable, inventory, prepaid expenses and deposits.

Cash Flow from Financing Activities***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.

Year ended December 31, 2016

Net cash inflows from financing activities during Fiscal 2016 totaled \$0.7 million as compared to cash outflows of \$20.6 million during the year ended December 31, 2015. Net cash inflows of \$11.0 million resulting from draws on the 2016 Credit Facility to repay balances outstanding of the 2012 Demand Loan Facilities and to fund FTTH capital expenditures and the proceeds from a \$6.0 million draw on the 2012 Demand Loan Facilities to fund the Melbourne IT reseller channel acquisition. These cash inflows were partially offset by outflows of \$7.2 million resulting from the repurchasing of 308,416 of our shares during Fiscal 2016 through our open market stock buyback that commenced on February 9, 2016, principal repayments of \$9.8 million relating to our 2012 Demand Loan Facilities and 2016 Credit Facility, \$0.5 million of discount and debt issuance costs, and a \$0.2 million outflow from the net impact of exercise of stock options.

Cash Flow from Investing Activities***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) 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.

Year ended December 31, 2016

Investing activities during Fiscal 2016 used net cash of \$14.4 million as compared to our generating net cash of \$3.3 million during Fiscal 2015.

On April 1st, 2016, the Company acquired the international reseller channel from Melbourne IT Limited for consideration of \$6.0 million, excluding legal and registry related transaction costs of \$0.2 million. The consideration was funded through a \$6.0 million draw on the 2012 Demand Loan Facilities. The Company also acquired the customer bases of a series of small hosting companies for total consideration of \$0.3 million.

In addition, the Company invested \$7.9 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.

Based on our operations, we believe that our cash flow from operations will be adequate to meet our anticipated requirements for working capital, capital expenditures and our loan repayments for at least the next 12 months.

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, 2018.

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, 2018. 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, 2018 (Dollar amounts in thousands of US dollars):

Contractual Obligations for the year ending December 31,	Contractual Lease Obligations ⁽¹⁾	Purchase Obligations ⁽²⁾	Total Obligations
2019	1,748	44,938	46,686
2020	1,084	5,068	6,152
2021	1,198	388	1,586
2022	1,182	379	1,561
2023	1,153	370	1,523
Thereafter	7,195	795	7,990
	\$ 13,560	\$ 51,938	\$ 65,498

⁽¹⁾ Contractual lease obligations include an agreement to extend the lease of the Company's principal administrative office located in Toronto, ON. Prior to the extension, the lease agreement was set to expire on December 31, 2020. The new agreement extends the lease period from 2021 to 2030. Not including additional building operating expenses, the Company has committed to lease payments of \$7.4 million over the term of the lease extension.

⁽²⁾ Purchase obligations include all other legally binding service contracts for mobile telephone services and other operational agreements to be delivered during Fiscal 2019 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, 2018. We are also subject to market risk exposure related to changes in interest rates under our 2017 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.