

ITEM 6. RESERVED.

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

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 related services. We are organized into three operating and reporting segments - Ting, Wavelo, and Tucows Domains. Each segment is differentiated primarily by their services, the markets they serve and the regulatory environments in which they operate. The Ting segment contains the operating results of our retail high speed Internet access operations, including its wholly owned subsidiaries - Cedar and Simply Bits. The Wavelo segment includes our platform and professional services offerings, as well as the billing solutions to Internet services providers ("ISPs") (branded as Platypus). Tucows Domains includes wholesale and retail domain name registration services, as well as value added services derived through our OpenSRS, eNom, Ascio, EPAG and Hover brands.

Our Chief Executive Officer (CEO), who is also our chief operating decision maker, reviews the operating results of Ting, Wavelo and Tucows Domains as three distinct segments in order to make key decisions and evaluate segment performance. Certain revenues and expenses disclosed under the Corporate category are excluded from segment earnings before interest, tax, depreciation and amortization ("EBITDA") results as they are centrally managed and not monitored by or reported to our CEO by segment. The exclusions include: retail mobile services, the 10-year payment stream on transferred legacy Mobile subscribers, eliminations of intercompany transactions, portions of Finance and Human Resources, Legal and Corporate Information Technology (IT) shared services.

For the years ended December 31, 2023, 2022 and 2021, we reported revenue of \$339 million, \$321 million and \$304 million, respectively.

On September 22, 2023, the Company and its wholly owned subsidiaries, Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Wavelo, Inc. and Tucows (Emerald), LLC (each, a "Borrower" and together, the "Borrowers," collectively with the Company) and certain other subsidiaries of the Company, as guarantors, entered into the 2023 Credit Agreement with Bank of Montreal, as administrative agent ("BMO" or the "Agent"), and the lenders party thereto, to, among other things, provide the Borrowers with a revolving credit facility in an aggregate amount not to exceed \$240 million (the "2023 Credit Facility"). The Borrowers may request an increase to the 2023 Credit Facility through new commitments of up to \$60M if the Total Funded Debt to Adjusted EBITDA Ratio (as defined in the 2023 Credit Agreement) is less than 3.75:1.00. The 2023 Credit Facility expires on September 22, 2026, which is the third anniversary of the effective date of the 2023 Credit Facility. The 2023 Credit Agreement contains customary representations and warranties, affirmative and negative covenants, and events of default. The 2023 Credit Agreement requires that the Company comply with certain customary non-financial covenants and restrictions. In addition, the Company has agreed to comply with the following financial covenants: (1) a leverage ratio by maintaining at all times a Total Funded Debt to Adjusted EBITDA Ratio of not more than (i) 4.50:1.00 at any time from and after the Closing Date to and including December 30, 2023; (ii) 4.25:1.00 from December 31, 2023 to and including March 30, 2024; (iii) 4.00:1.00 from March 31, 2024 to and including June 29, 2024; and (iv) 3.75:1.00 thereafter; and (2) an interest coverage ratio by maintaining as of the end of each rolling four financial quarter period, an Interest Coverage Ratio (as defined in the 2023 Credit Agreement) of not less than 3.00:1.00.

During Fiscal 2023, the Company made repayments of \$27.8 million towards 2023 Credit Facility and the 2019 Credit Facility (as defined in "Note 8 - Syndicate Revolver of in the Notes to the Consolidated Financial Statements for Fiscal 2023 included in Part II, Item 8 of this Annual Report). The Company ended December 31, 2023 with a remaining principal balance of \$211.9 million, for which the required repayment is due in 2026.

Ting

Ting and its wholly owned subsidiaries, Cedar and Simply Bits includes the provision of high-speed Internet access services to select towns throughout the United States, with further expansion underway to both new and existing markets. Our primary sales channel is through the Ting website. The primary focus of this segment is to provide reliable Gigabit Fiber and Fixed Wireless Internet services to consumer and business customers. Revenues from Ting Internet are all generated in the U.S. and are billed on a monthly basis. Ting Internet services have no fixed contract terms.

As of December 31, 2023, Ting Internet had access to 121,000 owned infrastructure serviceable addresses, 29,000 partner infrastructure serviceable addresses and 43,000 active accounts under its management; compared to having access to 96,000 owned infrastructure serviceable addresses, 19,000 partner infrastructure serviceable addresses and 35,000 active accounts under its management as of December 31, 2022. These figures exclude the increase in serviceable addresses and accounts attributable to the Simply Bits acquisition.

Wavelo

Wavelo includes the provision of full-service platforms and professional services providing a variety of solutions that support Communication Services providers ("CSPs"), including subscription and billing management, network orchestration and provisioning, and individual developer tools. Wavelo's focus is to provide accessible telecom software to CSPs globally, minimizing network and technical barriers and improving internet access worldwide. Wavelo's suite of flexible, cloud-based software simplifies the management of mobile and internet network access, enabling CSPs to better utilize their existing infrastructure, focus on customer experience and scale their businesses faster. Wavelo launched as a proven asset for CSPs, with DISH using Wavelo's Mobile Network Operating System ("MONOS") software to drive additional value within its Digital Operator Platform and Ting integrating Wavelo's Internet Service Operating System ("ISOS") and Subscriber Management ("SM") software to enable faster subscriber growth and footprint expansion. The Wavelo segment also includes the Platypus brand and platform, our legacy billing solution for ISPs. The revenues from Wavelo's MONOS, ISOS, SM and professional services are all generated in the U.S. and our customer agreements have set contract lengths with the underlying CSP. Similarly, Wavelo's revenues from Platypus are largely generated in the U.S., with a small portion earned in Canada and other countries.

Domain Services

Tucows Domains includes wholesale and retail domain name registration services, as well as value added services derived through our OpenSRS, eNom, Ascio, EPAG and Hover brands. Tucows Domains 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. Tucows Domains revenues are attributed to the country in which the contract originates, which is primarily in Canada and the U.S for OpenSRS and eNom brands whereas it is primarily in European nations for Ascio and EPAG.

Our primary distribution channel is a global network of more than 35,000 resellers that operate in almost 200 countries and who typically provide their customers, the end-users of Internet-based services, with solutions for establishing and maintaining an online presence. Our primary focus is serving the needs of this network of resellers by providing the broadest portfolio of gTLD and the country code top-level domain options and related services, a white-label platform that facilitates the provisioning and management of domain names, a powerful Application Program Interface, easy-to-use interfaces, comprehensive management and reporting tools, and proactive and attentive customer service. Our services are integral to the solutions that our resellers deliver to their customers. We provide "second tier" support to our resellers by email, chat and phone in the event resellers experience issues or problems with our services. In addition, our Network Operating Center proactively monitors all services and network infrastructure to address deficiencies before customer services are impacted.

We believe that the underlying platforms for our services are among the most mature, reliable and functional reseller-oriented provisioning and management platforms in our industry, and we continue to refine, evolve and improve these services for both resellers and end-users. Our business model is characterized primarily by non-refundable, up-front payments, which lead to recurring revenue from renewals and positive operating cash flow.

Wholesale, primarily branded as OpenSRS, eNom, EPAG and Ascio, derives revenue from its domain name registration service. Together the OpenSRS, eNom, EPAG and Ascio Domain Services manage 24.6 million domain names under the Tucows, eNom, EPAG and Ascio ICANN registrar accreditations and for other registrars under their own accreditations. Domains under management has increased by 0.2 million, or less than 1%, since December 31, 2022.

Value-Added Services include hosted email which provides email delivery and webmail access to millions of mailboxes, Internet security services, WHOIS privacy, publishing tools and other value-added services. All of these services are made available to end-users through a network of 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 expiry auction sale.

Retail, primarily the Hover and eNom portfolio of websites, including eNom, and eNom Central, derive revenues from the sale of domain name registration and email services to individuals and small businesses. Our retail domain services also include 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. The retail segment now includes the sale of the rights to its portfolio of surname domains used in connection with our RealNames email service and our Exact Hosting Service, that provides Linux hosting services for individual and small business websites.

KEY BUSINESS METRICS AND NON-GAAP MEASURES

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:

Ting Internet	For the year ended December 31,		
	2023	2022	2021
	(in '000's)		
Ting Internet accounts under management	43	35	26
Ting Internet owned infrastructure serviceable addresses (1)	121	96	76
Ting Internet partner infrastructure serviceable addresses (1)	29	19	15

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

Tucows Domains

	As of December 31,		
	2023	2022	2021
Total new, renewed and transferred-in domain name registrations provisioned(1)	22,031	21,774	22,530
Domains under management:			
Registered using Registrar Accreditation belonging to the Tucows Group	17,565	17,921	18,909
Registered using Registrar Accreditation belonging to Resellers	6,995	6,469	6,254
Total domain names under management	24,560	24,390	25,163

(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.

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 excludes 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 as well as the Adjusted EBITDA reconciliation to net income in the Results of Operations section below.

OPPORTUNITIES, CHALLENGES AND RISKS

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.

Ting

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.

Wavelo

Wavelo launched as a proven asset for CSPs, with DISH using Wavelo’s MONOS software to drive additional value within its Digital Operator Platform. More recently, Ting Internet has also integrated Wavelo’s ISOS and SM software to enable faster subscriber growth and footprint expansion. With our external platform and professional services revenues concentrated to one customer in DISH, we are exposed to significant risk if we are unable to maintain this customer relationship or establish new relationships for any of our Platforms in the future. Additionally, our revenues as a platform provider are directly tied to the subscriber volumes of DISH’s MVNO or Mobile Network Operator (“MNO”) networks, and our profitability is contingent on the ability of DISH to continue to add subscribers, either from organic growth or from migration off legacy systems, onto our platforms

Domain Services

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 Tucows Domains 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 Tucows Domains 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, Tucows Domains also generate revenues through the sale of names from our portfolio of domain names and through the OpenSRS, eNom, and Ascio Domain Expiry Streams.

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.

Other opportunities, challenges and risks

The Company is entitled to a long-term payment stream that is a function of the margin generated by the transferred subscribers over the 10-year term of the DISH Purchase Agreement executed in Fiscal 2020. This consideration structure may not prove to be successful or profitable in the long-term to us if the existing subscriber base churns at an above average rate. Additionally, given DISH controls the revenues and costs incurred associated with the acquired subscribers, there could arise a situation where profitability for the subscriber base is diminished either by lower price points or cost inflation. Additionally, as part of the DISH Purchase Agreement, the Company retained a small number of customer accounts associated with one MNO agreement that was not reassigned to DISH at time of sale. We continue to be subject to the minimum revenue commitments previously agreed to with this excluded MNO agreement. The Company is able to continue adding customers under the excluded MNO network in order to meet the commitment. However, with no direct ability to change customer pricing and limited ability to renegotiate contract costs or significant terms, the Company may be unable to meet the minimum commitments with this MNO partner and could incur significant and recurring penalties until such a time that the contract is complete. These penalties would negatively impact our operational performance and financial results if enforced by the MNO. During the twelve months ended December 31, 2023, the Company has accrued \$0.3 million of penalties associated with the minimum commitment shortfall. The Company expects to incur penalties throughout 2024 and thereafter until the contract is complete.

An in-depth assessment of the risk factors impacting our businesses has been discussed at length above in Part I under the caption "Item 1A Risk Factors" in this Annual Report on Form 10-K.

Critical Accounting Estimates

The following is a discussion of our critical accounting estimates. Critical accounting estimates 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 Fiscal 2023 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 the consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Management bases its estimates on historical experience, available market information as applicable, and on various other assumptions that are believed to be reasonable under the circumstances at the time they are made. Under different assumptions or conditions, the actual results will differ, potentially materially, from those previously estimated. Many of the conditions impacting these assumptions and estimates are outside of the Company's control. Management evaluates its estimates on an on-going basis.

Acquired customer relationships

For acquired customer relationships, the Company estimates the fair value based on the income approach. The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows expected to be generated over the remaining useful life of the asset. This valuation involves significant subjectivity and estimation uncertainty, including assumptions related to future revenues attributable to acquired customer relationships, attrition rates and discount rates.

Loss contingencies

We are sometimes subject to claims, suits, regulatory and government investigations, and other proceedings involving competition, intellectual property, privacy, tax and related compliance, labor and employment, commercial disputes, and other matters. Certain of these matters include speculative claims for substantial or indeterminate amounts of damages. We record a liability when we believe that it is probable that a loss has been incurred and the amount can be reasonably estimated.

We evaluate, on a regular basis, developments in our legal matters that could affect the amount of liability that has been previously accrued, and the matters and related reasonably possible losses disclosed, and make adjustments and changes to our disclosures as appropriate. Significant judgment is required to determine both the likelihood and the estimated amount of a loss related to such matters. Until the final resolution of such matters, there may be an exposure to loss in excess of the amount recorded, and such amounts could be material.

Impairment of Goodwill and intangibles

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.

We evaluate factors such as macro-economic, industry and market conditions including the capital markets, the competitive environment, in addition to other internal factors including changes to our market capitalization, cash inflows, obligations and access to capital of our segments. We concluded that there were no indications of impairment under the qualitative approach during Fiscal 2023. The analysis was consistent with the approach we utilized in prior years.

Changes in estimates

There were no material changes to our critical accounting estimates during Fiscal 2023.

SIGNIFICANT ACCOUNTING POLICIES

Revenue Recognition Policy

The Company's revenues are derived from (a) the provisioning of retail fiber Internet services in our Ting segment, (b) the provisioning of CSP focused platform and professional services in our Wavelo segment; and from (c) domain name registration contracts, other domain related value-added services, domain sale contracts, and other advertising revenue in our Tucows Domains segment. 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 21 – Segment Reporting” of the Notes to the Consolidated Financial Statements included in this report for more information.

(a) Ting

Ting and its subsidiaries - Cedar, and Simply Bits, includes the provision of high-speed Internet access services to select towns throughout the United States, with further expansion underway to both new and existing markets. Our primary sales channel is through the Ting website. The primary focus of this segment is to provide reliable Gigabit Fiber and Fixed Wireless Internet services to consumer and business customers. Revenues are all generated in the U.S., have no fixed contract terms and are billed on a monthly basis, with unlimited bandwidth based on a fixed price.

The Company's billing cycle for all Ting Internet customers is computed based on the customer's activation date. Since consideration is collected before the service period, revenue is initially deferred and recognized as the Company performs its obligation to provide Internet access within 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, as is the case for service requiring installation, then revenue is not recognized until a customer's service is activated. 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) Wavelo

Platform Services

Tucows' Platform Services include the following full-service platforms from Wavelo, including MONOS, ISOS, SM and our legacy Platypus ISP Billing software. Under each of these platforms there are a variety of solutions that support CSPs, including subscription and billing management, network orchestration and provisioning, and individual developer tools. Wavelo's customers are billed monthly, on a postpaid basis. The monthly fees are variable, based on the volume of their subscribers utilizing the platform during a given month, to which minimums may apply. Customers may also be billed fixed platform fees and granted fixed credits as part of the consideration for long-term contracts. Consideration received is allocated to platform services and bundled professional services and recognized as each service obligation is fulfilled. Any fixed fees for Wavelo are recognized into revenue evenly over the service period, while variable usage fees are recognized each month as they are consumed. Professional services revenue is recognized as the hours of professional services granted to the customer are used or expire. When consideration for these platform services is received before the service is delivered, the revenue is initially deferred and recognized only as the Company performs its obligation to provide services. Likewise, if platform services are delivered before the Company has the unconditional right to invoice the customer, revenue is recognized as a Contract Asset.

Other Professional Services

This revenue stream includes any other professional services earned from Wavelo's performance of standalone technology services development work. These are billed to our customers monthly at established rates for services provided in period. The Company recognizes professional services revenue as the Company satisfies its obligations to provide professional services.

(c) Tucows Domains

Wholesale - 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.

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. Tucows Domains will continue to be the largest portion of our business and will further fuel our ability to sell add-on services.

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

Wholesale – Value-Added Services

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

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

Retail

We derive REVENUES mainly from Hover and eNom's retail properties through the sale of retail domain name registration and email services to individuals and small businesses. The retail segment now includes the sale of the rights to its portfolio of surname domains used in connection with our RealNames email and Linux hosting services for websites through our Exact Hosting brand.

For information about geographic areas, see "Note 21 – Segment Reporting" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

(d) Tucows Corporate - Mobile Services and Eliminations

Although we still provide mobile telephony services to a small subset of customers retained through the Ting Mobile brand as part of the DISH Purchase Agreement executed in Fiscal 2020; this revenue stream no longer represents the Company's strategic focus going forward. Instead we have transitioned towards being a platform provider for CSPs globally via our Wavelo segment. Effective January 1, 2022 we decided to exclude retail telephony services and transition services revenues from segment Adjusted EBITDA results as they are no longer centrally managed and not monitored by or reported to our CEO by segment.

Ting Mobile wireless usage contracts grant customers access to standard talk, text and data mobile services. Ting Mobile contracts are billed based on the customer's selected rate plan, which can either be usage based or an unlimited plan. All rate plan options are charged to customers on a postpaid, monthly basis at the end of their billing cycle. All future revenues associated with retail mobile services stream will only be for this subset of customers retained by the Company, as mentioned above. 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.

These mobile services revenue streams also includes transitional services provided to DISH. These are billed monthly at established rates for services provided in period, including: the provision of sales, marketing, order fulfillment, and data analytics related to the legacy customer base sold to DISH. The Company recognizes revenue as the Company satisfies its obligations to provide transitional services.

As a form of consideration for the sale of the customer relationships, the Company receives a payout on the margin associated with the legacy customer base sold to DISH, over a period of 10 years. This has been classified as Other Income and not considered revenue in the current period.

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, 2023, we had \$130.4 million in goodwill related to our acquisitions and \$29.5 million in intangible assets comprised of \$12.3 million of indefinite life intangibles and \$17.2 million of finite life intangible assets. At December 31, 2022, we had \$130.4 million in goodwill related to our acquisitions and \$39.8 million in intangible assets comprised of \$12.3 million of indefinite life intangibles and \$27.5 million of finite life intangible assets. As described above, we report our financial results as three operating segments, Ting, Wavelo and Tucows Domains. The goodwill balance is built up of \$107.7 million (83%) related to Tucows Domains and \$22.7 million (17%) related to Ting. Of our goodwill balance, \$90.3 million is not deductible for tax purposes. The intangible asset balance is built up of \$20.0 million (68%) related to Tucows Domains and \$9.5 million (32%) related to Ting.

We account for goodwill and indefinite life intangible assets in accordance with the Financial Accounting Standards Board ("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. There was no impairment recorded on indefinite-life intangible assets during 2023, 2022 and 2021.

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. During Fiscal 2023, 2022 and 2021, property, plant, and equipment with net book values of \$4.8 million, \$0.1 million, and \$0.2 million, respectively, were written off and included in impairment of property and equipment in the consolidated statements of comprehensive income. The impairment losses incurred in 2023 related to specific network assets that were identified as being damaged and no longer in use. The full cost of the identified assets was recorded as an impairment loss. During Fiscal 2023, 2022 and 2021 there was no impairment recorded on definite-life intangible assets.

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, the competitive environment, in addition to other internal factors including changes to our market capitalization, cash inflows, obligations and access to capital of our segments. We concluded that there were no indications of impairment under the qualitative approach. The analysis was consistent with the approach we utilized in prior years.

In connection with business acquisitions that we have completed, we identify and estimate the fair value of net assets acquired, including certain identifiable intangible assets (other than goodwill) and liabilities assumed. The determination of acquisition date fair values requires us to make significant estimates and assumptions regarding projected revenues, costs, earnings before interest, taxes, depreciation and amortization, attrition rates and discount rates. Changes to these assumptions may result in material differences depending on the size of the acquisition completed.

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 impairment of goodwill or intangible assets, both definite and indefinite life, as a result of the annual impairment tests completed during the fourth quarters of 2023, 2022 or 2021.

Accounting for Income Taxes

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 taxable income 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. Significant judgment is required in determining our provision for income taxes and evaluating our uncertain tax positions.

We account for income taxes under the asset and liability method, which recognizes the 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. Valuation allowances are established to reduce 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 valuation allowance, historical and future levels of income, expectations and risks associated with estimates of future taxable income and tax planning strategies are considered. As at December 31, 2023, the valuation allowance of \$28.8 million was recorded, which we are not expected to realize on a more than likely than not basis.

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. As at December 31, 2023, we did not recognize any uncertain tax provisions within the provision for income taxes.

See "Note 10 - Income Taxes" to the Consolidated Financial Statements for further information regarding income taxes included in Part II, Item 8 of this Annual Report.

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.

Inflation, rising interest rates and expected impacts

The Company continues to operate in a challenging macro environment as inflation and interest rates continue to rise globally. The impact of these issues on our business will vary by geographic market and operating segment. We continue to monitor economic conditions closely, as well as segment revenues, cash position, cash flow from operations, interest rates and other factors. Across our three operating segments - Ting, Wavelo and Tucows Domains, personnel costs continue to be impacted by sustained wage inflation incurred in the prior periods. These increases were necessary in order to remain competitive to attract and retain the best talent. The Company continues to monitor and assess wage inflation and is managing it against offsets in hiring plans and contractor mix. Outside of wage inflation, the operating segment most impacted by inflation overall is Ting, as sustained levels of inflation increase our Fiber Network build costs across both materials and contracted labor. We continue to assess ways to reduce build costs through more efficient management of our build design, build efficiency and real-time tracking of build costs to more effectively manage total cost estimates against actual spends. We are also managing our significant vendor relationships closely to mitigate supply chain disruptions and ensure optimal pricing. However, there can be no assurance as to the effectiveness of our efforts to mitigate any impact of the current and future adverse economic conditions, and other unknown developments.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2023 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2022

For additional information on our financial condition as of December 31, 2022 and results of operations for the year ended December 31, 2022 as compared to the year ended December 31, 2021, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on [10-K/A for the year ended December 31, 2022](#) which was filed with the United States Securities and Exchange Commission on June 6, 2023.

NET REVENUES

Ting

Ting and its subsidiaries - Cedar, and Simply Bits includes the provision of high-speed Internet access services to select towns throughout the United States, with further expansion underway to both new and existing markets. Our primary sales channel is through the Ting website. The primary focus of this segment is to provide reliable Gigabit Fiber and Fixed Wireless Internet services to consumer and business customers. Revenues are all generated in the U.S., have no fixed contract terms and are billed on a monthly basis, with unlimited bandwidth based on a fixed price.

The Company's billing cycle for all Ting Internet customers is computed based on the customer's activation date. Since consideration is collected before the service period, revenue is initially deferred and recognized as the Company performs its obligation to provide Internet access within 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, as is the case for service requiring installation, then revenue is not recognized until a customer's service is activated. 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.

Wavelo

Platform Services

Tucows' Platform Services include the following full-service platforms from Wavelo, including MONOS, ISOS, SM and our legacy Platypus ISP Billing software. Under each of these platforms there are a variety of solutions that support CSPs, including subscription and billing management, network orchestration and provisioning, and individual developer tools. Wavelo launched as a proven asset for CSPs, with DISH using Wavelo's MONOS software to drive additional value within its Digital Operator Platform. More recently, Ting Internet has also integrated Wavelo's ISOS and SM software to enable faster subscriber growth and footprint expansion. Wavelo's customers are billed monthly, on a postpaid basis. The monthly fees are variable, based on the volume of their subscribers utilizing the platform during a given month, to which minimums may apply. Customers may also be billed fixed platform fees and granted fixed credits as part of the consideration for long-term contracts. Consideration received is allocated to platform services and bundled professional services and recognized as each service obligation is fulfilled. Any fixed fees for Wavelo are recognized into revenue evenly over the service period, while variable usage fees are recognized each month as they are consumed. Professional services revenue is recognized as the hours of professional services granted to the customer are used or expire. When consideration for these platform services is received before the service is delivered, the revenue is initially deferred and recognized only as the Company performs its obligation to provide services. Likewise, if platform services are delivered before the Company has the unconditional right to invoice the customer, revenue is recognized as a Contract Asset.

Other Professional Services

This revenue stream includes any other professional services earned in connection with the Wavelo business from the provision of standalone technology services development work. These are billed to our customers monthly at set and established rates for services provided in period. The Company recognizes revenue as the Company satisfies its obligations to provide professional services.

Tucows Domains

Wholesale - 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.

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. We expect Domain services will continue to be the largest portion of our business and will continue to enable us to sell add-on services.

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

Wholesale – Value-Added Services

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

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

Retail

We derive revenues mainly from Hover and eNom’s retail properties through the sale of retail domain name registration and email services to individuals and small businesses. The retail segment now includes the sale of the rights to its portfolio of surname domains used in connection with our RealNames email service and Linux hosting services for websites through our Exact Hosting brand.

Tucows Corporate - Mobile Services and Eliminations

Although we still provide mobile telephony services to a small subset of customers retained through the Ting Mobile brand as part of the DISH Purchase Agreement executed in Fiscal 2020; this revenue stream no longer represents the Company's strategic focus going forward. Instead we have transitioned towards being a Wavelo provider for CSPs globally. Where these retail mobile services revenues were previously disclosed as part of a Mobile Services segment in the prior year, effective January 1, 2022 we have decided to exclude retail telephony services and transition services revenues from segment Adjusted EBITDA results as they are no longer centrally managed and not monitored by or reported to our CEO by segment.

Ting Mobile wireless usage contracts grant customers access to standard talk, text and data mobile services. Ting Mobile contracts are billed based on the customer's selected rate plan, which can either be usage based or an unlimited plan. All rate plan options are charged to customers on a postpaid, monthly basis at the end of their billing cycle. All future revenues associated with retail mobile services stream will only be for this subset of customers retained by the Company, as mentioned above. 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.

These mobile services revenue streams also includes transitional services provided to DISH. These are billed monthly at set and established rates for services provided in period and include the provision of sales, marketing, order fulfillment, and data analytics related to the legacy customer base sold to DISH. The Company recognizes revenue as the Company satisfies its obligations to provide transitional services.

As a form of consideration for the sale of the customer relationships, the Company receives a payout on the margin associated with the legacy customer base sold to DISH, over a period of 10 years. This has been classified as Other Income and not considered revenue in Fiscal 2022 or 2023.

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

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

	Year ended December 31,	
	2023	2022
<u>Ting:</u>		
Fiber Internet Services	\$ 50,937	\$ 42,425
<u>Wavelo:</u>		
Platform Services	37,082	22,594
Other professional services	1,588	1,750
Total Wavelo	38,670	24,344
<u>Tucows Domains:</u>		
Wholesale		
Domain Services	189,013	187,542
Value Added Services	17,712	20,712
Total Wholesale	206,725	208,254
Retail		
Total Tucows Domains	35,372	34,904
	242,097	243,158
<u>Tucows Corporate:</u>		
Mobile Services and eliminations	7,633	11,215
	\$ 339,337	\$ 321,142
Increase over prior period	\$ 18,195	
Increase - percentage		6%

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

	Year ended December 31,	
	2023	2022
Ting:		
Fiber Internet Services	15%	13%
Wavelo:		
Platform Services	11%	7%
Other Professional Services	0%	1%
Total Wavelo	11%	8%
Tucows Domains:		
Wholesale		
Domain Services	56%	58%
Value Added Services	5%	6%
Total Wholesale	61%	64%
Retail		
Total Tucows Domains	71%	75%
Tucows Corporate:		
Mobile services and eliminations	3%	4%
	100%	100%

Total net revenues for Fiscal 2023 increased by \$18.2 million, or 6%, to \$339.3 million compared the year ended December 31, 2022 ("Fiscal 2022"). The increase in net revenue was driven by our Wavelo and Ting segments. The Wavelo segment increased \$14.3 million in the current period primarily from the complete migration of DISH's Boost Mobile subscriber base onto our platform. The Ting segment increased \$8.5 million in the current period as a result of subscriber growth from the continued buildout of our Fiber network across the United States. These increases were partially offset by decreased revenues from both mobile services and eliminations as well as the Tucows Domains segment. Mobile services and eliminations decreased \$3.6 million attributable to increased intercompany revenues, decreased transitional services, and decreased telephony services revenues. Tucows Domains decreased \$1.1 million in the current period, driven primarily by reduced expiry revenues, consistent with industry trends.

Deferred revenue at December 31, 2023 increased by \$3.0 million to \$148.1 million from \$145.1 million at December 31, 2022. The increase was driven primarily by Tucows Domains, which accounted for \$3.2 million of the increase as a result of strong Fiscal 2023 billings for domain name registrations and service renewals. Tucows Domains also increased prices as a result of increased costs from gTLD registries, which is also a factor in increased deferred revenues in the current period. Additionally, Ting saw a small increase of \$0.4 million, reflective of the continued growth in customer base and billings relative to December 31, 2022. These increases were partially offset by a decrease from Wavelo of \$0.6 million, specifically related to Other Professional Services revenues for standalone technology services development work for DISH, which we defer until we have satisfied our obligations to provide the professional services. These other professional services were completed in the current period and thus recognized from previously deferred revenues.

As a result of significant subscriber migration onto the Wavelo MONOS platform in the current period, DISH now accounts for 10.7% of total net revenue in Fiscal 2023. No customer accounted for more than 10% of revenue during Fiscal 2022. DISH accounted for 59% of total accounts receivable at December 31, 2023 and 46% of total accounts receivable at December 31, 2022. Though a significant portion of the Company's domain services revenues are prepaid by our customers, where the Company does collect receivables, management judgment is required at the time revenue is recorded 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. Our allowance for doubtful accounts was \$0.5 million and \$0.7 million as at December 31, 2023 and at December 31, 2022, respectively. Based on this assessment, we expect the carrying amount of our outstanding receivables, net of allowance for doubtful accounts, to be fully collected.

Ting

Ting generated \$50.9 million in revenue during Fiscal 2023, which increased by \$8.5 million or 20% compared to Fiscal 2022. This growth is driven by continued subscriber growth across the markets we serve, as well as the continued expansion of our Ting Internet footprint to new Ting towns throughout the United States.

As of December 31, 2023, Ting Internet had access to 121,000 owned infrastructure serviceable addresses, 29,000 partner infrastructure serviceable addresses and 43,000 active accounts under its management; compared to having access to 96,000 owned infrastructure serviceable addresses, 19,000 partner infrastructure serviceable addresses and 35,000 active accounts under its management as of December 31, 2022. These figures exclude the increase in serviceable addresses and accounts attributable to the Simply Bits acquisition.

Wavelo

Platform Services

Wavelo's Platform services generated \$37.1 million in revenue during Fiscal 2023, which increased by \$14.5 million or 64% compared to Fiscal 2022. The increase in Fiscal 2023 revenue is driven primarily by the complete migration of DISH's Boost Mobile subscriber base onto our MONOS platform, as well as organic subscriber growth from our anchor customers DISH and Ting as they expand product offerings and expand their network footprints. The increased platform fees are partially offset by a reduction of revenues related to the amortization of the related contract asset with DISH. The Company expects the contract asset to continue to amortize against revenue through the remainder of the contract as we continue to fulfill the performance obligations. Our full-service platforms support CSPs with subscription and billing management, network orchestration and provisioning, and individual developer tools. Any intercompany ISOS or SM revenues earned from Ting, by Wavelo are eliminated upon consolidation.

Other Professional Services

Wavelo's Other Professional Services for the Fiscal 2023, decreased by \$0.2 million compared to Fiscal 2022, to \$1.6 million. These revenues are related to the provision of standalone technology services development for our CSP customers and are non-recurring in nature, and expectantly can fluctuate period over period. These revenues depend on the volume (if any) and scope of standalone technology services development work our customers engage us to perform. In the current period, we performed less standalone professional services for our customers.

Tucows Domains

Wholesale - Domain Services

During Fiscal 2023, Wholesale Tucows Domains revenue increased by \$1.5 million or 1% to \$189.0 million. The increase from Wholesale domain services was driven primarily by strong domains transactions through the period.

Together the OpenSRS, eNom, EPAG and Ascio Domain Services manage 24.6 million domain names under the Tucows, eNom, EPAG and Ascio ICANN registrar accreditations and for other registrars under their own accreditations. Domains under management has increased by 0.2 million domain names, or less than 1%, since December 31, 2022.

Wholesale - Value Added Services

Net revenues from value-added services decreased by \$3.0 million to \$17.7 million compared to Fiscal 2022. The decrease in value-added service revenue was driven by lower expiry, digital certifications, and email service proceeds across our brands in the current period. The prior period continued to benefit from the normalization of renewal rates and domains under management from COVID-19 which saw a significant volume of expired domain names registered in prior years being available for our expiry streams, which returned favorable proceeds at auction and drove revenue generation for value added services. The value and volume of domain names sold at auction has since declined relative to the prior period.

Retail

Net revenues from retail increased by \$0.5 million to \$35.4 million compared to Fiscal 2022. The increase in revenue was driven primarily by higher Exact Hosting revenues driven by small acquisitions and a higher volume of domain name portfolio sales compared to the prior period.

Tucows Corporate - Mobile Services and Eliminations

Net revenues from mobile services and eliminations for the Fiscal 2023, decreased by \$3.6 million compared to Fiscal 2022, to \$7.6 million. The decrease was driven primarily by incremental intercompany corporate eliminations of \$2.2 million as a result of increased revenues generated by Wavelo from Ting, associated with Ting's integration of Wavelo's ISOS and SM platforms. Incremental to this, mobile services decreased as a result of less transitional services of \$0.7 million notably from a decreased level of dedicated support services provided to DISH in connection with the legacy Ting Mobile customer base, and \$0.7 million associated with the mobile telephony services and device revenues from the small group of customers retained by the Company as part of the DISH Purchase Agreement as a result of the organic subscriber churn experienced through Fiscal 2023.

COST OF REVENUES

Ting

Cost of revenues primarily includes the costs for provisioning high speed Internet access for Ting and its subsidiaries - Cedar, and Simply Bits, which is comprised of network access fees paid to third-parties to use their network, leased circuit costs to directly support enterprise customers, the personnel and related expenses (net of capitalization) for the physical planning, design, construction and build out of the physical Fiber network, and as well as personnel and related expenses (net of capitalization) for the installation, activation, repair, maintenance and overall field service delivery of the Ting business. Hardware costs include the cost of equipment sold to end customers, including routers, ONTs, and IPTV products, and any adjustments on this inventory. Other costs include field vehicle expenses, and small sundry equipment and supplies consumed in building the Fiber network.

Wavelo

Platform Services

Cost of revenues to provide the new MONOS, ISOS and SM platforms, as well as our legacy Platypus ISP Billing software services including network access, provisioning and billing services for CSPs. This includes the amortization of any capitalized contract fulfillment costs over the period consistent with the pattern of transferring network access, provisioning and billing services to which the cost relates. Additionally, this includes any fees paid to third-party service providers primarily for printing services in connection with the Platypus ISP Billing software.

Other Professional Services

Cost of revenues to provide standalone technology services development work to our CSP customers to help support their businesses. This includes any personnel and contractor fees for any client service resources retained by the Company. Only a subset of the Company's employee base provides professional services to our customers. This cost reflects that group of resources.

Tucows Domains

Wholesale - Domain Services

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 ratably 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.

Wholesale - Value-Added Services

Costs of revenues for value-added services include licensing and royalty costs related to the provisioning of certain components for 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 ratably 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 and are expensed ratably over the renewal term. Costs of revenues for our surname 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.

Tucows Corporate - Mobile Services and Eliminations

Cost of revenues for retail mobile services includes the costs of provisioning mobile services, which is primarily our customers' voice, messaging, data usage provided by our MNO partner, 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. Included in the costs of provisioning mobile services are any penalties associated with the minimum commitments with our MNO partner.

These mobile services costs also include the personnel and related costs of transitional services provided to DISH. These are billed monthly at established rates for services provided in period and include the provision of sales, marketing, customer support, order fulfillment, and data analytics related to the legacy customer base sold to DISH. The Company recognizes costs as the Company satisfies its obligations to provide professional services.

Network expenses

Network expenses include personnel and related expenses related to platform and network site reliability engineering, network operations centers, IT infrastructure and supply chain teams that support our various business segments. It also includes the depreciation and any impairment charges of property and equipment related to our networks and platforms, amortization of any intangible assets related to our networks and platforms, communication and productivity tool costs, and equipment maintenance costs. Communication and productivity tool costs include collaboration, customer support, bandwidth, co-location and provisioning costs we incur to support the supply of all our services, across our segments.

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

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

	Year ended December 31,	
	2023	2022
Ting:		
Fiber Internet Services	\$ 20,151	\$ 17,004
Wavelo:		
Platform Services	1,337	1,294
Other Professional Services	1,289	1,632
Total Wavelo	2,626	2,926
Tucows Domains:		
Wholesale		
Domain Services	150,664	147,894
Value Added Services	2,249	2,514
Total Wholesale	152,913	150,408
Retail		
Total Tucows Domains	16,501	16,482
	169,414	166,890
Tucows Corporate:		
Mobile services and eliminations	10,065	9,448
Network Expenses:		
Network, other costs	28,222	17,433
Network, depreciation and amortization costs	37,370	29,101
Network, impairment	4,822	92
	70,414	46,626
	\$ 272,670	\$ 242,894
Increase over prior period	\$ 29,776	
Increase - percentage		12%

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

	Year ended December 31,	
	2023	2022
Ting:		
Fiber Internet Services	7%	7%
Wavelo:		
Platform Services	1%	1%
Other Professional Services	0%	1%
Total Wavelo	1%	2%
Tucows Domains:		
Wholesale		
Domain Services	54%	60%
Value Added Services	1%	1%
Total Wholesale	55%	61%
Retail		
Total Tucows Domains	61%	68%
Tucows Corporate:		
Mobile services and eliminations	4%	4%
Network Expenses:		
Network, other costs	11%	7%
Network, depreciation and amortization costs	14%	12%
Network, impairment	2%	-
	27%	19%
	100%	100%

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Total cost of revenues for Fiscal 2023 increased by \$29.8 million, or 12% to \$272.7 million, from \$243 million in Fiscal 2022. The increase in cost of revenues was driven by increases across Network Expenses, Ting, Tucows Domains, and mobile service and eliminations by \$23.8 million, \$3.2 million, \$2.5 million, and \$0.6 million respectively. Network Expenses increase of \$23.8 million is primarily a result of the Company's increased network infrastructure associated with the continuing expansion of the Ting Internet network footprint, the ramp up of Wavelo's platforms, increased communication and productivity tools costs across our operating segments, and impairment of assets within the Ting segment. The increase in Ting of \$3.2 million was driven in part by the costs of revenues associated with growth in active subscribers. The increase in Tucows Domains of \$2.5 million was a result of increased registry related costs from the registration of domain names. Lastly, the increase in mobile services and eliminations of \$0.6 million was the result of higher penalties associated with the MNO minimum commitment shortfall through Fiscal 2023. These increases were partially offset by a decrease of \$0.3 million in Wavelo as a result of the lower standalone technology services development revenues and similarly costs, in Fiscal 2023.

Deferred costs of fulfillment as of December 31, 2023 increased by \$0.4 million, to \$111.1 million from \$110.7 million at December 31, 2022. This increase was driven by Tucows Domains with an increase of \$2.2 million as a result of strong Fiscal 2023 billings for domain name registrations and service renewals, consistent with the increase in deferred revenues discussed above. This increase was partially offset by Wavelo, with a decrease of \$1.8 million related to the continued amortization of capitalized contract fulfillment costs related to DISH over the remaining term of that agreement as well as the completion of Other Professional Services discussed above for standalone technology services development work. As these professional services were completed in the current period, the deferred costs to fulfill those services were amortized into costs of revenues.

Ting

In Fiscal 2023, costs related to provisioning high speed Internet access for Ting and its subsidiaries - Cedar, and Simply Bits, increased \$3.2 million, or 19%, to \$20.2 million as compared to \$17.0 million during Fiscal 2022. Consistent with the discussion above, the subscriber growth across our Fiber network drove an increase in network connectivity, dark fiber, bandwidth, colocation and personnel costs in support of the continued expansion of the Ting Internet network footprint.

Wavelo

Platform Services

Cost of revenues from Wavelo Platform Services for remained flat at \$1.3 million for both Fiscal 2023 and Fiscal 2022. Cost incurred are driven by the amortization of previously capitalized costs incurred to fulfill the DISH Master Services Agreement ("MSA") over the term of the agreement. No additional costs additional costs to fulfill the contract were incurred in the period.

Other Professional Services

Cost of revenues from Other Professional Services for Fiscal 2023 decreased by \$0.3 million to \$1.3 million, when compared to Fiscal 2022. Costs incurred represent the personnel and related expenses of employees and contractors providing professional services to DISH. These costs depend on the volume (if any) and scope of standalone technology services development work our customers engage us to perform. In the current period, we performed less standalone professional services for our customers.

Domain Services

Wholesale - Domain Services

Costs for wholesale domain services for Fiscal 2023 increased by \$2.8 million to \$150.7 million, when compared to Fiscal 2022. The increase is driven primarily by registration growth and escalating registry costs for gTLDs, consistent with the Net Revenues discussion above.

Wholesale - Value Added Services

Costs for wholesale value-added services for Fiscal 2023 decreased by \$0.3 million to \$2.2 million, when compared to Fiscal 2022. The decrease is driven by lower expiry, digital certifications, and email services rendered across our brands in the current period, consistent with the decline in Net Revenues discussed above.

Retail

Costs for retail for Fiscal 2023 remained flat at \$16.5 million, when compared to Fiscal 2022.

Tucows Corporate - Mobile Services and Eliminations

Cost of revenues from mobile services and eliminations for Fiscal 2023 increased by \$0.6 million when compared to Fiscal 2022. The increase costs of revenues were driven primarily by higher costs to deliver mobile telephony services from the small group of customers retained by the Company as part of the DISH Purchase Agreement due to plan mix changes, the Company also incurred higher penalties associated with the MNO minimum commitment shortfall and expects to continue to incur penalties through the end of Fiscal 2024 and thereafter should limited subscriber growth persist. These factors were partially offset by a decrease in transitional services costs provided to DISH in connection with the legacy Ting Mobile customer base, consistent with the above discussion around net revenues.

Network Expenses

Network costs for Fiscal 2023 increased by \$23.8 million to \$70.4 million when compared to Fiscal 2022. The current period increase was driven by increased network costs, network depreciation, and network impairment by \$10.8 million, \$8.3 million, and \$4.7 million respectively. Consistent with the discussion above, the current period increase in network costs relates to additional personnel costs associated with wage inflation sustained from prior years, increased spending on colocation costs and contracted services including tools and systems to better monitor and manage our network infrastructure and platforms. The current period increase in network depreciation relates to \$6.8 million in incremental depreciation from Ting's expansion of our Ting Internet footprint to new Ting towns throughout the United States, \$1.7 million in incremental depreciation of Wavelo's platform assets, partially offset by decreased depreciation of \$0.2 million related to Tucows Domains. In addition to network costs and network depreciation, the current period increase in network impairment of \$4.7 million was primarily driven by an impairment charge for Ting for cable plant, asset under construction, and capital inventory that occurred in the current period.

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)

	<u>Year ended December 31,</u>	
	<u>2023</u>	<u>2022</u>
Sales and marketing	\$ 67,806	\$ 53,937
Increase over prior period	\$ 13,869	
Increase - percentage	26%	
Percentage of net revenues	20%	17%

Sales and marketing expenses for Fiscal 2023 increased by \$13.9 million, or 26%, to \$67.8 million when compared to Fiscal 2022. The increase in costs relates primarily to the investment in hiring additional personnel for Ting sales, product, marketing, customer support and success teams to drive growth in Ting markets. Outside of additional hiring personnel costs were further impacted by wage inflation sustained from prior years and increased stock-based compensation in order to attract and retain marketing personnel, primarily for Wavelo. There were also increases across marketing, facility, and travel related costs to drive active subscription growth in Ting markets given the increase in serviceable addresses available to Ting and to support our growing workforce in select Ting towns across the United States.

Excluding movements in exchange rates, we expect sales and marketing expenses for Fiscal 2024 to increase in absolute dollars, as we adjust our marketing programs and sales and customer support personnel costs to facilitate the continued expansion of our operations.

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)

	<u>Year ended December 31,</u>	
	<u>2023</u>	<u>2022</u>
Technical operations and development	\$ 19,217	\$ 14,187
Increase over prior period	\$ 5,030	
Increase - percentage	35%	
Percentage of net revenues	6%	4%

Technical operations and development expenses for Fiscal 2023 increased by \$5.0 million, or 35%, to \$19.2 million. The increase was primarily related to the investment in hiring additional personnel for Ting and Wavelo. Outside of additional hiring, personnel costs were further impacted by wage inflation sustained from prior years due to broader economic conditions in order to attract, retain technical operations and development personnel, primarily for Wavelo. In addition to these personnel and related costs, both contracted services for tools, systems and labor to support the technical operations and development of our systems and platforms increased compared to Fiscal 2022.

Excluding movements in exchange rates, we expect technical operations and development expenses for Fiscal 2024, in absolute dollars, to increase when compared to Fiscal 2023 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,	
	2023	2022
General and administrative	\$ 33,406	\$ 30,845
Increase over prior period	\$ 2,561	
Increase - percentage	8%	
Percentage of net revenues	10%	10%

General and administrative expenses for Fiscal 2023 increased by \$2.6 million, or 8%, to \$33.4 million as compared to Fiscal 2022. The increase was primarily driven by higher professional fees incurred in the current period, higher property tax and other expenses with the Ting segment consistent with the continued expansion of Ting Internet footprint throughout the United States, and personnel costs driven by continued investment in the administrative teams to better support our segments as well as restructuring costs incurred as part of corporate reorganization.

Excluding movements in exchange rates, we expect general and administrative expenses for Fiscal 2024, in absolute dollars, to increase when compared to Fiscal 2023 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,	
	2023	2022
Depreciation of property and equipment	\$ 567	\$ 598
Decrease over prior period	\$ (31)	
Decrease - percentage	(5)%	
Percentage of net revenues	-%	-%

Depreciation costs for Fiscal 2023 decreased by less than \$0.1 million to \$0.6 million as compared to Fiscal 2022. The slight decrease was due to lower additions to property and equipment, in particular computer hardware, in Fiscal 2023 while additions from prior years became fully depreciated.

LOSS (GAIN) ON DISPOSAL OF PROPERTY AND EQUIPMENT

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

	Year ended December 31,	
	2023	2022
Loss on disposition of property and equipment	\$ -	\$ 461
Decrease over prior period	\$ (461)	
Decrease - percentage	(100)%	
Percentage of net revenues	-%	-%

Loss on disposal of property and equipment decreased by \$0.5 million to nil as compared to Fiscal 2022. The decrease was a result of Fiscal 2022 including a disposal of minor internal use software related to Tucows Domains for which the Company no longer expects to realize the initial use and intended benefit that it initially did when those development costs were initially capitalized. No such disposals exist during the current period.

AMORTIZATION OF INTANGIBLE ASSETS

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

	Year ended December 31,	
	2023	2022
Amortization of intangible assets	\$ 9,323	\$ 9,882
Decrease over prior period	\$ (559)	
Decrease - percentage	(6)%	
Percentage of net revenues	3%	3%

Amortization of intangible assets decreased by \$0.6 million, to \$9.3 million as compared to Fiscal 2022. This decrease in amortization was a driven in part by the completed amortization of customer relationships associated with the Company's Fiscal 2016 acquisition of Melbourne IT assets. The amortization of the related customer relationships was completed during the three months ended March 31, 2023.

Network rights, brand and customer relationships acquired in connection with the following acquisitions are amortized on a straight-line basis over a range of two to seven years: eNom in January 2017, Ascio in March of 2019, Cedar in January 2020 and Simply Bits in November 2021.

OTHER INCOME (EXPENSES)

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

	Year ended December 31,	
	2023	2022
Other income (expense), net	\$ (39,418)	\$ 3,874
Increase over prior period	\$ (43,292)	
Increase - percentage	(1,118)%	
Percentage of net revenues	12%	1%

Other income decreased by \$43.3 million when compared to Fiscal 2022. This was driven by a \$49.7 million increase in expense during Fiscal 2023. The increase in interest expense was driven by a \$21.7 million increase in connection with Ting's Generate preferred units and 2023 Term Notes, \$14.7 million relating to the make-whole premium payable to Generate, a result of the redemption of Series A Preferred Units held by Generate, and the residual \$13.3 million relates primarily to the interest expense on the Credit Facility for the Tucows businesses excluding Ting. In addition to higher interest expense, the Company experienced a \$1.5 million decrease in the gain on sale of Ting Customer Assets to DISH in the current period. As described above, the Company receives a payout on the margin associated with the legacy customer base sold to DISH over the 10-year term of the agreement, as form of consideration for the sale of the legacy customer relationships. The Company expects the gain on the sale of Ting Customer Assets to continue to decrease over the term of the payout as legacy customers naturally churn away from Ting Mobile. These decreases to Other Income were partially offset by a \$4.4 million increase primarily from the inclusion of interest income following the execution of Ting's 2023 Term Notes as well as \$3.4 million increase primarily from the capitalization for interest expense related to the Fiber network assets under construction as part of our Ting segment.

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,	
	2023	2022
Provision for income taxes	\$ (6,873)	\$ (217)
Decrease in provision over prior period	\$ (6,656)	
Decrease - percentage	3,067%	
Effective tax rate	7%	1%

Income taxes decreased by \$6.6 million and the effective tax rate increased from 1% to 7% when compared to the year ended December 31, 2022. The increase in effective tax rate is primarily due the change in valuation allowance on net operating losses and interest expense limitation and a decrease in state income taxes as a percentage of net income before tax for the year, and it is partially offset by an increase in the impact of foreign earnings.

Our effective tax rate for the year ended December 31, 2023 differs from the U.S. federal statutory rate primarily due to changes in valuation allowance on net operating losses and interest limitation, and the impact of foreign earnings.

A reconciliation of the federal statutory income tax rate to our effective tax rate is set forth in "Note 10 – Income Taxes" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

ADJUSTED EBITDA

We believe that the provision of this supplemental non-GAAP measure allows investors to evaluate the operational and financial performance of our core business using similar evaluation measures to those used by management. We use Adjusted EBITDA to measure our performance and prepare our budgets. Since Adjusted EBITDA is a non-GAAP financial performance measure, our calculation of Adjusted EBITDA may not be comparable to other similarly titled measures of other companies; and should not be considered in isolation, as a substitute for, or superior to measures of financial performance prepared in accordance with GAAP. Because Adjusted EBITDA is calculated before recurring cash charges, including interest expense and taxes, and is not adjusted for capital expenditures or other recurring cash requirements of the business, it should not be considered as a liquidity measure. For liquidity measures, see the Consolidated Statements of Cash Flows included in Part II, Item 8 of this Annual Report. 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 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 provision for income tax, depreciation, amortization of intangible assets, asset impairment, interest expense (net), loss on debt extinguishment, accretion of contingent liabilities, stock-based compensation, gains and losses from unrealized foreign currency transactions and costs that are one-time in nature and not indicative of on-going performance (profitability), including acquisition and transition costs. Gains and losses from unrealized foreign currency transactions removes the unrealized effect of the change in the mark-to-market values on outstanding foreign currency contracts not designated in accounting hedges, 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 Income before Provision for Income Taxes to Adjusted EBITDA (In Thousands of US Dollars)	Twelve months ended December 31,		
	2023	2022	2021
Net Income (Loss) for the period	\$ (96,197)	\$ (27,571)	\$ 3,364
Less:			
Provision for income taxes	(6,873)	(217)	3,906
Depreciation of property and equipment	36,431	28,187	17,986
Impairment and loss on disposition of property and equipment	4,822	553	435
Amortization of intangible assets	10,829	11,394	10,007
Interest expense, net	41,771	14,456	4,617
Loss on debt extinguishment	14,680	-	-
Accretion of contingent liability	-	248	383
Stock-based compensation	8,134	7,599	4,592
Unrealized loss (gain) on change in fair value of foreign currency forward contracts	-	-	606
Unrealized loss (gain) on foreign exchange revaluation of foreign denominated monetary assets and liabilities	(62)	281	219
Acquisition and other costs ¹	1,916	2,660	2,706
Adjusted EBITDA	\$ 15,451	\$ 37,590	\$ 48,821

¹ Acquisition and other costs represent transaction-related expenses, transitional expenses, such as redundant post-acquisition expenses, primarily related to our acquisitions, including Simply Bits in November 2021. 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, 2023 decreased by \$22.1 million, or 59% to \$15.5 million when compared to the year ended December 31, 2022. The decrease in Adjusted EBITDA from period-to-period was primarily driven by decreased contribution from Ting, mobile services and eliminations, and Tucows Domains. The Ting contribution decreased \$22.6 million, from the continued investment in costs required to execute on the Ting Internet network build and expansion plan, partially offset by subscriber growth across the markets we serve. Mobile services and eliminations contribution decreased \$4.0 million from lower mobile telephony and transitional service revenues as well as increased penalties associated with the MNO minimum commitment. Tucows Domains contribution decreased \$2.2 million from lower value added service proceeds generated across brands partnered with the escalating registry costs for gTLDs. These decreases were partially offset by Wavelo contribution increasing \$6.7 million primarily driven increased MONOS platform revenues earned from the completed migration of the DISH Boost subscriber base to the platform, offset partially by investment in network, technical operations and development, and marketing costs in the current period.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2023, our cash and cash equivalents balance increased \$69.2 million, our secured notes reserve funds balance which is maintained with the Indenture Trustee until the maturity of the 2023 Term Notes increased by \$8.7 million, and our restricted cash balance increased by \$3.6 million, when compared to December 31, 2022. The increase in our cash balance was driven primarily by \$227.3 million in proceeds from the issuance of notes payable, \$52.4 million from the proceeds of the syndicate revolver, and \$35.0 million in proceeds from redeemable preferred units, and \$0.1 million from additional deferred preferred financing costs. These increases were partially offset by \$92.1 million for the continued investment in property and equipment primarily driven by Ting Internet expansion, \$80.2 million related to the repayment of the syndicated revolver, \$45.7 million for the cash payment for the redeemable preferred units redemption, \$6.7 million related to deferred notes payable financing costs, \$4.8 million from cash used in operating activities, \$1.7 million related to the deferred issuance cost of the syndicate revolver, \$1.6 million related to the payment of contingent consideration related to the acquisition of Cedar, and \$0.5 million related to the acquisition of intangible assets.

Third Amended 2019 Credit Facility

In connection with entering into the 2023 Credit Agreement, on September 22, 2023, the Company paid off the principal balance, including accrued interest thereon, of the revolving loans outstanding under the Third Amended and Restated Credit Agreement (the "RBC Credit Agreement"), dated as of August 8, 2022, as amended, by and among the Company, certain subsidiaries of the Company as borrowers, certain other subsidiaries of the Company as guarantors, Royal Bank of Canada, as administrative agent ("RBC"), and the lenders party thereto, pursuant to which Tucows' prior credit facility that provided the Borrowers with a \$240 million revolving credit facility (the "2019 Credit Facility"). The RBC Credit Agreement automatically terminated upon the receipt by RBC of certain backstop letters of credit to be delivered by BMO.

2023 Credit Facility

On September 22, 2023, the Company and its wholly owned subsidiaries, Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Wavelo, Inc. and Tucows (Emerald), LLC (each, a "Borrower" and together, the "Borrowers," collectively with the Company) and certain other subsidiaries of the Company, as guarantors, entered into the 2023 Credit Agreement with Bank of Montreal, as administrative agent ("BMO" or the "Agent"), and the lenders party thereto, to, among other things, provide the Borrowers with a revolving credit facility in an aggregate amount not to exceed \$240 million (the "2023 Credit Facility"). The Borrowers may request an increase to the 2023 Credit Facility through new commitments of up to \$60M if the Total Funded Debt to Adjusted EBITDA Ratio (as defined in the 2023 Credit Agreement) is less than 3.75:1.00. The Credit Facility expires on September 22, 2026, which is the third anniversary of the effective date of the 2023 Credit Facility.

The 2023 Credit Agreement contains customary representations and warranties, affirmative and negative covenants, and events of default. The 2023 Credit Agreement requires that the Company comply with certain customary non-financial covenants and restrictions. In addition, the Company has agreed to comply with the following financial covenants: (1) a leverage ratio by maintaining at all times a Total Funded Debt to Adjusted EBITDA Ratio of not more than (i) 4.50:1.00 at any time from and after the Closing Date to and including December 30, 2023; (ii) 4.25:1.00 from December 31, 2023 to and including March 30, 2024; (iii) 4.00:1.00 from March 31, 2024 to and including June 29, 2024; and (iv) 3.75:1.00 thereafter; and (2) an interest coverage ratio by maintaining as of the end of each rolling four financial quarter period, an Interest Coverage Ratio (as defined in the 2023 Credit Agreement) of not less than 3.00:1.00.

During Fiscal 2023, the Company made net repayments of \$27.8 million towards the 2023 Credit Facility and the previous facility. The Company ended December 31, 2023 with a remaining principal balance of \$211.9 million, for which the required repayment is due in 2026.

As of December 31, 2023, the Company held contracts in the amount of \$61.4 million with BMO to trade U.S. dollars in exchange for Canadian dollars under an uncommitted treasury risk management facility which assists the Company with hedging Canadian dollar exposures. Please see the discussion in the Material Cash Requirements section below.

Cash Flow from Operating Activities

Year ended December 31, 2023

Net cash inflows (outflows) from operating activities were (\$4.8) million, a decrease of 124% when compared to the prior year. After adjusting for non-cash charges, the Company reported a net loss of (\$17.2) million during Fiscal 2023, a decrease of 216% when compared to the prior year. Net income included non-cash charges and recoveries of \$79.0 million such as depreciation, loss on debt extinguishment, accretion of redeemable preferred units, amortization of intangible assets, stock-based compensation, impairment of property and equipment, amortization of debt discount and issuance costs, loss (gain) on change in fair value of currency forward contracts, write off of debt discount and issuance cost, loss on disposal of domain names, net right of use operating asset or liability, net amortization of contract costs, amortization of discontinued cash flow hedge, and deferred income taxes (recovery). In addition, changes in our working capital contributed to a net cash inflow of \$12.5 million. Positive contributions of \$22.7 million from movements in accrued liabilities, contract asset, customer deposits, deferred revenue, income taxes recoverable, and inventory, were partially offset by utilized cash of \$10.2 million from the changes in accounts payable, accounts receivable, deferred costs of fulfillment, prepaid expenses and deposits, and accreditation fees payable.

Year ended December 31, 2022

Net cash inflows from operating activities were \$19.9 million, a decrease of 33% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2022 was \$14.8 million, a decrease of 53% when compared to the prior year. Net income included non-cash charges and recoveries of \$42.4 million such as depreciation, amortization, stock-based compensation, loss (gain) on change in fair value of currency forward contracts, net right of use operating asset or liability, accretion of contingent consideration, amortization of debt discount and issuance costs, impairment of property and equipment, loss on disposal of domain names, net amortization of contract costs, excess tax benefits on stock-based compensation, accretion of redeemable preferred units, and deferred income taxes (recovery). In addition, change in our working capital contributed net cash of \$5.0 million. Utilized cash of \$18.5 million from the changes in the contract asset from DISH, inventory, accounts receivable, deferred revenue, customer deposits and accreditation fees payable were offset by positive contributions of \$23.5 million from movements in accrued liabilities, accounts payable, prepaid expenses and deposits, income taxes recoverable, and deferred costs of fulfillment.

Year ended December 31, 2021

Net cash inflows from operating activities were \$29.6 million, a decrease of 18% when compared to the prior year. Net income, after adjusting for non-cash charges, during Fiscal 2021 was \$31.6 million, a decrease of 12% when compared to the prior year. Net income included non-cash charges and recoveries of \$28.3 million such as depreciation, amortization, impairment of indefinite life intangible asset, loss on write-off of property and equipment, write-down on disposal of Ting Mobile customer assets and contract costs, 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 reduced by a working capital change of \$2.0 million. We generated \$11.1 million from movements in accounts receivable, accounts payable, accrued liabilities, and customer deposits. These positive contributions were offset by cash use of \$13.1 million from deferred revenue, prepaid expenses and deposits, deferred costs of fulfillment, income taxes recoverable, contract asset, inventory, and accreditation fees payable.

Cash Flow from Financing Activities

Year ended December 31, 2023

Net cash inflows from financing activities during Fiscal 2023 totaled \$178.8 million as compared to cash inflows of \$132.0 million during Fiscal 2022. Total cash inflows were driven by \$227.3 million of proceeds from the issuance of notes payable, \$52.4 million of proceeds from the syndicate revolver, \$35.0 million of proceeds from redeemable preferred units issued to Generate, and \$0.1 million from additional deferred preferred financing costs. These cash inflows were partially offset by \$80.2 million related to the repayment of the syndicate revolver, \$45.7 million related to the redemption of preferred units held by Generate, \$6.7 million from deferred notes payable financing costs, \$1.7 million related to the syndicate revolver issued, and \$1.6 million related to the payment of contingent consideration related to the acquisition of Cedar.

Year ended December 31, 2022

Net cash inflows from financing activities during Fiscal 2022 totaled \$132.0 million as compared to cash inflows of \$73.1 million during Fiscal 2021. Total cash inflows were driven by \$87.5 million of proceeds from redeemable preferred units issued to Generate, \$48.3 million of proceeds received from drawdown of the Amended Credit Facility, as well as \$1.1 million from proceeds received on the exercise of stock options. These cash inflows were partially offset by \$3.1 million for contingency consideration related to the acquisition of Cedar and Simply Bits, \$1.0 million related to deferred preferred unit financing costs for Ting, and \$0.7 million related to the payment of loan payable costs.

Year ended December 31, 2021

Net cash inflows from financing activities during Fiscal 2021 totaled \$73.1 million as compared to cash inflows of \$5.1 million during Fiscal 2020. Net cash inflows of \$69 million resulting from draws on the Second Amended 2019 Credit Facility and \$4.8 million from proceeds received on the exercise of stock options. These cash inflows were partially offset by \$0.4 million outflow from the net impact of exercise of stock options and \$0.3 million of loan costs.

Cash Flow from Investing Activities

Year ended December 31, 2023

Investing activities during the Fiscal 2023 used net cash of \$92.6 million as compared to using \$137.5 million during Fiscal 2022. Cash outflows of \$92.1 million primarily related to the investment in property and equipment, primarily to support the continued expansion of our Ting Internet Fiber network footprints in Colorado, North Carolina, California, and Virginia as we seek to extend both our current network and expand to new markets. In addition to investment in property and equipment, the current period used \$0.5 million for the acquisition of other intangible assets.

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.

Year ended December 31, 2022

Investing activities during the Fiscal 2022 used net cash of \$137.5 million as compared to using \$102.0 million during Fiscal 2021. Cash outflows of \$136.7 million related to the investment in property, equipment and intangible assets, primarily to support the continued expansion of our Ting Internet Fiber network footprints in California, Colorado, Idaho, North Carolina, and Virginia as we seek to extend both our current network and expand to new markets. We expect our capital expenditures to continue to increase during Fiscal 2023. In addition to investment in property, equipment and intangible assets, the current period used \$0.8 million for the acquisition of other intangible assets.

Year ended December 31, 2021

Investing activities during the Fiscal 2021 used net cash of \$102.0 million as compared to using \$53.3 million during Fiscal 2020. Cash outflows of \$73.9 million related to the investment in property, equipment and intangible assets, primarily to support the continued expansion of our fiber footprint. The Company continues to invest in our existing Ting Towns of Centennial, Colorado, Charlottesville, Virginia, Fuquay-Varina, North Carolina, Wake Forest, North Carolina, Holly Springs, North Carolina, Sandpoint, Idaho, Rolesville, North Carolina and Culver City, California as we seek to extend both our current network and expand to new markets. In addition to investment in property, equipment and intangible assets, the current period used \$24 million in connection with the acquisition of Simply Bits, used \$2.5 million in connection with the acquisition of Uniregistry and used \$2.0 million for an investment in an unrelated entity. These cash outflows were partially offset by \$0.5 million from proceeds on disposal of property and equipment.

Off Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of December 31, 2023.

Material Cash Requirements

At December 31, 2023, the Company's Cash and cash equivalents, restricted cash and secured notes reserve funds balances totaled \$105.0 million, of which \$94.7 million belonged to Ting and \$10.3 million belonged to the other Tucows businesses.

Ting

Prior to the Company entering into a securitized financing agreement on May 4, 2023, Ting's operating losses, acquisitions, and capital investments were funded by the UPA executed August 8, 2022. The securitized financing agreement provided Ting with capital commitments of \$200 million, if the milestones are achieved over the three-year period following the Transaction Close date the milestones are achieved. On May 4, 2023, Ting Fiber, LLC executed the Ting Class C Notes - Redemption Agreement (the "Redemption Agreement") and the Ting Class C Notes – Side Letter (the "Side Letter Agreement") with Generate. The total redemption price was \$45.7 million, which included a make-whole payment of \$14.7 million. As of December 31, 2023 the balancing owing on the UPA was \$111.9 million, with remaining capital commitments of \$108.5 million ("Note 14 - Redeemable preferred units" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report). On May 4, 2023, Tucows Inc. through its indirect and wholly owned subsidiaries, including Ting Fiber, LLC entered into a definitive agreement relating to a securitized financing facility where Ting Issuer LLC, a Delaware limited liability company, issued the 2023 Term Notes for a total value of \$238.5 million ("Note 9 - Notes Payable" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report). The combination of these agreements is expected to fund Ting operations of the next 12 months.

In the next 12 months, Ting has capital purchase commitments of \$12.3 million, redeemable preferred unit interest commitments of \$7.4 million, lease commitments of \$5.8 million and other operating expense commitments of \$2.1 million. Ting has no debt repayment commitments due in the next 12 months. We believe that Ting's current cash and cash equivalents as well as the remaining capital commitments will be sufficient to fund Ting's commitments over the next 12 months. Other than the aforementioned \$12.3 million in purchase commitments, all other capital expenditures are discretionary in nature.

In the long-term, Ting intends to continue the rapid expansion of its Internet footprint through construction activities, joint ventures and acquisitions. Future expansion of the Ting Internet footprint will continue to require further debt and equity financing. Our future expansion of the Ting Internet footprint and access to additional financing will depend on a range of factors, including economic, competitive and business factors as well as changes in government monetary or fiscal policy. Redemptions under the Unit Purchase Agreement are expected to be funded by growth in future cash flows, equity financing as well as alternative debt financing.

Tucows Businesses Excluding Ting

Tucows businesses excluding Ting, acquisitions and capital investments have been funded by the Company's operating income and the Company's existing 2023 Credit Agreement. As of December 31, 2023, the Company's 2023 Credit Facility had an outstanding balance of \$211.9 million. Tucows businesses excluding Ting make principal repayments from time to time. Future interest payments associated with the 2023 Credit Facility, for the fiscal year ending in 2024, are estimated to total \$17.8 million, using estimated interest rates and assuming that no repayments will be made ("Note 8 - Syndicate Revolver" of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report).

In the next 12 months, Tucows businesses excluding Ting have lease commitments of \$0.9 million and other operating expense commitments of \$17.3 million. Tucows businesses excluding Ting have no capital expenditure commitments. We believe that the current cash and cash equivalents as well as operating cash flow of Tucows businesses excluding Ting will be sufficient to fund their commitments over the next 12 months. For Fiscal 2024, the Company plans to fund the cash requirements of Tucows businesses excluding Ting solely through operating income, while making discretionary loan repayments to create greater operating flexibility and access to additional financing.

In the long-term, Tucows businesses excluding Ting may seek additional financing to accelerate the growth of our Wavelo business, repurchase shares or future acquisitions. The Company's 2023 Credit Facility expires on September 30, 2026 and the Company will be required to refinance the 2023 Credit Facility once it becomes due.

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 our 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, 2023.

We are also subject to market risk exposure related to changes in interest rates under our 2023 Credit Agreement. Changes in interest rates will impact our borrowing cost. 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 act 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.

As of December 31, 2023, we had the following outstanding foreign exchange forward contracts to trade U.S. dollars in exchange for Canada dollars:

<u>Maturity date (Dollar amounts in thousands of U.S. dollars)</u>	<u>Notional amount of U.S. dollars</u>	<u>Weighted average exchange rate of U.S. dollars</u>	<u>Fair value</u>
January - March 2024	16,840	1.3664	592
April - June 2024	13,840	1.3678	507
July - September 2024	16,974	1.3697	652
October - December 2024	13,795	1.3686	526
	<u>\$ 61,449</u>	1.3681	<u>\$ 2,277</u>

As of December 31, 2023, the Company had \$61.4 million of outstanding foreign exchange forward contracts which will convert to CDN \$84.1 million. Of these contracts, \$61.4 million met the requirements for hedge accounting.

As of December 31, 2022, the Company had \$49.7 million of outstanding foreign exchange forward contracts which will convert to CDN \$67.0 million. Of these contracts, \$49.7 million met the requirements for hedge accounting.

We have performed a sensitivity analysis model for foreign exchange exposure during the year ended December 31, 2023. The analysis used a modeling technique that compares the U.S. dollar equivalent of all expenses incurred in Canadian dollars, at the actual exchange rate, to a hypothetical 10% adverse movement in the foreign currency exchange rates against the U.S. dollar, with all other variables held constant. Foreign currency exchange rates used were based on the market rates in effect during the year ended December 31, 2023. The sensitivity analysis indicated that a hypothetical 10% adverse movement in foreign currency exchange rates would result in a decrease in pre-tax net income for the year ended December 31, 2023 of approximately \$6.8 million, before the effects of hedging. We will continue to monitor and assess the risk associated with these exposures and may take additional actions in the future to hedge or mitigate these risks.

Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash equivalents, marketable securities, foreign exchange contracts and accounts receivable. Our cash, cash equivalents and short-term investments are in high-quality securities placed with major banks and financial institutions whom we have evaluated as highly creditworthy, and commercial paper. Similarly, we enter into our foreign exchange contracts with major banks and financial institutions. With respect to accounts receivable, we perform ongoing evaluations of our customers, generally granting uncollateralized credit terms to our customers, and maintaining an allowance for doubtful accounts based on historical experience and our expectation of future losses.

Interest rate risk

Our exposure to interest rate fluctuations relate primarily to the 2023 Credit Agreement.