



Tucows Inc.
2023 Annual Report

CONTENTS

Tucows Inc. Annual Report on Form 10-K
for Fiscal Year Ended December 31, 2023

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO
SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-32600

Tucows Inc.

(Exact Name of Registrant as Specified in Its Charter)

Pennsylvania
(State or Other Jurisdiction of Incorporation or Organization)

23-2707366
(I.R.S. Employer Identification No.)

96 Mowat Avenue
Toronto, Ontario, Canada
(Address of Principal Executive Offices)

M6K 3M1
(Zip Code)

Registrant's telephone number, including area code: (416) 535-0123

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common stock, no par value	TCX	NASDAQ Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934.

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to Section 13(a) of the Securities Exchange Act of 1934. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b), indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. Yes ☐ No ☐

Indicate by check mark whether any of such error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to § 240.10D-1(b). Yes ☐ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of Act). Yes ☐ No ☒

As of June 30, 2023, (the last day of our most recently completed second quarter), the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$161.3 million. Such aggregate market value was computed by reference to the closing sale price per share of \$27.74 as reported on the NASDAQ Capital Market on such date. For purposes of making this calculation, the registrant has excluded each executive officer, each director and each beneficial owner of more than ten percent of the outstanding shares of common stock of the Company. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares outstanding of the registrant's common stock as of March 27, 2024, was 10,928,623.

TUCOWS INC.
ANNUAL REPORT ON FORM 10-K
For Fiscal Year Ended December 31, 2023

TABLE OF CONTENTS

		<u>Page</u>
	PART I	
Item 1	Business	3
Item 1A	Risk Factors	9
Item 1B	Unresolved Staff Comments	22
Item 1C	Cybersecurity	22
Item 2	Properties	23
Item 3	Legal Proceedings	23
Item 4	Mine Safety Disclosures	23
	PART II	
Item 5	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	24
Item 6	Reserved	26
Item 7	Management’s Discussion and Analysis of Financial Condition and Results of Operations	26
Item 7A	Quantitative and Qualitative Disclosures About Market Risk	49
Item 8	Financial Statements and Supplementary Data	50
Item 9	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	50
Item 9A	Controls and Procedures	50
Item 9B	Other Information	51
Item 9C	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	51
	PART III	
Item 10	Directors, Executive Officers and Corporate Governance	52
Item 11	Executive Compensation	59
Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	74
Item 13	Certain Relationships and Related Transactions, and Director Independence	76
Item 14	Principal Accountant Fees and Services	77
	PART IV	
Item 15	Exhibits and Financial Statement Schedules	78
Item 16	Form 10-K Summary	80

TRADEMARKS, TRADE NAMES AND SERVICE MARKS

Tucows®, EPAG®, Hover®, OpenSRS®, Platypus®, Ting®, eNom®, Roam®, Roam Mobility®, Bulkregister®, Ascio®, Cedar®, YummyNames®, Simply Bits®, and Wavelo® are registered trademarks of Tucows Inc. or its subsidiaries. Other service marks, trademarks and trade names of Tucows Inc. or its subsidiaries may be used in this Annual Report on Form 10-K (this “Annual Report”). All other service marks, trademarks and trade names referred to in this Annual Report are the property of their respective owners. Solely for convenience, any trademarks referred to in this Annual Report may appear without the ® or TM symbol, but such references are not intended to indicate, in any way, that we or the owner of such trademark, as applicable, will not assert, to the fullest extent under applicable law, our or its rights, or the right of the applicable licensor, to these trademarks.

Information Concerning Forward-Looking Statements

This Annual Report on Form 10-K contains, in addition to historical information, forward-looking statements by Tucows Inc. (the “Company”, “we”, “us” “Tucows” or “our”) with regard to our expectations as to financial results and other aspects of our business that involve risks and uncertainties and may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “may,” “should,” “anticipate,” “believe,” “plan,” “estimate,” “expect,” and “intend,” and other similar expressions are intended to identify forward-looking statements. The forward-looking statements contained in this report include statements regarding, among other things, the competition we expect to encounter as our business develops and competes in a broader range of Internet services, the Company's foreign currency requirements, specifically for the Canadian dollar and Euro; Wavelo, and Ting subscriber growth and retention rates; the number of new, renewed and transferred-in domain names we register as our business develops and competes; the effect of a potential generic top level domain (“gTLD”) expansion by the Internet Corporation for Assigned Names and Numbers (“ICANN”) on the number of domains we register and the impact it may have on related revenues; our belief regarding the underlying platform for our domain services; our expectation regarding the trend of sales of domain names; our belief that, by increasing the number of services we offer, we will be able to generate higher revenues; our expectation regarding litigation; the potential impact of current and pending claims on our business; our valuations of certain deferred tax assets; our expectation to collect our outstanding receivables, net of our allowance for doubtful accounts; our expectation regarding fluctuations in certain expense and cost categories; our expectations to obtain additional financing to further accelerate the Ting Internet footprint while sustaining liquidity; our expectations regarding our unrecognized tax; our expectations regarding cash from operations to fund our business; the impact of cancellations of or amendments to market development fund programs under which we receive funds; our expectation regarding our ability to manage realized gains/losses from foreign currency contracts; our partnership with an affiliate of Generate TF Holdings, LLC, a Delaware limited liability company (“Generate”); and general business conditions and economic uncertainty. These statements are based on management’s current expectations and are subject to a number of uncertainties and risks that could cause actual results to differ materially from those described in the forward-looking statements. Many factors affect our ability to achieve our objectives and to successfully develop and commercialize our services including:

- Our ability to continue to generate sufficient working capital to meet our operating requirements;
- Our ability to service our debt commitments and preferred unit commitments;
- Our ability to maintain a good working relationship with our vendors and customers;
- The ability of vendors to continue to supply our needs;
- Actions by our competitors;
- Our ability to attract and retain qualified personnel in our business;
- Our ability to effectively manage our business;
- The effects of any material impairment of our goodwill or other indefinite-lived intangible assets;
- Our ability to obtain and maintain approvals from regulatory authorities on regulatory issues;
- Our ability to invest in the build-out of fiber networks into selected towns and cities to provide Internet access services to residential and commercial customers while maintaining the development and sales of our established services;
- Adverse tax consequences such as those related to changes in tax laws or tax rates or their interpretations, including with respect to the impact of the Tax Cuts and Jobs Act of 2017 and the Organization for Economic Cooperation and Development (“OECD”) model global minimum tax rules;
- Our ability to effectively respond or comply with new data protection regulations and any conflicts that may arise between such regulations and our ICANN contractual requirements;
- The application of business judgment in determining our global provision for income taxes, deferred tax assets or liabilities or other tax liabilities given that the ultimate tax determination is uncertain;
- Our ability to effectively integrate acquisitions;
- Our ability to monitor, assess and respond to changing geopolitical and economic environments including rising inflation and interest rates;
- Our ability to collect anticipated payments from DISH in connection with the 10-year payment stream that is a function of the margin generated by the transferred subscribers over a 10-year period pursuant to the terms of the Asset Purchase Agreement dated August 1, 2020 between the Company and DISH Wireless LLC (“DISH”) (the “DISH Purchase Agreement”);
- Our ability to meet the operational and financial drawdown milestones under the Unit Purchase Agreement with Generate, which provides the Company with the ability to obtain additional financing to invest in the expansion of fiber networks;
- Our ability to maintain compliance with the operational and financial covenants of the 2023 Notes as defined in “Note 9 - Notes Payable” of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report, which provides the Company with financing to invest in the expansion of fiber networks;
- Our ability to maintain the safety and security of our systems and data;
- Pending or new litigation; and
- Factors set forth herein under the caption “Item 1A Risk Factors”.

This list of factors that may affect our future performance and financial and competitive position and the accuracy of forward-looking statements is illustrative, but it is by no means exhaustive. Accordingly, all forward-looking statements should be evaluated with the understanding of their inherent uncertainty. All forward-looking statements included in this document are based on information available to us as of the date of this document, and we assume no obligation to update these cautionary statements or any forward-looking statements, except as required by law. These statements are not guarantees of future performance.

We qualify all the forward-looking statements contained in this Annual Report on Form 10-K by the foregoing cautionary statements.

PART I

ITEM 1. BUSINESS

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"). 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 operating decisions as well as 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, including 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.

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.

Tucows Domains

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.

Additional information about segments can be found in “Note 21 – Segment Reporting” of the Notes to the Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

Intellectual Property

We believe that we are well positioned in the wholesale domain registration and email markets due in part to our highly-recognized “Tucows”, “OpenSRS”, “Ascio” and “eNom” brands and the respect they confer on us as a defender of end-user rights and reseller-friendly approaches to doing business. We were among the first group of 34 registrars to be accredited by ICANN in 1999, and we remain active in Internet governance issues.

Our success and ability to compete depend on our ability to develop and maintain the proprietary aspects of our brand name and technology. We rely on a combination of trademark, trade secret and copyright laws, as well as contractual restrictions to protect our intellectual property rights.

We have registered the Tucows trademark in the United States, Canada and the European Union and we register additional service marks and trademarks as appropriate and where such protection is available.

We seek to limit disclosure of our intellectual property by requiring all employees and consultants with access to our proprietary information to commit to confidentiality, non-disclosure and work-for-hire agreements. All of our employees are required to sign confidentiality and non-use agreements, which provide that any rights they may have in copyrightable works or patentable technologies accrue to us. Before entering into discussions with potential vendors and partners about our business and technologies, we require them to enter into a non-disclosure agreement. If these discussions result in a license or other business relationship, we also generally require that the agreement containing the parties’ rights and obligations include provisions for the protection of its intellectual property rights.

Customers

Within the Ting segment, customers are a very broad mix of consumers, small businesses and corporations seeking high-speed Internet services. Wavelo offers services to a small number of CSPs focused in the U.S. along with DISH, their largest external customer, and Ting, their internal customer, until such time we expand these offerings to other MVNOs or MNOs. The majority of the customers to whom we provide services as Tucows Domains are generally either web hosts or ISPs. A small number of customers are consultants and designers providing our services to their business clients, or retail consumers registering a personal domain name.

During the year ended December 31, 2023 one customer, DISH, accounted for 11% of revenue. For the years ended December 31, 2022 and December 31, 2021 no customer accounted for more than 10% of total revenue.

While our customers are capitalizing on the growth in Internet usage and the demand for new services, they also face significant competition from numerous other service providers with competitive or comparable offerings. This has led customers within our Wavelo and Tucows Domains segments to focus on core competencies, and increasingly seeking to outsource non-core services. Outsourcing enables these customers to better focus on customer acquisition and retention efforts by eliminating the need to own, develop and support non-core applications in-house. In the case of Tucows Domains, this supports our Value-Added Services offerings, and for Wavelo this supports our go-to-market efforts to offer full-service platforms providing a variety of solutions that support CSPs, including subscription and billing management, network orchestration and provisioning, and individual developer tools.

Seasonality

During the summer months and certain other times of the year, such as major holidays, Internet usage often declines. As a result, some of our services (such as OpenSRS, eNom, Ascio, and Hover) may experience reduced demand during these times. In addition, the first quarter of the fiscal year will often see higher deferred revenues in regard to domain names due to most renewals occurring on January 1. The demand for Ting and Wavelo services is not impacted by seasonality. However, in certain Ting markets we operate in, construction activities associated with adding new serviceable addresses can be impacted by seasonal climate.

Competition

Our competitors may be divided into the following groups:

Ting

- U.S. Broadband providers such as AT&T, Comcast, Verizon and Lumen Technologies, who primarily compete with Ting Internet services.

Tucows Domains

- Retail-oriented domain registrars, such as GoDaddy and Web.com, who compete with our Reseller customers in wholesale domain services and with Hover.
- Wholesale-oriented domain registrars, such as GoDaddy, who market services to resellers such as our customers.
- Wholesale Email Service providers, such as Google, Microsoft, Bluetie and MailTrust.

Wavelo

- Traditional BSS/OSS providers such as Amdocs, Netcracker, Ericsson, Optiva and Sonar Software, who primarily compete with Wavelo's platforms and services.

We expect to continue to experience significant competition from the competitors identified above and, as our business continues to develop, we expect to encounter competition from other providers. Service providers, Internet portals, web hosting companies, email hosting companies, outsourced application companies, country code registries and major telecommunication firms may broaden their services to include services we offer.

We believe the primary competitive factors in Ting are:

- Providing a superior customer service experience;
- Providing a simple and friendly user experience through more usable web and application interfaces and more fair and transparent pricing;
- Being agnostic on Internet hardware, including network routers; and
- Providing superior technology, speed and reliability with fiber to the home services.

We believe the primary competitive factors in Tucows Domains are:

- Providing superior customer service by anticipating the technical requirements and business objectives of resellers and providing them with technical advice to help them understand how our services can be customized to meet their particular needs;
- Providing cost savings over in-house solutions by relieving resellers of the expense of acquiring and maintaining hardware and software and the associated administrative burden;
- Enabling resellers to better manage their relationships with their end-users;

- Facilitating scalability through an infrastructure designed to support millions of transactions across millions of end-users; and
- Providing superior technology and infrastructure, consisting of industry-leading software and hardware that allow resellers to provide these services to their customers without having to make substantial investments in their own software or hardware.

We believe the primary competitive factors in Wavelo are:

- Event-based architecture is the foundation to our modern platforms, which means less network bandwidth consumption and less central processing unit ("CPU") utilization, cutting costs and speeding up delivery, enabling new features, functionality and better customer experiences;
- Our product suite is modular by nature, so our platforms can work just as well together as they do independently, and alongside other best-in-class software - to fill specific gaps in operations, network provisioning, subscriber management, or anything in between; and
- CSPs are able to select the best of breed software and use it where they please, versus being forced into a traditional BSS/OSS software stack that forces them to use that providers' version of software to have full functionality.

Although we encounter pricing pressure in many markets in which we compete, we believe the effects of that pressure are mitigated by the fact that we deliver a high degree of value to our customers through our business and technical practices. We believe our status as a trusted supplier also allows us to mitigate the effects of this type of competition. We believe that the long-term relationships we have made with many customers results in a sense of certainty that would not be available to those customers through a competitor.

Human Capital Resources

Employee Profile

At Tucows, we strive to maintain a best-in-class workplace where our employees can proudly bring their whole selves to work. We believe that by creating an intentional, inclusive culture, our people have more opportunities to thrive every day.

As of December 31, 2023, we had approximately 1,045 full-time employees and 84 contracted employees globally. As a global Internet and technology company, we have a wide range of employees, including management professionals, technicians, engineers, and call center employees. None of our employees are currently represented by a labor union. We consider our relations with our employees to be good. Approximately 53% of our employees are based in Canada, followed by 36% based in the U.S., and the remaining 11% are spread across countries in Europe and other regions. Of our employees, approximately 523 support our Ting segment, 190 support our Wavelo segment, and approximately 244 support our Tucows Domains segment. The remaining 172 employees support corporate functions and shared technology services used across the Tucows group.

We offer competitive compensation in addition to employee stock options, physical and mental health benefits, learning allowances, future planning programs for employee Registered Retirement Savings Plans ("RRSP/401k") contributions, as well as generous vacation, maternity, paternity and adoption leaves for our employees.

As an organization, Tucows is proud to foster a flexible, remote-first work environment that empowers employees to find a work style that fits their individual circumstances. Some employees perform work in other environments, including fulfillment centers, customers' homes or businesses to perform service installation, and in the field to build out our network facilities.

On February 7, 2024, Ting undertook a restructuring plan to reflect the ongoing operational prioritizations of the Ting business and to lower the Company's year-over-year operating expenses, which impacted 72 employees, approximately 13% of Ting's workforce or 7% of the Company's total workforce.

People Philosophy & Inclusion

As an organization, Tucows believes in the importance of driving meaningful change and impact; from its products to its people, everything is approached with intentionality. Our People Philosophy is no different. To us, inclusion is not a standalone effort; it is intrinsically part of our employee experience, which helps us create a space where our team can proudly and comfortably bring their full selves to work.

This principle is found throughout the entire company, and is especially apparent in Tucows' benchmark-free people philosophy and company-wide efforts, such as IDEA (Inclusion, Diversity, Equity and Allyship), which anchors on the belief that diversity without inclusion, equity or allyship is futile.

To support its commitments and ensure real, tangible impact for its teams, the Company has invested in a number of resources, including: Employee Resource Groups ("ERGs") and communities, comprehensive assistance programs for employees and their families, wellness and support tools. The Company also ensures that its practices evolve to mitigate bias and protect its people, regularly updating policies and reviewing processes, such as hiring practices.

Employee Wellness

At Tucows, we're committed to fostering a workplace culture that prioritizes the mental and personal well-being of every team member. Tucows has introduced a series of initiatives that prioritize the mental and personal well-being of our employees and destigmatize mental health conversations at work. These initiatives include daily mindfulness sessions open to all employees, as well as company-wide memberships to mindfulness tools that allow employees to prioritize their well-being whenever they need.

The Company also supports eight ERGs that recognize the shared experiences of our employees. These groups include: 2SLGBTQ+, Black Future, Caregivers, Women's Leadership, Canadian Newcomers, Neurodiversity, Mental Health, and Equality and Justice. These volunteer groups connect employees with shared characteristics, life experiences and enable them to engage in activities that advance our culture and foster connectivity.

Compliance with Government Regulations

Ting

Our Fiber Internet services are also subject to a number of regulations and commitments. The Federal Communications Commission ("FCC") frequently considers imposing new broadband-related regulations such as those relating to an Open Internet. States and localities also consider new broadband-related regulations, including those regarding government-owned broadband networks, net neutrality and connectivity. Additionally, as an ISP, we must implement certain network capabilities to assist law enforcement in conducting surveillance of persons suspected of criminal activity. From time to time, the FCC considers imposing new regulatory obligations on ISPs. We are committed to an Open Internet and do not block, throttle or engage in paid or affiliated prioritization, and have committed not to block, throttle or discriminate against lawful content.

Tucows Corporate - Mobile Services

The FCC and other federal, state and local, as well as international, governmental authorities have jurisdiction over our business. The licensing, construction, operation, sale and interconnection arrangements of wireless telecommunications systems are regulated by the FCC and, depending on the jurisdiction, international, state and local regulatory agencies. In particular, the FCC imposes significant regulation on licensees of wireless spectrum with respect to how radio spectrum is used by licensees, the nature of the services that licensees may offer and how the services may be offered, and resolution of issues of interference between spectrum bands.

Wavelo

Our Wavelo Segment is less subject to government regulations and commitments because it enables subscription and billing management, network orchestration and provisioning, and individual developer tools. Outside of *General Data Protection Regulation ("GDPR")*, which creates obligations around the procurement, processing, publication and sharing of personal data, there is limited regulation or commitment to government bodies for software.

Tucows Domains

Our Tucows Domains segment is subject to regulation by ICANN, federal and state laws in the U.S. and the laws of other jurisdictions in which we do business. These include:

ICANN: The registration of domain names is governed by ICANN. ICANN is a multi-stakeholder private sector, not-for-profit corporation formed for the express purposes of overseeing a number of Internet related tasks, including management of the DNS, allocation of IP addresses, accreditation of domain name registrars and registries and the definition and coordination of policy development for all of these functions. Tucows, eNom, EPAG and Ascio are each individually accredited by ICANN as domain name registrars and thus our ability to offer domain name registration products is subject to our ongoing relationship with, and accreditation by, ICANN.

Country Code Top-Level Domain ("ccTLD") Authorities: The regulation of ccTLDs is governed by national regulatory agencies of the country underlying the specific ccTLDs, such as Canada (.ca). Our ability to sell ccTLDs is dependent on our ability to maintain accreditation in good standing with these various international authorities.

Communications Decency Act ("CDA"): The CDA generally protects online service providers, such as Tucows, from liability for certain activities of their customers, such as posting of defamatory or obscene content, unless the online service provider is participating in the unlawful conduct. Notwithstanding the general protections from liability under the CDA, we may nonetheless be forced to defend ourselves from claims of liability covered by the CDA, resulting in an increased cost of doing business.

Digital Millennium Copyright Act ("DMCA"): The DMCA provides recourse for owners of copyrighted material who believe that their rights under U.S. copyright law have been infringed on the Internet. Under the DMCA, we generally are not liable for infringing content posted by third parties. However, if we receive a proper notice from a copyright owner alleging infringement of its protected works by web pages for which we provide hosting services, and we fail to expeditiously remove or disable access to the allegedly infringing material, fail to post and enforce a digital rights management policy or a policy to terminate accounts of repeat infringers, or otherwise fail to meet the requirements of the safe harbor under the DMCA, the owner may seek to impose liability on us.

General Data Protection Regulation: GDPR creates obligations around the procurement, processing, publication and sharing of personal data. Potential fines for violations of certain provisions of GDPR reach as high as 4% of a company's annual total revenue, potentially including the revenue of its international affiliates. The solutions we develop for GDPR-compliance may not be adequate in the views of regulatory authorities or ICANN, which may cause the loss of WHOIS privacy revenue or increase our costs of developing compliant solutions or subject us to litigation, liability, civil penalties, or loss of market share. As the privacy laws and regulations around the world continue to evolve, these changes could adversely affect our business operations in similar ways.

Several bodies of law may be deemed to apply to us with respect to various customer activities. Because we operate in a relatively new and rapidly evolving industry and since our industry is characterized by rapid changes in technology and in new and growing illegal activity, these bodies of laws are constantly evolving. As a host of content through our Exact Hosting business, and to a lesser extent as a registrar of domain names services we may be subject to potential liability for illegal activities by our resellers' customers on their websites. We provide an automated service that enables users to register domain names. We do not monitor or review, nor does our accreditation agreement with ICANN require that we monitor or review, the appropriateness of the domain names we register for our customers or the content of their websites, and we have no control over the activities in which these customers engage. While we have policies in place to terminate domain names or to take other action if presented with evidence of illegal conduct, customers could nonetheless engage in prohibited activities without our knowledge.

Corporate Information

Our principal place of business is located in Canada.

We were incorporated under the laws of the Commonwealth of Pennsylvania in November 1992 under the name Infonautics, Inc. In August 2001, we completed our acquisition of Tucows Inc., a Delaware corporation, and we changed our name from Infonautics, Inc. to Tucows Inc. Our principal executive offices are located at 96 Mowat Avenue, Toronto, Ontario, M6K 3M1 Canada. Our telephone number is (416) 535-0123. We also have offices in Germany, Denmark and the U.S.

We are subject to the filing requirements of the Securities Exchange Act of 1934 (the "Exchange Act"). Therefore, we file annual reports, periodic reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically at www.sec.gov.

Our website address is tucows.com. We make available through our website, free of charge, copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as amended as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC. The information on the website listed above is not and should not be considered part of this Annual Report and is not incorporated by reference in this document.

Information about our Executive Officers and Key Employees

The following table sets forth the names, ages and titles of persons currently serving as our executive officers and key employees.

Name	Age	Title
Elliot Noss	61	President and Chief Executive Officer, Tucows Inc. and Ting
Davinder Singh	49	Chief Financial Officer
Dave Woroch	61	Chief Executive Officer of Tucows Domains Services
Bret Fausett	60	Chief Legal Officer and Vice-President, Regulatory Affairs
Michael Koenig	39	Chief Operating Officer
Justin Reilly	36	Chief Executive Officer, Wavelo

Elliot Noss has served as our President and Chief Executive Officer of Tucows Inc. since May 1999 and Ting since 2022 and served as Vice President of Corporate Services for Tucows Interactive Limited, which was acquired by Tucows in May 1999, from April 1997 to May 1999.

Davinder Singh has served as our Chief Financial Officer since 2017, having previously served as Vice President Finance since joining the Company in 2016. Prior to joining the Company, Mr. Singh spent eight years at KPMG LLP primarily focusing on public company audits in the technology field. After leaving KPMG LLP, Mr. Singh joined TELUS and held progressive roles, including Chief Financial Officer of TELUS International. Mr. Singh is a Chartered Professional Accountant with the Institute of Chartered Professional Accountants of British Columbia. Mr. Singh also sits on the Board of Hootsuite and serves as its audit committee chair. Hootsuite is a privately held social media management company.

David Woroch currently serves as our Chief Executive Officer of Tucows Domains Services and has led our Domains business since 2014 and oversees OpenSRS, eNom, Ascio and EPAG (wholesale), Hover (retail) and the premium domain portfolio. Mr. Woroch joined Tucows in March 2000 after thirteen years at IBM and has helped build Tucows' sales, marketing, business development, product management and technical support capabilities.

Bret Fausett joined Tucows in September 2017 as our Chief Legal Officer. Prior to joining Tucows, Mr. Fausett worked for Uniregistry, where he had served as General Counsel for six years. Prior to Uniregistry, Mr. Fausett worked as outside legal counsel to a number of domain industry related companies.

Michael Koenig joined Tucows in April 2022 as the Chief Revenue Officer of Wavelo before moving into Tucows' Chief Operating Officer role in October 2022. Prior to joining Tucows, Mr. Koenig served as the Chief Operating Officer of two organizations, Sweet and Time Doctor, for five and two years, respectively.

Justin Reilly joined Tucows in September 2019 and currently serves as our Chief Executive Officer of Wavelo. Prior to joining Tucows, Justin was Head of Product & Customer Experience Innovation at Verizon, as well as a founder of a number of companies with consumer grade product and machine learning at their core.

ITEM 1A. RISK FACTORS

Our business faces significant risks. Some of the following risks relate principally to our business and the industry and statutory and regulatory environment in which we operate, including those highlighted in this section and summarized below. Other risks relate principally to the securities markets and ownership of our stock. If any of the events or circumstances described in the following risk factors actually occur, our business, financial condition or results of operations could suffer, and the trading price of our common stock could decline.

RISKS RELATED TO OUR BUSINESS AND INDUSTRY

We face intense competition and consolidation in the industries and markets we serve. If we do not continue to provide services that are useful to users, we may not remain competitive and be forced to reduce our prices, and our revenues and operating results could be adversely affected.

The industries and markets we serve are characterized by intense competition and consolidation. Be it the U.S. Internet services industry serviced by our Ting segment, the U.S. wireless communications industry serviced by Tucows Corporate - Mobile Services, the BSS/OSS software industry serviced by our Wavelo segment or the Internet services and domain registration market serviced by our Tucows Domains segment; these industries and markets have become extremely competitive and are characterized both by the entrance of new competitors or the expansion of services offered by existing competitors. Our brands compete with incumbent service providers and their affiliate brands. Across all our segments, most of our competitors have greater financial, technical, personnel and marketing resources and a larger market share than we do, and we may not be able to compete successfully against them. Due to our competitors' size and bargaining power, they may obtain discounts for facilities, equipment, devices, content, and services, potentially placing us at a competitive disadvantage. As consolidation in these industries creates even larger competitors, our competitors' purchasing and cost structure advantages may increase further, hampering our efforts to attract and retain customers. Our competitors may use their market power and resources to introduce additional products and service features (or lower prices) that we are unable to offer at similar cost or price to the customer. This may impact our ability to win over significant market share from these competitors. To remain competitive, we may be compelled to reduce the prices for our services or augment our service offerings. Any subsidies or price reductions that we offer in order to remain competitive may reduce our revenues and margins, and may adversely affect our profitability and cash flows. Any subsidies or price reductions may also make our services more accessible to new, lower-value customers with less disposable income available to spend on our services. In addition, if prices decline, customers without long-term contracts may change their service providers more frequently, thereby increasing our churn and resulting in higher acquisition costs to replace those customers. A shift to lower value or less loyal customers could have an adverse impact on our results of operations and cash flows.

Our service offerings may not be successful if we are unable to maintain existing customer relationships or establish new relationships.

Maintaining our existing customer relationships and being able to establish new relationships is critical to our success across all our segments, regardless if that customer is an end consumer wanting Gigabit Fiber or Fixed Wireless Internet service to their home, a telecommunication provider, or a leading global domain reseller. Long-term success is dependent upon our sustained ability to generate sufficient revenue from our customers based on their use of our services and ability to respond to churn by retaining existing customers and adding new customers. With significant investments across our segments, be it in the continued build out of our Fiber Network across the United States, our development of our Wavelo or Domains Platforms, our performance and financial results could be negatively impacted if we are unable to realize the return on these investments by failing to attract customers or retain customers to the services we offer.

Our retail mobile services has limited influence over the small subset of subscribers on the MNO contract retained by the Company as part of the DISH Purchase Agreement, and we may be unable to effectively respond to churn or attract a sufficient level of new customers to meet the minimum commitments with this MNO partner. Failing to meet the minimum commitments could cause our retail mobile services to 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. Based on the size of the small subset of customers retained as part of the DISH Purchase Agreement, their limited network usage and our limited negotiating ability, the Company has accrued \$0.3 million of penalties associated with the minimum commitment shortfall during the twelve months ended December 31, 2023. The Company expects to incur penalties throughout the year ending December 31, 2024 ("Fiscal 2024") and thereafter until the contract is complete. Historically, the Company has been unable to renegotiate the penalties down or at all, with the only successful renegotiation related to partial deferral of penalty escalation into later years of the contract term.

Regarding Wavelo, DISH is our main customer and represents the majority of our revenues until such time that we are able to scale our services to other customers. With the majority of our revenues concentrated with one customer, we are exposed to significant risk if we are unable to maintain this customer relationship or establish new relationships with other MNOs or MVNOs in the future. Additionally, our revenues are directly tied to the subscriber volumes of DISH's MVNO or MNO networks, so our profitability is contingent on the ability of DISH to continue to add and retain subscribers onto our platform. If any of these events occur, our operational performance and financial results may be adversely affected.

Our service offerings may be limited in ability to grow their respective businesses and customer base unless we can continue to manage our vendor relationships and supply chain to obtain valuable products and service options to offer to our customers.

In order to remain competitive, we must provide a multitude of valuable products and services to our customers. To enable this, we need to continue to manage our vendor relationships and supply chain to ensure we are able to obtain valuable inventory, services and products across our segments. In particular, we need to obtain MNO network capacity for our mobile services; fiber optic cable, installation equipment, ONT and router inventory, and third party network capacity for our Ting segment; as well as a multitude of domain name registration options in the form of TLDs/ccTLDs for our Tucows Domains segment. Any change in our ability, or the ability of third parties with whom we contract, to provide these products and services could adversely affect our operations and financial performance.

In our retail mobile services, we retain control over such a small subset of our historical subscriber base all of which are fixed to one MNO network which could hinder our ability to negotiate favorable rates and access to the mobile services mentioned above in the future.

In our Tucows Domains segment, each registry typically imposes a fee in association with the registration of each domain name and any increases in fees could adversely impact our business. For example, Verisign, the registry for .com, presently charges a \$9.59 fee for each .com registration and ICANN currently charges a \$0.18 fee for each .com domain name registered in the gTLDs that fall within its purview. We have no control over these agencies and cannot predict when they may increase their respective fees. An amendment to the registry agreement between ICANN and Verisign was approved by the U.S. Department of Commerce in November 2018. The amendment confirms that Verisign will operate the .com registry until 2024 and permits Verisign to pursue with ICANN an up to 7 percent increase in the prices for .com domain names, in each of the last four years of the six-year term of the .com Registry Agreement. The changes also affirm that Verisign may not vertically integrate or operate as a registrar in the .com top level domain. Verisign acted on this ability to raise pricing during the year ended December 31, 2023 ("Fiscal 2023"), increasing our cost of .com registrations by 6.9 percent, relative to the prior year.

Our service offerings may experience a material adverse effect should the nature of the Internet fundamentally change or fail to grow and expand internationally as a viable medium for commerce. This includes changes in current navigation practices, technologies or marketing practices.

The success of all of our segments depends on the continued development, acceptance and widespread access to the Internet, and its existing domain system and infrastructure as a foundational resource for communication and commerce.

In our Ting segment, a number of factors could prevent the continued growth and acceptance of symmetrical gigabit Internet infrastructure and service as a medium for faster Internet communication, including (a) the unwillingness of companies and customers to shift their purchasing from traditional ISP vendors to alternative vendors like Ting Internet; (b) Fiber infrastructure may not be able to support the demands placed on it, and its performance and reliability may decline as usage grows; or (c) where the development of alternative, wireless technologies could provide a similar or reasonably acceptable Internet speed and service without a fixed connection/physical network. Any of these issues could slow the growth of the adoption of Fiber Internet, which could limit our growth and revenues.

In our Tucows Domains segment, the domain name registration industry continues to develop and adapt to changing technology and the demands of individual governments. These developments may include changes in the administration or operation of the Internet, including (a) the creation and institution of alternate systems for directing Internet traffic without the use of the existing domain system or (b) systems under local government control that splinter from, or thwart the operation of, the Internet. Systems existing outside the domain name system are not subject to ICANN accreditation requirements and restrictions. Other competitors have attempted to introduce naming systems that use keywords rather than traditional domains. The widespread acceptance of any alternative systems and Internet navigation practices could eliminate the need to register a domain to establish an online presence and could materially adversely affect our business, financial condition and results of operations.

Additionally, we believe that a major source of growth for Internet-based companies will come from individuals and businesses outside the U.S. where Internet access and use is currently less prevalent. A substantial number of our resellers are currently based outside the U.S. and we plan to grow our business in other countries. If Internet usage in these jurisdictions does not increase as anticipated, or if governments prohibit the registration and use of domain names or certain classes of domain names, our revenues may not grow as anticipated.

Our ongoing investment in new businesses, services and technologies and divestment of old businesses and services is inherently risky, and could disrupt our current operations. We may not be able to realize the intended and anticipated benefits from our investments, acquisitions and agreements, which could affect the value of these decisions to our business and our ability to meet our financial obligations and targets in the short or medium term.

We have and expect to continue to acquire companies, assets or the rights to technologies in the future in order to develop new services, enhance existing services, enhance our operating infrastructure, to fund expansion, to respond to competitive pressures or to acquire complementary businesses across all of our segments. Entering into these types of arrangements entails many risks, any of which could materially harm our business, including: the diversion of management's attention from other business concerns; the failure to effectively integrate the acquired technology or company into our business; the incurring of significant acquisition costs; the loss of key employees from either our current business or the acquired business; the assumption of significant liabilities of the acquired company; inability to obtain the appropriate technical and operational resources; and unanticipated local or federal regulatory changes that could cause us to fail to realize the anticipated benefits of such investments. Any of the foregoing or other factors could harm our ability to achieve anticipated levels of profitability from the acquired technology or business or to realize other anticipated benefits of acquisitions or return of capital on our investments.

For example, in Corporate, as part of the DISH Purchase Agreement, the Company is entitled to a 10-year payment stream that is a function of the margin generated by the transferred subscribers over the 10-year period. With subscribers able to accept offers, plans or pricing from DISH, 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 upon acquisition by DISH. 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. If any of these events occur, our operational performance and financial results may be adversely affected.

We may not be able to identify or consummate any future acquisitions on favorable terms, or at all. If we do effect an acquisition, it is possible that the financial markets or investors will view the acquisition negatively. No assurance can be given that such investments will be successful and will not adversely affect our financial condition and operating results.

The Company's success depends on our ability to keep pace with technological advances. Failure to respond to rapid technological changes in the industries we serve or difficulty in scaling or adapting existing architecture could result in the loss of customers and cause us to incur additional expenses.

In our Ting segment, currently there is no Internet access technology that comes close to the speed, reliability, scalability and value of fiber-optics. However, it's possible that another medium, that's better or more economically/easily deployed, could be developed in the longer term, or wireless could be improved enough to supplant the need for fiber in certain types of installations, like multi-family units, that would impact Ting's ability to grow. To be successful as we continue to build out the Ting Internet network in communities across the U.S. and bring customers onto the network, we must ensure that our network infrastructure performs well and is reliable. The greater the user traffic and the greater the complexity of our services, the more computing power we will need. We have spent, and expect to continue to spend, substantial amounts on the purchase of equipment to enable our network infrastructure to handle increased traffic. This expansion is expensive and complex and could result in inefficiencies or operational failures. If we do not expand successfully, or if we experience inefficiencies and operational failures, the quality of our services and our customers' experience could decline. This could damage our reputation and lead us to lose current and potential customers. Cost increases, loss of traffic or failure to accommodate new technologies or changing business requirements could harm our operating results and financial condition.

In our Wavelo segment, the U.S. wireless communications industry is experiencing rapid growth of new technologies, products and services, like adoption of artificial intelligence. We cannot predict which of many possible future technologies, products, or services will be important to maintain our competitive position or what expenditures we will be required to make in order to develop and provide these technologies, products or services. To the extent we do not keep pace with technological advances or fail to respond timely to changes in the competitive environment affecting our industry, we could lose market share or experience a decline in revenue, net income, and cash flows from our platform and other professional services (both retail and platform related services). As a result of the financial strength and benefits of scale enjoyed by some of our competitors, they may be able to offer their services at lower prices than we can, thereby adversely affecting our revenues, growth and profitability.

In our Tucows Domains segment, the Internet and e-commerce are characterized by rapid technological change. Sudden changes in user and customer requirements and preferences, the frequent introduction of new applications and services embodying new technologies and the emergence of new industry standards and practices could make our applications, services and systems obsolete. The emerging nature of applications and services in the Internet application and services industry and their rapid evolution will require that we continually improve the performance, features and reliability of our applications and services. Our success will depend, in part, on our ability: to develop and license new applications, services and technologies that address the increasingly sophisticated and varied needs of our current and prospective customers; and to respond to technological advances and emerging industry standards and practices on a cost-effective and timely basis. The development of applications and services and other proprietary technology involves significant technological and business risks and requires substantial expenditures and lead-time. We may be unable to use new technologies effectively or adapt our internally developed technology and transaction-processing systems to customer requirements or emerging industry standards in a timely manner, or at all. Our internal development teams may also be unable to keep pace with new technological developments that affect the marketplace for our services. In addition, as we offer new services and functionality, we will need to ensure that any new services and functionality are well integrated with our current services, particularly as we offer an increasing number of our services as part of bundled suites. To the extent that any new services offered by us do not interoperate well with our existing services, our ability to market and sell those new services would be adversely affected and our revenue level and ability to achieve and sustain profitability might be harmed. Updating technology internally and licensing new technology from third parties may require us to incur significant additional capital expenditures.

Our ability to accurately forecast construction and marketing costs as well as manage the cost per serviceable address within expected targets will impact our return on investment on the Ting Internet footprint.

The build-out of our Fiber network requires significant costs to be incurred ahead of revenue generation, including design, procurement of materials, construction of primary infrastructure and customer installation. Our ability to accurately forecast these costs and execute an efficient construction plan will impact the returns that we are ultimately able to realize. Our costs to build out segments of the Ting Internet footprint are also impacted by factors outside of our control such as material prices, general price inflation, weather conditions, labor markets, local permitting and regulation changes. Our ability to generate sufficient investment returns is also dependent upon generating sufficient customer penetration on completed network segments over time, which also requires investments ahead of revenue generation in the form of marketing and other customer acquisition costs. We continuously monitor our expenditures and adjust accordingly to achieve our targets.

We rely on network operators, bandwidth providers, data centers and other vendors in providing services to our customers, and any system failure or interruption in the services provided by either our Company or third parties could harm our ability to operate our business and damage our reputation.

In our Ting segment, we rely on the continuing operation of our Fiber Network. Any damage to or failure of our network facilities could result in interruptions in our service, which could reduce our revenues and profits, and damage our brands. Our systems are vulnerable to damage or interruption from earthquakes, terrorist attacks, floods, fires, power loss, telecommunications failures, or other attempts to harm our systems. In any Ting town where we are not the underlying network operator and are utilizing the Fiber network of a third party, we rely on those third parties and their affiliates to maintain their network facilities, government authorizations and to comply with government policies and regulations. If they fail to do so, we may incur substantial losses. Some of our data centers are located in areas with a high risk of major earthquakes. Our data centers are also subject to break-ins, sabotage and intentional acts of vandalism, and to potential disruptions if the operators of these facilities have financial difficulties. The occurrence of a natural disaster, a decision to close a facility without adequate notice or other unanticipated problems at our data centers could result in lengthy interruptions in our service.

In our Wavelo segment, the availability of our platform services is reliant on data centers and public cloud providers, to continue to operate. Wavelo also depends on key observability service providers that integrate with our platforms to be operating in order to alert us of an outage or issue with our client's billing or provisioning services.

In our Tucows Corporate - Mobile Services segment, as provider of retail mobile services, we do not own or operate a physical network, but rather utilize the nationwide wireless communication networks of our Network Operator. We rely on them and their third-party affiliates to maintain their wireless facilities and government authorizations and to comply with government policies and regulations. If they fail to do so, we may incur substantial losses. Some of the risks related to their nationwide wireless communication networks and infrastructure include: major equipment failures, breaches of network or information technology security that affect their wireless networks, including transport facilities, communications switches, routers, microwave links, cell sites or other equipment or third-party owned local and long-distance networks on which we rely, power surges or outages, software defects and disruptions beyond their control, such as natural disasters and acts of terrorism, among others. The Master Services Agreement with our Network Operator does not contain any contractual indemnification provisions relating to network outages or other disruptions. Any impact on their nationwide wireless communication networks could disrupt our operations, require significant resources, result in a loss of subscribers or impair our ability to attract new subscribers, which in turn could have a material adverse effect on our business, results of operations and financial condition. Delays or failure to add network capacity, or increased costs of adding capacity or operating the network, could limit our ability to increase our customer base, limit our ability to increase our revenues, or cause a deterioration of our operating margin.

In our Tucows Domains segment, the availability of our Domain Name services depends on the continuing operation of our information technology and communications systems. Any damage to or failure of our systems could result in interruptions in our service, which could reduce our revenues and profits, and damage our brands. Our systems are vulnerable to damage or interruption from earthquakes, terrorist attacks, floods, fires, power loss, telecommunications failures, computer viruses, computer denial of service attacks or other attempts to harm our systems. Some of our data centers are located in areas with a high risk of major earthquakes. Our data centers are also subject to break-ins, sabotage and intentional acts of vandalism, and to potential disruptions if the operators of these facilities have financial difficulties. Some of our systems are not fully redundant, and our disaster recovery planning cannot account for all eventualities. The occurrence of a natural disaster, a decision to close a facility without adequate notice or other unanticipated problems at our data centers could result in lengthy interruptions in our service.

We are parties to agreements with other unrelated parties for certain business operations and to license third-party technologies. Any claims against these unrelated parties that we rely upon for business operations and/or licensed technology could result in the need to incur substantial costs to replace technology or services which could delay and increase the cost of product and service developments.

Across all of our business segments, we have entered into agreements with third parties for licensing of certain technologies, the day-to-day execution of certain services, the development and maintenance of certain systems necessary for the operation of our businesses and for network equipment, handsets, devices and other equipment where appropriate. We expect our dependence on key suppliers to continue as more advanced technologies and services are developed. If we experience difficulties with regard to these arrangements or are unable to negotiate on commercially reasonable terms or at all with future vendors, it could result in additional expense, loss of customers and revenue, interruption of our services or a delay in the roll-out of new technology and services for our customers.

Our systems face security risks, and any compromise of the security of these systems could disrupt our business, damage our reputation and result in the disclosure of confidential information, legal liability for damages and loss of customers.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our customers, suppliers and business partners, and personally identifiable information of our customers and employees. Due to the fact that all of our services are Internet based, the amount of data we store for our users on our servers (including personal information) naturally increases. We make extensive use of online services and centralized data processing, including through third-party service providers. The secure maintenance and transmission of customer information is an important element of our operations.

From time to time, concerns have been expressed about whether our services compromise the privacy of our users and others. Concerns about our practices with regard to the collection, use, disclosure or security of personal information or other privacy-related matters, even if unfounded, could damage our reputation and operating results and expose us to litigation and possible liability, including claims for unauthorized purchases with credit card information, impersonation, or fraud claims and other claims relating to the misuse of personal information and unauthorized marketing purposes. While we strive to comply with all applicable data protection laws and regulations, as well as our own privacy policies, any failure or perceived failure to comply may result in proceedings or actions against us by government entities or others, which could potentially have an adverse effect on our business.

We have previously been the target of attacks and must monitor and develop our systems to protect this data from misappropriation. Our information technology and other systems that maintain and transmit customer information, including location or personal information, or those of service providers, may be compromised by a malicious third-party penetration of our network security, or that of a third-party service provider, or impacted by advertent or inadvertent actions or inactions by our employees, or those of a third-party service provider. Cyber-attacks, which include the use of malware, computer viruses and other means for disruption or unauthorized access, have increased in frequency, scope and potential harm in recent years, including recently as retaliation for geo-political alliances, support and country imposed sanctions. While, to date, we have not been subject to any successful cyber-attacks or other cyber incidents which, individually or in the aggregate, have been material to our operations or financial condition, the preventive actions we take to reduce the risk of cyber incidents and protect our information technology and networks may be insufficient to repel a major cyber-attack in the future.

Due to the recent increase in geopolitical instability, and the increase in industry cyber attacks by nation state actors as a proxy to traditional kinetic warfare, we may be targeted by threat actors of the highest sophistication with yet unseen capabilities to which we and others may have no defense or can prepare for. Our position as a provider of technology serving as the backbone of the internet may cause us to be targeted by such nation state actors attacking infrastructure assets. As a result, our subscribers' information may be lost, disclosed, accessed, used, corrupted, destroyed or taken without the subscribers' consent.

In addition, the development and use of generative AI could broaden the cybersecurity threat landscape and increase the impact and severity of existing cybersecurity risks. Businesses have seen increasingly sophisticated social engineering attacks utilizing the voices, images, and writing style of key individuals and executives to conduct fraud or otherwise breach systems through this category of attacks leveraging the trust amongst persons. Previous effective measures to prevent this category of attacks, such as voice or visual verification, will likely lose their effectiveness or in fact become the method of attack. Technology to combat these risks effectively has not yet been developed.

We make use of open source software in elements of our applications and infrastructure. Supply chain attacks, including those targeting open source software and their dependencies have increased in frequency and complexity in recent years.

Any major compromise of our data or network security, failure to prevent or mitigate the loss of our services or customer information and delays in detecting any such compromise or loss could disrupt our operations, impact our reputation and subscribers' willingness to purchase our services and subject us to additional costs and liabilities, including litigation, which could be material.

Disputes concerning the ownership or rights to use intellectual property and litigation involving other rights of third parties could be costly and time-consuming to litigate, may distract management from operating the business, and may result in us paying significant damage awards, losing significant rights and our ability to operate all or a portion of our business.

We rely upon copyright, trade secret and trademark law, confidentiality and nondisclosure agreements, invention assignment agreements and work-for-hire agreements to protect our proprietary technology, all of which offer only limited protection. Due to the global nature of our web-based businesses and services, we cannot ensure that our efforts to protect our proprietary information will be adequate to protect against infringement and misappropriation by third parties, particularly in foreign countries where laws or law enforcement practices may not protect proprietary rights as fully as in the U.S. and Canada.

We have licensed, and may in the future license, some of our trademarks and other proprietary rights to others. Third parties may also reproduce or use our intellectual property rights without seeking a license and thus benefit from our technology without paying for it. Third parties could also independently develop technology, processes or other intellectual property that are similar to or superior to those used by us. Actions by licensees, misappropriation of the intellectual property rights or independent development by others of similar or superior technology might diminish the value of our proprietary rights or damage our reputation. The unauthorized reproduction or other misappropriation of our intellectual property rights, including copying the look, feel and functionality of our website could enable third parties to benefit from our technology without us receiving any compensation. The enforcement of our intellectual property rights may depend on our taking legal action against these infringing parties, and we cannot be sure that these actions will be successful.

Defense of claims of infringement of intellectual property or other rights of third parties against us would require the resources of both our time and money. Third parties may assert claims of infringement of patents or other intellectual property rights against us concerning past, current or future technologies. Content obtained from third parties and distributed over the Internet by us may result in liability for defamation, negligence, intellectual property infringement, product or service liability and dissemination of computer viruses or other disruptive problems. We may also be subject to claims from third parties asserting trademark infringement, unfair competition and violation of publicity and privacy rights relating specifically to domains.

As a domain name registrar, we regularly become involved in disputes over registration of domain names. These disputes are typically resolved through the UDRP, ICANN's administrative process for domain name dispute resolution, or less frequently through litigation under the Anti Cyber Squatting Consumer Protection Act "ACPA", or under general theories of trademark infringement or dilution. The UDRP generally does not impose liability on registrars, and the ACPA provides that registrars may not be held liable for registering or maintaining a domain name absent a showing of bad faith intent to profit or reckless disregard of a court order by the registrars. However, we may face liability if we fail to comply in a timely manner with procedural requirements under these rules. In addition, these processes typically require at least limited involvement by us, and therefore increase our cost of doing business. The volume of domain name registration disputes may increase in the future as the overall number of registered domain names increases.

We have substantial goodwill and other intangible assets, therefore to the extent that any intellectual property is deemed impaired we would be required to record a significant charge to earnings in our financial statements during the period in which any impairment of our goodwill or intangible assets is determined. Any impairment charges or changes to the estimated amortization periods could have a material adverse effect on our financial results.

Our service offerings are exposed to risks associated with credit card and other online payment chargebacks, fraud and new payment methods.

Across all of our business segments, regardless if those services operate on a postpaid or prepaid basis, we are exposed to the risks associated with credit card and other online payment technologies, chargebacks and fraud associated with these payment types. A substantial majority of our revenue originates from online credit card transactions. Under current credit card industry practices, we are liable for fraudulent and disputed credit card transactions because we do not obtain the cardholder's signature at the time of the transaction, even though the financial institution issuing the credit card may have authorized the transaction. Under credit card association rules, penalties may be imposed at the discretion of the association. Any such potential penalties would be imposed on our credit card processor by the association. Under our contract with our processor, we are required to reimburse our processor for such penalties. Our current level of fraud protection, based on our fraudulent and disputed credit card transaction history, is within the guidelines established by the credit card associations. However, we face the risk that one or more credit card associations may, at any time, assess penalties against us or terminate our ability to accept credit card payments from customers, which would have a material adverse effect on our business, financial condition and results of operations.

Furthermore, for our postpaid businesses, namely the Tucows Corporate - Mobile Services and Ting segment, our success depends on our ability to manage credit risk while attracting new customers with profitable usage patterns. Both of these segments have relatively short operating histories and there can be no assurance that it will be able to manage credit risk or generate sufficient revenue to cover its postpaid-related expenses, including losses arising from its customers' failure to make payments when due. We manage credit risk exposure using techniques that are designed to set terms and limits for the credit risk it accepts. The techniques we use may not accurately predict future defaults due to, among other things, inaccurate assumptions or fraud. Our ability to manage credit risk may also be adversely affected by legal or regulatory changes, competitors' actions, consumer behavior, and inadequate collections staffing or techniques. While we continually seek to improve our assumptions and controls, the failure to manage credit risk appropriately may materially adversely affect our profitability and ability to grow.

Our indebtedness could adversely affect our ability to raise additional capital to fund our operations, our ability to operate our business, execute our strategy divert our cash flow from operations for debt payments, and prevent us from meeting our debt obligations.

The Company's wholly owned subsidiary, Ting LLC as well as Ting LLC's wholly owned subsidiaries are financed by the 2023 Term Notes (as defined in Note 9 – Notes Payable to the Company's Consolidated Financial Statements) as well as the Unit Purchase Agreement ("UPA") with Generate (as defined in Note 14 – Redeemable Preferred Units to the Company's Consolidated Financial Statements).

On May 4, 2023 (the "Closing Date"), Tucows Inc. through its indirect and wholly owned subsidiaries, including Ting Fiber, LLC, entered into a definitive agreement relating to a securitized financing facility related to the 2023 Term Notes. On the Closing Date, Ting Issuer LLC, a Delaware limited liability company (the "Issuer"), a limited purpose, bankruptcy-remote, indirect wholly owned subsidiary of the Company issued the 2023 Term Notes. The net proceeds from the issuance of the 2023 Term Notes were \$220.5 million, after deducting a debt discount of \$11.2 million and issuing costs of \$6.7 million. As of April 1, 2024, our outstanding 2023 Term Notes was \$238.5 million. The 2023 Term Notes are subject to a series of covenants, restrictions and other investor protections including (i) that the Issuer maintains specified reserve accounts to be used to make required payments in respect of the 2023 Term Notes, (ii) provisions relating to optional and mandatory prepayments and the related payment of specified amounts, (iii) certain indemnification payments, (iv) that the guarantors comply with standard bankruptcy-remoteness covenants, including not guaranteeing or being liable for other affiliates debts or liabilities, and (v) covenants relating to recordkeeping, access to information, and similar matters. Our ability to remain in compliance with our operating restrictions, generate cash flow from operations to maintain reserve account, make principal, interest payments on our debt will depend on our future performance, which will be affected by a range of economic, competitive and business factors and changes in government monetary or fiscal policy. Failure to maintain compliance with the operating restrictions of our credit facility could result in a default and could have a material adverse effect on our business.

As of April 1, 2024, Generate purchased preferred units under the UPA for an aggregate amount equal to \$91.5 million, with a further capital commitment of \$108.5 million available to Ting Fiber, LLC through Milestone Fundings. The terms of Ting Fiber, LLC's amended and restated limited liability company agreement (the "LLC Agreement") with Generate prohibit Tucows from funding the operations or capital investments in Ting Fiber, LLC with funds generated by its subsidiaries outside of Ting Fiber, LLC or its wholly owned subsidiaries ("Tucows businesses excluding Ting"). In order to continue the planned expansion of the Ting Internet footprint and fund future operating losses, we will need to access Milestone Fundings under the UPA, as well as engage in equity and further debt financing. Our ability to achieve the Milestones to access the additional funding under the UPA will depend on our future performance, which will be affected by a range of economic, competitive and business factors and changes in government monetary or fiscal policy. Our financing partner, Generate, may not grant permission for Ting Fiber, LLC to engage in further debt or equity financings. Failure to access the additional funding, could have a material adverse effect on our business. In addition, the terms of the LLC Agreement restrict distribution from Ting Fiber, LLC's net cash flow without Generate's consent.

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, "Tucows") and certain other subsidiaries of the Company, as guarantors, entered into a Credit Agreement (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 \$60 million 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 Facility 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. Tucows businesses excluding Ting are financed by the Company's 2023 Credit Facility. As of April 1, 2024, our outstanding debt under the 2023 Credit Facility was \$211.9 million with remaining committed funds of \$28.1 million. Absent sufficient cash flows from operations, Tucows businesses excluding Ting may need to engage in equity or debt financings to secure additional funds to meet our operating and capital needs. The covenants and restrictions on the 2023 Credit Facility may prevent the Tucows businesses excluding Ting from accessing the remaining committed funds if additional financing is required.

In any situation where the Company is seeking such debt or equity financing, it may not be able to secure additional debt or equity financing on favorable terms, or at all, at the time when funding is needed. The Company does not currently have an effective “universal” shelf registration statement on Form S-3 on file with the SEC, which might delay the Company's ability to complete an equity financing. In addition, even though we may have sufficient cash flow, we may still elect to sell additional equity or debt securities or obtain credit facilities for other reasons. If we raise additional funds through further issuances of equity or convertible debt securities, our existing shareholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. In addition, if we decide to raise funds through debt or convertible debt financings, we may be unable to meet our interest or principal payments. Our inability to generate sufficient cash flow from operations or obtain additional capital or alternative financing on acceptable terms could have a material adverse effect on our business, financial condition and results of operations.

Our debt agreements impose significant operating and financial restrictions on us and our subsidiaries, which may prevent us from capitalizing on business opportunities across the Company. Breaching these agreements could have a materially adverse impact on the Company.

The agreements governing our current 2023 Credit Facility impose significant operating and financial restrictions on Tucows businesses excluding Ting. These restrictions, subject in certain cases to customary baskets, exceptions, and incurrence-based ratio tests, may limit our subsidiaries' ability to engage in some transactions, including the following: incurring additional indebtedness and issuing stock; paying dividends, share repurchases or making other restricted payments or investments; selling assets, properties, or licenses that we have or in the future may procure; creating liens on assets; engaging in mergers, acquisitions, business combinations, or other transactions.

The trailing twelve month debt to Adjusted EBITDA ratio was 3.42:1.00 as of December 31, 2023 for the Tucows businesses excluding Ting. Our covenants under the Company's 2023 Credit Facility required us to maintain a debt to Adjusted EBITDA ratio of 4.25:1.00 until March 30, 2024. Our ability to remain in compliance with our operating restrictions, generate cash flow from operations to make principal, interest payments on our debt will depend on our future performance, which will be affected by a range of economic, competitive and business factors as well as changes in government monetary or fiscal policy. Failure to maintain compliance with the operating restrictions of the 2023 Credit Facility could result in default and could have a material adverse effect on our business.

With respect to the UPA, Ting LLC is obligated to redeem Generate's equity interests for an amount equal to the outstanding capital balance plus the unsatisfied preferred return (and pay a make-whole premium if the redemption of the preferred units occurs within the four years following the Transaction Close), upon certain conditions, including a material breach of any Tucows' credit agreement that is not cured, the failure to pay the preferred return in two consecutive quarters following the second anniversary of the Transaction Close, and the six year anniversary of the Transaction Close. These restrictions could limit our ability to react to changes in our operating environment or the economy. Triggering the make-whole provision could have a material adverse effect on our business.

With respect to the 2023 Term Notes are secured by certain of the Company's revenue-generating assets, consisting principally of fiber-network related agreements, fiber-network assets and customer contracts (collectively, the “Securitized Assets”) that are owned by certain other limited-purpose, bankruptcy-remote, wholly owned indirect subsidiaries of the Company that act as the Guarantors (collectively with the Issuer, the “Obligor”) under the Base Indenture. The 2023 Term Notes are subject to a series of covenants, restrictions and other investor protections including (i) that the Issuer maintains specified reserve accounts to be used to make required payments in respect of the 2023 Term Notes, (ii) provisions relating to optional and mandatory prepayments and the related payment of specified amounts, (iii) certain indemnification payments, (iv) the guarantors comply with standard bankruptcy-remoteness covenants, including not guaranteeing or being liable for other affiliates debts or liabilities, and (v) covenants relating to recordkeeping, access to information, and similar matters. Our ability to remain in compliance with our operating restrictions, generate cash flow from operations to maintain reserve account, make principal, interest payments on our debt will depend on our future performance, which will be affected by a range of economic, competitive and business factors as well as changes in government monetary or fiscal policy. Failure to maintain compliance with the operating restrictions of our credit facility could result in default and could have a material adverse effect on our business.

Any future indebtedness that we incur may contain similar or more restrictive covenants. Any failure to comply with the restrictions of our debt agreements may result in an event of default under these agreements, which in turn may result in defaults or acceleration of obligations under these agreements and other agreements, giving our lenders the right to terminate any commitments they had made to provide us with further funds and to require us to repay all amounts then outstanding. Any of these events would have a material adverse effect on our business, financial condition, and operating results.

Our preferred unit financing arrangement could adversely affect our financial condition, our ability to operate our business, divert our cash flow from operations for debt payments, and prevent us from meeting our debt obligations. Our preferred unit financing agreement imposes predetermined operational and financial drawdown milestones on our Ting segment, which may prevent us from obtaining additional financing under such preferred unit financing arrangement. In addition, the Company may need additional financing to further accelerate the expansion of the Ting Internet footprint.

On August 8, 2022, Ting LLC entered into the UPA with Generate under which Ting LLC has committed to issue and sell \$60 million of Series A Preferred Units at the Initial Funding, subject to customary closing conditions, and an additional aggregate of \$140 million Series A Preferred Units if the Milestones are achieved over a three year period from the date of the Transaction Close. As of April 1, 2024, our outstanding preferred units purchased under the UPA was \$91.5 million, with a further capital commitment of \$108.5 million available to Ting LLC through Milestone Fundings.

The Series A Preferred Units accrue a preferred return to the holder at a rate of 15% per annum, subject to adjustments based on the value of approved projects under the Equity Capital Contribution Agreement (the “ECC Agreement”). The preferred return on the Series A Preferred Units purchased under the Unit Purchase Agreement may be adjusted down to a floor of 13% or up to a ceiling of 17% per annum based on commitment and contribution amounts under the ECC Agreement. The preferred return accrues daily, and is compounded quarterly. The preferred return accrued during the first two years is not payable unless and until the Series A Preferred Units are redeemed. The preferred return accrued after the second anniversary of the Transaction Close is payable by the Company quarterly. If the Company should redeem the Series A Preferred Units prior to the fourth anniversary of the Transaction Close, the Company is required to pay a make-whole premium.

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. Under the terms of the Redemption Agreement, Ting Fiber, LLC redeemed 5,173,067 Series A Preferred Units held by Generate at \$6 per unit, totaling a redemption of \$31 million. The terms of the redemption were modified by the Side Letter Agreement, which granted a 30% discount on the make-whole premium which amounted to \$14.7 million for a total redemption price of \$45.7 million inclusive of the make-whole premium. Terms of the Side Letter Agreement also preclude Ting Fiber, LLC from issuing additional Series A Preferred Units for 365 days from the closing of the Redemption Agreement during which time standby fees will be suspended.

Our ability to achieve the Milestones to access the additional funding, as well as to generate cash flow from operations to make the payments in respect of the preferred return, will depend on our future performance, which will be affected by a range of economic, competitive and business factors as well as changes in government monetary or fiscal policy. The failure to access the additional funding or pay the preferred return, could have a material adverse effect on our business. In addition, the Company is obligated to redeem Generate's equity interests for an amount equal to the outstanding capital balance plus the unsatisfied preferred return (and pay a make-whole premium if the redemption occurs within the four years following the Transaction Close), upon certain conditions, including a material breach of any Tucows' credit agreement that is not cured, the failure to pay the preferred return in two consecutive quarters following the second anniversary of the Transaction Close, and the six year anniversary of the Transaction Close.

In addition, if in order to further accelerate the expansion of the Ting Internet footprint, the Company may seek additional financing, which may include an equity or debt issuance, a partnership or collaborating arrangement with another third party. We may not be able to secure additional financing on favorable terms, or at all, at the time when that funding is needed, and if not available, could have a material adverse effect on our business. Moreover, any additional financing may be dilutive to existing investors.

The international nature of our businesses and operations expose us to additional risks that could harm our business, operating results, and growth strategy; including risks related to taxation and foreign currencies fluctuations.

We are a U.S. based multinational company. Expansion into international markets is a continued element of our growth strategy. Introducing and marketing our services internationally, developing direct and indirect international sales and support channels and managing foreign personnel and operations all require significant management attention and financial resources. We face a number of risks associated with expanding our businesses internationally that could negatively impact our results of operations, including the following:

- Foreign currency fluctuations and exchange rates: Our operating results are accordingly subject to fluctuations in foreign currency exchange rates, which could adversely affect our future operating results. We attempt to mitigate a portion of these risks through foreign currency hedging, based on our judgment of the appropriate trade-offs among risk, opportunity and expense. We generally use hedging programs to partially hedge our exposure to foreign currency exchange rate fluctuations for Canadian dollars, the currency in which we incur the majority of operating expenses. Although we regularly review our hedging program and make adjustments as necessary based on the judgment factors discussed above, our hedging activities may not offset more than a portion of the adverse financial impact resulting from unfavorable movement in foreign currency exchange rates, which could adversely affect our financial condition or results of operations.
- Potentially adverse tax consequences or an inability to realize tax benefits: Significant judgment is required in determining our provision for income taxes, deferred tax assets or liabilities and in evaluating our tax positions on a worldwide basis. While we believe our tax positions are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible that these positions may be overturned by jurisdictional tax authorities, which may have a significant impact on our provision for income taxes. Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied, including the Tax Cuts and Job Act of 2017. In addition, governmental tax authorities are increasingly scrutinizing the tax positions of companies. If the U.S. or other foreign tax authorities change applicable tax laws, our overall taxes could increase, and our business, financial condition or results of operations may be adversely impacted.
- Management, communication and integration problems resulting from cultural differences and geographic dispersion.
- Compliance with foreign laws, accreditation and regulatory requirements in relation to provision of services, protection of intellectual property and third-party data in foreign jurisdictions.
- Competition from companies with international operations, including large international competitors and entrenched local companies.
- To the extent we choose to make acquisitions to enable our international expansion efforts, the identification of suitable acquisition targets in the markets into which we want to expand.
- Political and economic instability in some international markets.
- Sufficiently qualified labor pools in various international markets.
- We may not succeed in our efforts to continue to expand our international presence as a result of the factors described above or other factors that may have an adverse impact on our overall financial condition and results of operations.

The execution of our Ting restructuring plan, involves risks that could adversely affect our business operations, financial condition, and growth strategy; including risks related to implementation difficulties, operational disruptions, and financial impacts.

To reflect the ongoing operational prioritizations of the Ting segment and to lower year-over-year operating expenses, we undertook the Ting restructuring plan (the "Plan"). The Plan, was aimed at streamlining the operations within our Ting segment. The successful execution of this plan is critical to our efforts to reduce costs, improve efficiency, and align our resources with strategic priorities. However, the implementation of the Plan requires significant management attention and financial resources and is subject to a number of risks that could negatively impact our results of operations, including the following:

- Implementation difficulties and costs: The process of implementing the Plan may encounter unforeseen challenges, including delays and higher-than-anticipated expenses. These difficulties could hinder our ability to achieve the anticipated benefits of the Plan, such as cost savings and improved operational efficiencies.
- Operational Disruptions: Changes to our operational structure as part of the Plan, such as workforce reductions may lead to temporary disruptions in our operations. These disruptions could adversely affect our ability to meet customer demands, maintain service quality, and achieve our growth objectives.
- Financial Impacts: The Plan is expected to incur significant upfront costs related to severance, asset write-downs, and other restructuring charges. While these expenditures are anticipated as part of the plan's implementation, they could negatively affect our profitability in the short term, even if the long-term financial benefits are expected to be positive.
- Employee Morale and Retention: The Plan may impact employee morale and lead to challenges in retaining key personnel. Maintaining a motivated workforce is crucial to our ongoing success, and any negative effects on employee morale could adversely impact our business operations and financial performance.
- Market and Competitive Pressures: As we restructure our operations, there is a risk that competitors may take advantage of any perceived disruptions or weaknesses, potentially impacting our market position and competitive advantage.
- Reputational Harm: The public perception and reputation of our company could be adversely affected by the execution of significant restructuring plans like the Plan. Public, customer, and investor perceptions of our actions, especially in relation to workforce reductions, service changes, or other visible outcomes of the restructuring, could negatively influence our brand and reputation in the market.

Despite these challenges, we are committed to successfully implementing the Plan and believe that it is a necessary step towards achieving our long-term strategic goals. We are closely monitoring the progress of the restructuring activities and are prepared to take corrective actions as needed to mitigate these risks. However, investors should be aware that the factors described above, among others, could have an adverse impact on our overall financial condition and results of operations.

Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our operating results and financial condition.

We are subject to income and other taxes in a number of jurisdictions and our tax structure is subject to review by both domestic and foreign tax authorities. We must make significant assumptions, judgments and estimates to determine our current provision for income taxes, deferred tax assets and liabilities and any valuation allowance that may be recorded against our deferred tax assets. Although we believe that our estimates are reasonable, the ultimate determination of our tax liability is always subject to review by the applicable tax authorities. Any adverse outcome of such a review could have a negative effect on our operating results and financial condition in the period or periods for which such determination is made. Our current and future tax liabilities could be adversely affected by:

- international income tax authorities, including the Canada Revenue Agency and the U.S. Internal Revenue Service, challenging the validity of our arms-length related party transfer pricing policies or the validity of our contemporaneous documentation.
- changes in the valuation of our deferred tax assets; or
- changes in tax laws, regulations, accounting principles or the interpretations of such laws.

We have identified a material weakness in our internal control over financial reporting that, if not properly remediated, could adversely affect our business and results of operations.

In connection with the audit of our consolidated financial statements as of and for the year ended December 31, 2023, we have concluded that there is a material weakness relating to our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis. In addition, given our reliance on IT systems to synthesize both financial and nonfinancial information, any material weaknesses in our IT controls may result in errors in not only our consolidated financial statements but our nonfinancial metrics as well.

Specifically, as discussed in more detail in Item 9A of this Form 10-K, we identified a material weakness occurred because we did not design and maintain (i) program change management controls for certain financial systems to ensure that IT program and data changes affecting certain IT systems and underlying accounting records are identified, tested, authorized and implemented appropriately and (ii) user access controls that adequately restrict user access to certain financial systems, programs and data to appropriate company personnel. As a result of this material weakness, management has determined that our disclosure controls and procedures and internal control over financial reporting were not effective as of December 31, 2023.

In light of the material weakness identified, we performed additional analysis and other post-closing procedures to ensure that our consolidated financial statements accurately reflected our financial position and results of its operations as of and for the year ended December 31, 2023. Subsequent to our December 31, 2023 fiscal year end, we began taking a number of actions, including evaluating access controls to key financial systems and implementing enhanced procedures for regular access reviews. We expect to continue our remediation efforts, including testing of operating effectiveness of new controls, and expect to incur additional costs remediating this material weakness.

Although we believe we are taking appropriate actions to remediate the control deficiency we identified and to strengthen our internal control over financial reporting, we may need to take additional measures to fully mitigate the material weakness, and the measures we have taken, and expect to take, to improve our internal controls may not be sufficient to address the issues identified, to ensure that our internal controls are effective or to ensure that the identified material weakness will not result in a material misstatement of our annual or interim consolidated financial statements. In addition, other material weaknesses or deficiencies may be identified in the future. If we are unable to correct material weaknesses or deficiencies in internal controls in a timely manner, our ability to record, process, summarize and report financial information accurately and within the time periods specified in the rules and forms of the SEC will be adversely affected. This failure could negatively affect the market price and trading liquidity of our common stock, negatively affect our ability to raise financing, and cause investors to lose confidence in our reported financial information, subject us to civil and criminal investigations and penalties, and generally materially and adversely impact our business and financial condition.

A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. Implementation of new technology related to the control system may result in misstatements due to errors that are not detected and corrected during testing. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

We could be subject to changes in tax rates, the adoption of new U.S. or international tax legislation, or exposure to additional tax liabilities. This could discourage the registration or renewal of domain names.

Due to the global nature of the Internet, it is possible that, although our services and the Internet transactions related to them typically originate in the United States, Canada, Denmark and Germany, governments of other states or foreign countries might attempt to regulate our transactions or levy sales, income or other taxes relating to our activities. Tax authorities at the international, federal, state and local levels are currently reviewing the appropriate treatment of companies engaged in Internet commerce. New or revised international, federal, state or local tax regulations may subject us or our customers to additional sales, income and other taxes. We cannot predict the effect of current attempts to impose sales, income or other taxes on commerce over the Internet on Tucows or on our customers. New or revised taxes and, in particular, sales taxes, would likely increase the cost of doing business online and decrease the attractiveness of advertising and selling goods and services over the Internet. New taxes could also create significant increases in internal costs necessary to capture data, and collect and remit taxes. Any of these events could have an adverse effect on our business and operating results.

The Company's success depends on the continued service and availability of key personnel.

Much of the Company's future success depends on the continued availability and service of key personnel, including its Chief Executive Officer, executive team and other highly skilled employees. Experienced personnel in the technology industry are in high demand and competition for their talents is intense. We may not be able to retain our key employees or replace them when necessary.

Our business depends on our strong brands. If we are not able to maintain and enhance our brands, our ability to expand our customer base will be impaired and our business and operating results will be harmed.

In recognition of the evolving nature of the Internet services market and to make it easier to clearly differentiate each service we offer from our competitors, we enhanced our branding by focusing our primary service offerings under seven distinct brands namely "OpenSRS", "eNom", "Hover", "EPAG", "Ascio", "Ting", and "Wavelo". We also believe that maintaining and enhancing the "Tucows" corporate brand and our service brands is critical to expanding our customer base. We anticipate that, as our market becomes increasingly competitive, maintaining and enhancing our brands may become increasingly difficult and expensive. Maintaining and enhancing our brands will depend largely on our ability to be a technology leader providing high quality products and services, which we may not do successfully. To date, we have engaged in relatively little direct brand promotion activities. This enhances the risk that we may not successfully implement brand enhancement efforts in the future.

Additionally, as part of the DISH Purchase Agreement executed in the year ending December 31, 2020 ("Fiscal 2020"), the Company granted DISH the right to use the name "Ting" and its associated domain name over a 24-month period, after which DISH had an option to purchase the brand from the Company. DISH has formally refused their option to purchase the Ting brand, however the right to use the name "Ting" by DISH was subsequently extended by the Company until the end of Fiscal 2024. Any actions taken by DISH as part of the transactions contemplated by the DISH Purchase Agreement may impact the Ting brand's reputation. These actions could range from poor service quality, bad customer experience, privacy concerns, data breaches, and other events that could negatively impact the Ting brand permanently. The Ting brand could then carry negative connotation with consumers and impact our ability to continue to grow our Fiber Internet business under the Ting brand. If any of these events occur, our operational performance and financial results, in particular those of our Fiber Internet business may be adversely affected.

We are subject to minimum purchase commitments with some partner network providers.

In some Ting markets, our Ting segment operates Internet networks owned by third parties, such as municipalities or private entities ("Partner Network Providers"), rather than owning and constructing the Internet network ourselves. The Company pays a fee to Partner Network Providers in exchange for the use of the Internet network. Fees are commonly subject to minimum purchase commitments which can vary in their structure, but often increase as the Internet network is constructed and Ting is provided access to more serviceable addresses. In order to generate profit and avoid losses in these partner markets, we must generate enough revenue to offset our costs, including our minimum purchase commitments by attracting new customers and managing attrition.

RISKS RELATED TO LEGAL, GOVERNMENTAL AND REGULATORY MATTERS

The use of ICANN's Oversight of Domain Name Registration System and domain name registration involve charges and fees. If these fees increase, this may have a significant impact on our operating results.

ICANN is a private sector, not-for-profit corporation formed in 1998 by the U.S. Department of Commerce for the express purposes of overseeing a number of Internet related tasks previously performed directly on behalf of the U.S. government, including managing the domain name registration system. ICANN currently imposes a fee of \$0.18 for each domain name registered in the gTLDs that fall within its purview. We have no control over ICANN and cannot predict when they may increase their respective fees. If we absorb such cost increases, or if surcharges act as a deterrent to registration, our profits may be adversely impacted by these third-party fees.

ICANN has been subject to strict scrutiny by the public and by the U.S. and other governments around the world with many of those governments becoming increasingly interested in Internet governance. For example, the U.S. Congress has held hearings to evaluate ICANN's selection process for new TLDs. In addition, ICANN faces significant questions regarding efficacy as a private sector entity. ICANN may continue to evolve both its long-term structure and mission to address perceived shortcomings such as a lack of accountability to the public and a failure to maintain a diverse representation of interests on its board of directors. We continue to face the risks that:

- the U.S. or any other government may reassess its decision to introduce competition into, or ICANN's role in overseeing, the domain registration market;
- the Internet community or the U.S. Department of Commerce or U.S. Congress may refuse to recognize ICANN's authority or support its policies, which could create instability in the domain registration system;
- some of ICANN's policies and practices, and the policies and practices adopted by registries and registrars, could be found to conflict with the laws of one or more jurisdictions;
- ICANN may lose any one of the several claims pending against it in both the U.S. and international courts, in which case its credibility may suffer and its policies may be discredited;
- the terms of the Registrar Accreditation Agreement (the "RAA"), under which we are accredited as a registrar, could change in ways that are disadvantageous to us or under certain circumstances could be terminated by ICANN preventing us from operating our Registrar, or ICANN could adopt unilateral changes to the RAA that are unfavorable to us, that are inconsistent with our current or future plans, or that affect our competitive position;
- ICANN and, under their registry agreements, VeriSign and other registries may impose increased fees received for each ICANN accredited registrar and/or domain name registration managed by those registries;
- ICANN or any registries may implement policy changes that would impact our ability to run our current business practices throughout the various stages of the lifecycle of a domain name; and
- international regulatory or governing bodies, such as the International Telecommunications Union or the European Union, may gain increased influence over the management and regulation of the domain registration system, leading to increased regulation in areas such as taxation and privacy.
- If any of these events occur, they could create instability in the domain registration system. These events could also disrupt or suspend portions of our domain registration solution, which would result in reduced revenue.

Data protection regulations may impose legal obligations on us that we cannot meet or that conflict with our ICANN contractual requirements.

In 2018, the European Commission adopted the GDPR, which creates obligations around the procurement, processing, publication and sharing of personal data. Potential fines for violations of certain provisions of GDPR reach as high as 4% of a company's annual total revenue, potentially including the revenue of its international affiliates. The solutions we develop for GDPR-compliance may not be adequate in the views of regulatory authorities or ICANN, which may cause the loss of WHOIS privacy revenue or increase our costs of developing compliant solutions or subject us to litigation, liability, civil penalties, or loss of market share. As the privacy laws and regulations around the world continue to evolve, these changes could adversely affect our business operations in similar ways.

The law relating to the use of and ownership of intellectual property on the Internet as well as the liability of Internet services companies for data and content carried on or disseminated through their network's websites is currently unsettled and could expose us to unforeseen liabilities. This could negatively affect the public's perception of our corporate image.

As a host of content through our Exact Hosting business, and to a lesser extent as a registrar of domain names services, we may be subject to potential liability for illegal activities by our resellers' customers on their websites. We provide an automated service that enables users to register domain names. We do not monitor or review, nor does our accreditation agreement with ICANN require that we monitor or review, the appropriateness of the domain names we register for our customers or the content of their websites, and we have no control over the activities in which these customers engage. While we have policies in place to terminate domain names or to take other action if presented with evidence of illegal conduct, customers could nonetheless engage in prohibited activities without our knowledge.

Several bodies of law may be deemed to apply to us with respect to various customer activities. Because we operate in a relatively new and rapidly evolving industry and since our industry is characterized by rapid changes in technology and in new and growing illegal activity, these bodies of laws are constantly evolving. Some of the laws that apply to us with respect to certain customer activities include the following:

- The CDA generally protects online service providers, such as Tucows, from liability for certain activities of their customers, such as posting of defamatory or obscene content, unless the online service provider is participating in the unlawful conduct. Notwithstanding the general protections from liability under the CDA, we may nonetheless be forced to defend ourselves from claims of liability covered by the CDA, resulting in an increased cost of doing business.
- The DMCA provides recourse for owners of copyrighted material who believe that their rights under U.S. copyright law have been infringed on the Internet. Under the DMCA, we generally are not liable for infringing content posted by third parties. However, if we receive a proper notice from a copyright owner alleging infringement of its protected works by web pages for which we provide hosting services, and we fail to expeditiously remove or disable access to the allegedly infringing material, fail to post and enforce a digital rights management policy or a policy to terminate accounts of repeat infringers, or otherwise fail to meet the requirements of the safe harbor under the DMCA, the owner may seek to impose liability on us.
- Although established statutory law and case law in these areas to date generally have shielded us from liability for customer activities, court rulings in pending or future litigation may serve to narrow the scope of protection afforded us under these laws. In addition, laws governing these activities are unsettled in many international jurisdictions, or may prove difficult or impossible for us to comply with in some international jurisdictions. Also, notwithstanding the exculpatory language of these bodies of law, we may be embroiled in complaints and lawsuits which, even if ultimately resolved in our favor, add cost to our doing business and may divert management's time and attention. Finally, other existing bodies of law, including the criminal laws of various states, may be deemed to apply or new statutes or regulations may be adopted in the future. Our insurance may not be adequate to compensate or may not cover us at all in the event we incur liability for damages due to data and content carried on or disseminated through our network. Any costs not covered by insurance that are incurred as a result of this liability or alleged liability, including any damages awarded and costs of litigation, could harm our business and prospects.
- Domain name registrars also face potential tort law liability for their role in wrongful transfers of domain names. The safeguards and procedures we have adopted may not be successful in insulating us against liability from such claims in the future. In addition, we face potential liability for other forms of "domain name hijacking," including misappropriation by third parties of our network of customer domain names and attempts by third parties to operate websites on these domain names or to extort the customer whose domain name and website were misappropriated. Furthermore, our risk of incurring liability for a security breach on a customer website would increase if the security breach were to occur following our sale to a customer of an SSL certificate that proved ineffectual in preventing it. Finally, we are exposed to potential liability as a result of our private domain name registration service, wherein we become the domain name registrant, on a proxy basis, on behalf of our customers. While we have a policy of providing the underlying information and reserve the right to cancel privacy services on domain names giving rise to domain name disputes including when we receive reasonable evidence of an actionable harm, the safeguards we have in place may not be sufficient to avoid liability in the future, which could increase our costs of doing business.
- There have been ongoing legislative developments and judicial decisions concerning trademark infringement claims, unfair competition claims and dispute resolution policies relating to the registration of domains. To help protect ourselves from liability in the face of these ongoing legal developments, we have taken the following precautions:
 - our standard registration agreement requires that each registrant indemnify, defend and hold us harmless for any dispute arising from the registration or use of a domain registered in that person's name; and
 - since December 1, 1999, we have required our resellers to ensure that all registrants are bound to the UDRP as approved by ICANN.

Despite these precautions, we cannot be assured that our indemnity and dispute resolution policies will be sufficient to protect us against claims asserted by various third parties, including claims of trademark infringement and unfair competition.

New laws or regulations concerning domains and registrars may be adopted at any time. Our responses to uncertainty in the industry or new regulations could increase our costs or prevent us from delivering our domain registration services over the Internet, which could delay growth in demand for our services and limit the growth of our revenues. New and existing laws may cover issues such as:

- pricing controls;
- the creation of additional generic top-level domains and country code domains;
- consumer protection;
- cross-border domain registrations;
- trademark, copyright and patent infringement;
- domain dispute resolution; and
- the nature or content of domains and domain registration.

An example of legislation passed in response to novel intellectual property concerns created by the Internet is the ACPA enacted by the United States government in November 1999. This law seeks to curtail a practice commonly known in the domain registration industry as cybersquatting. A cyber squatter is generally defined in the ACPA as one who registers a domain that is identical or similar to another party's trademark, or the name of another living person, with the bad faith intent to profit from use of the domain. The ACPA states that registrars may not be held liable for registration or maintenance of a domain for another person absent a showing of the registrar's bad faith intent to profit from the use of the domain. Registrars may be held liable, however, if they do not comply promptly with procedural provisions of the ACPA. For example, if there is litigation involving a domain, the registrar is required to deposit a certificate representing the domain registration with the court. If we are held liable under the ACPA, any liability could have a material adverse effect on our business, financial condition and results of operations.

Our service offerings may become subject to new government regulations that may be costly to adopt, and may adversely affect our business prospects, future growth or results of operations.

The FCC grants wireless licenses for terms of generally ten years that are subject to renewal and revocation. There is no guarantee that our Network Operator's license will be renewed. Failure to comply with FCC requirements applicable to a given license could result in revocation of that license and, depending on the nature of the non-compliance, other licenses.

Various states are considering regulations over terms and conditions of service, including certain billing practices, privacy, and consumer-related issues that may not be preempted by federal law. If imposed, these regulations could make it more difficult and expensive to implement national sales and marketing programs and could increase the costs of our operations.

Specifically regarding our Tucows Domains segment, to date, government regulations have not materially restricted use of the Internet in most parts of the world. The legal and regulatory environment pertaining to the Internet, however, is uncertain and may change. New laws may be passed, existing but previously inapplicable laws may be deemed to apply to the Internet, or existing legal safe harbors may be narrowed, both by U.S. federal or state governments and by governments of foreign jurisdictions. These changes could affect:

- the liability of online resellers for actions by customers, including fraud, illegal content, spam, phishing, libel and defamation, infringement of third-party intellectual property and other abusive conduct;
- other claims based on the nature and content of Internet materials, such as pornography;
- user privacy and security issues;
- consumer protection;
- sales and other taxes, including the value-added tax of the European Union member states;
- characteristics and quality of services; and
- cross-border commerce.

The adoption of any new laws or regulations, or the application or interpretation of existing laws or regulations to the Internet, could hinder growth in use of the Internet and online services generally, and decrease acceptance of the Internet and online services as a means of communications, commerce and advertising. In addition, such changes in laws could increase our costs of doing business, subject our business to increased liability or prevent us from delivering our services over the Internet, thereby harming our business and results of operations.

Our Ting Internet businesses rely on Network Operators. Failure by a Network Operator to obtain the proper licenses and governmental approvals from regulatory authorities would cause us to be unable to successfully operate those businesses.

The FCC licenses currently held by our Network Operators and their third-party affiliates to provide wireless services are subject to renewal and revocation. There is no guarantee that their wireless or network licenses will be renewed. The FCC requires all licensee to meet certain requirements, including so-called "build-out" requirements, to retain their licenses. Their failure to comply with certain FCC requirements in a given license area could result in the revocation of their license for that geographic area. As Ting expands its Internet business, enters new markets, and considers offering regulated telecommunications services, it takes on additional local, state and federal regulatory and compliance obligations that require additional diligence and resources.

We may experience unforeseen or potentially uninsured liabilities or losses in connection with our Domain Services business, including the risk that our standard agreements with customers may not be enforceable. This could negatively impact our financial results.

We operate on a global basis and all of our customers must execute our standard agreements that govern the terms of the services we provide to our customers. These agreements contain provisions intended to limit our potential liability arising from the provision of services to our customers. As most of our customers purchase our services online, execution of our agreements by resellers occurs electronically or, in the case of our terms of use, is deemed to occur because of a user's continued use of the website/Internet service following notice of those terms. We believe that our reliance on these agreements is consistent with the practices in our industry, but if a domestic, foreign or international court were to find that either one of these methods of execution is invalid or that key provisions of our services agreements are unenforceable, we could be subject to liability that has a material adverse effect on our business or we could be required to change our business practices in a way that increases our cost of doing business.

Although we maintain general liability insurance, claims could exceed the coverage obtained or might not be covered by our insurance. While we typically obtain representations from our technology and content providers and contractual partners concerning the ownership of licensed technology and informational content and obtain indemnification to cover any breach of these representations, we still may not receive accurate representations or adequate compensation for any breach of these representations. We may have to pay a substantial amount of money for claims that are not covered by insurance or indemnification or for claims where the existing scope or adequacy of insurance or indemnification is disputed or insufficient.

RISKS RELATED TO OWNERSHIP OF OUR STOCK

Our share price may be volatile, which may make it difficult for shareholders to sell their shares of common stock when they want to, at an attractive price.

Our share price has varied recently and the price of our common stock may decrease in the future, regardless of our operating performance. Investors may be unable to resell their common stock following periods of volatility because of the market's adverse reaction to this volatility.

The following factors may contribute to this volatility: actual or anticipated variations in our quarterly operating results; interruptions in our services; seasonality of the markets and businesses of our customers; announcements of new technologies or new services by our company or by our competitors; our ability to accurately select appropriate business models and strategies; the operating and stock price performance of other companies that investors may view as comparable to us; analyst or short-seller reports; news relating to our company or our industry as a whole; and news relating to trends in our markets.

The stock market in general and the market for Internet-related companies in particular, including our company, has experienced volatility.

We cannot guarantee that our recently announced stock buyback program will be fully consummated or that such program will enhance the long-term value of our share price.

On February 22, 2024, the Company announced that its Board had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 23, 2024 and is expected to terminate on February 22, 2025. Although the Company has repurchased shares under previous programs, there is no obligation for the Company to continue to repurchase or to repurchase any specific dollar amount of stock. The stock buyback program could affect the price of our stock and increase volatility in the market. We cannot guarantee that this program will be fully consummated or that such program will enhance the long-term value of our share price.

GENERAL RISK FACTORS

Economic, political, and market conditions may adversely affect our businesses, financial condition, and operating results.

The financial results of our business are both directly and indirectly dependent upon economic conditions throughout the world, which in turn can be impacted by conditions in the global financial markets. Uncertainty about global economic conditions may lead businesses to postpone spending in response to tighter credit and reductions in income or asset values. Weak economic activity may lead government customers to cut back on services. Factors such as the availability of credit, changes in laws (including laws relating to taxation), trade barriers, currency exchange rates and controls, and national and international political circumstances including armed conflicts, wars, terrorist acts or security operations, and other geopolitical conflicts, such as the ongoing conflicts between Russia and Ukraine, Hamas and Israel, and the possible expansion of such conflict in surrounding areas could have a material adverse effect on our business and investments, which could reduce our revenue, profitability and value of our assets. These factors may also adversely affect the business, liquidity and financial condition of our customers. In addition, periods of poor economic conditions could increase our ongoing exposure to credit risks on our accounts receivable balances. This could have a material adverse effect on our business, financial condition and results of operations.

Rising inflation and interest rates may adversely affect our businesses, financial condition, and operating results.

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. The Company continues to monitor and assess wage inflation across all our operating segments - Ting, Tucows Domains, and Wavelo, and is managing it against offsets in hiring plans and contractor mix. Our Ting segment is also exposed to inflation through its Fiber Network build costs, and sustained levels of inflation increase the costs of related 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 better manage total cost estimates against actual spends. However, there can be no assurance as to the effectiveness of our efforts to mitigate any impact of the adverse economic conditions, and other unknown developments.

In addition, our exposure to interest rate fluctuations relate primarily to our 2023 Credit Facility, entered into on September 22, 2023. The Company's interest rates are based on SOFR.

Our business and financial performance could be adversely affected, directly or indirectly, by both global and local climate and environmental natural disasters, health crises and other disruptive activities.

Neither the occurrence nor the potential impact of global and local climate and environmental natural disasters, health crises and other disruptive activities can be predicted. However, these occurrences could impact us directly as a result of damage or by preventing us from conducting our business in the ordinary course, or indirectly as a result of their impact on our customers, suppliers or other counterparties. We could also suffer adverse consequences to the extent that such occurrences affect the financial markets or the economy in general or in any particular region or globally. Our ability to mitigate the adverse consequences of such occurrences is in part dependent on the quality of our resiliency planning, and our ability, if any, to anticipate the nature of any such event that occurs. The adverse impact of such occurrences also could be increased to the extent that there is a lack of preparedness on the part of international, national or regional emergency responders or on the part of other organizations and businesses that we deal with, particularly those that we depend upon but have no control over.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBER SECURITY

Risk Management and Strategy

Our business heavily relies on various IT and application systems, which contain proprietary and confidential information about our operations, employees, customers, and our customers' customers, including personally identifiable information. These systems are connected to and/or accessed from the Internet and, as a result, are susceptible to cyber-attacks. We recognize the critical importance of maintaining the safety and security of our systems and data and have a holistic process for overseeing and managing cybersecurity and related risks. Our process is supported by both management and our Board of Directors. Organizationally, our businesses are structured as three operating and reportable segments: Ting, Wavelo and Tucows Domains. These segments are decentralized; management and cybersecurity resources are organized both at the parent company level and within each decentralized segment. Each segment has dedicated liaisons for cybersecurity, compliance, and risk management activities.

We maintain and continue to expand our investment in the development of our information security management system ("ISMS"). Our ISMS leverages a risk-based approach and is informed by industry standard guidance, including the National Institute of Standards and Technology ("NIST") Cybersecurity Framework ("CSF") and the International Organization for Standardization ("ISO") 27001 Information Security Management System Requirements. A material cyber-attack on Company systems, distribution partners and their key operating systems, or any other third-party partners or vendors and their key operating systems may interrupt the ability to operate the Company's business, damage the Company's reputation, or result in monetary damages. The development of the ISMS is focused on the protections of the confidentiality, integrity, and availability of the Company's information system infrastructure as well as the data in the Company's care, custody and control. The Company engages third parties to evaluate certain aspects of the ISMS, provide threat intelligence, and perform vulnerability assessments and other services as needed.

The Company follows an established process to identify and evaluate risks from cyber security threats that may arise internally or through the introduction of third parties to the ISMS. This evaluation is part of the Company's risk management process. The process may include, but is not limited to, evaluating the third party's cybersecurity maturity and/or imposing certain contractual conditions.

Operationally, the Company maintains Security and Network Operations Centers, which provide 24/7 coverage and support of on-call cybersecurity and network professionals to triage and respond to immediate cybersecurity threats and outages. The Company also assesses cybersecurity risks on a quarterly basis and ranks them according to their risk profile. These risks are communicated to management and to the Board of Directors as part of the normal course of operations.

Cybersecurity incidents are responded to in accordance with the Company's established Cybersecurity Incident Response Plan ("IRP"). In the event of an incident, we follow our IRP, which includes evaluation of the severity of the incident based on factors such as the number of assets affected, the extent of the incident, the likelihood of inappropriate data exposure, operational impact and/or reliability impact. Dependent upon the severity of an incident, the incident is escalated to the senior leadership, including the CEO and CISO. Senior leadership then determines whether, based on various factors, the incident requires immediate escalation to the Board of Directors and to third-party incident response organizations and notification to functional areas, such as legal and finance, as well as senior leadership and the Board, and external entities, as appropriate and required. We maintain relationships with third-party Digital Forensics and Incident Response ("DFIR") service providers to strengthen our incident response capabilities in the event that we determine the need to augment our effort during an incident and to provide us additional assurance that our responses to complex incidents or highly sophisticated threat actors have been effective and complete.

Although the risks from cyber threats have not materially affected our business strategy, results of operations, or financial condition to date, they may in the future and we continue to closely monitor cyber risk. For a detailed description of the risks related to cybersecurity, see Item 1A. "Risk Factors." of this Form 10-K, which should be read in conjunction with this Item 1C.

Board Governance and Management

The Board of Directors oversees management's processes for identifying and mitigating risks, including cybersecurity risks, to help align our risk exposure with our strategic objectives. Our corporate information security function, led by our Chief Information Security Officer ("CISO"), is responsible for our overall information security strategy, policy, security engineering, operations and cyber threat detection and response. The current CISO has an extensive information technology and cybersecurity background gained through years of industry experience and leadership. The corporate information security function is responsible for managing and continually enhancing our information security posture and information security infrastructure with the ultimate goal of preventing cybersecurity incidents and reducing their severity to the extent feasible, while simultaneously increasing our resilience in an effort to minimize the business impact should an incident occur.

Senior leadership, including our CEO, who also has relevant experience in cybersecurity matters, and our CISO, regularly brief the Board of Directors on our cybersecurity and information security initiatives, and the Board of Directors is apprised of cybersecurity incidents deemed to have a material business impact.

ITEM 2. PROPERTIES

Our principal administrative, engineering, marketing and sales office is located in Toronto, Ontario, and consists of approximately 27,000 square feet. We lease satellite offices in various cities across the U.S. as well as internationally in Germany and Denmark. The Toronto, Ontario office supports all of our segments. Leased satellite offices across the U.S. support the Ting segment, while European offices support Tucows Domains.

The Company has acquired real property in Centennial, Colorado where it has constructed an office, warehouse and data center to support our local logistical operations and our North American colocation needs. This property primarily supports the Ting segment.

Currently, substantially all of our computer and communications hardware is located at our facilities or at server hosting facilities in Toronto, Ontario; San Jose, California; Centennial, Colorado; Ashburn, Virginia; Charlottesville, Virginia; Durango, Colorado; and Moncure, North Carolina.

Recent Sales of Unregistered Securities

None.

ITEM 3. LEGAL PROCEEDINGS

We are involved in various investigations, claims and lawsuits arising in the normal conduct of our business, none of which, individually or in aggregate in our opinion, will materially harm our business. We cannot assure you that we will prevail in any litigation. Regardless of the outcome, any litigation may require us to incur significant litigation expense and may result in significant diversion of management attention.

In addition, pursuant to Item 103(c)(3)(iii) of Regulation S-K under the Exchange Act, the Company is required to disclose certain information about environmental proceedings to which governmental authority is a party if the Company reasonably believes such proceedings may result in monetary sanctions, exclusive of interest and costs, above a stated threshold. The Company has elected to apply a threshold of \$1 million for purposes of determining whether disclosure of any such proceedings is required.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Price Range of Common stock

Our common stock is traded on the NASDAQ Capital Market under the symbol "TCX". Our common stock is also traded on the Toronto Stock Exchange under the symbol "TC".

As of April 1, 2024, Tucows had 74 shareholders of record.

We have not declared or paid any cash dividends on our common stock during the fiscal years ended December 31, 2023 and December 31, 2022, and we do not intend to do so in the immediate future, but we may decide to do so in the future depending on ongoing market conditions. Our ability to pay any cash dividends on our common stock, should our Board decide to do so, is also dependent on our earnings and cash requirements and may, from time to time, be governed by the terms of our credit agreements.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

2024 Stock Buyback Program:

On February 22, 2024, the Company announced that its Board had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 23, 2024 and is expected to terminate on February 22, 2025.

2023 Stock Buyback Program:

On February 9, 2023, the Company announced that its Board had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 10, 2023 and terminated on February 9, 2024. The Company did not repurchase shares under this program.

2022 Stock Buyback Program:

On February 10, 2022, the Company announced that its Board had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 11, 2023 and terminated on February 9, 2022. The Company did not repurchase shares under this program.

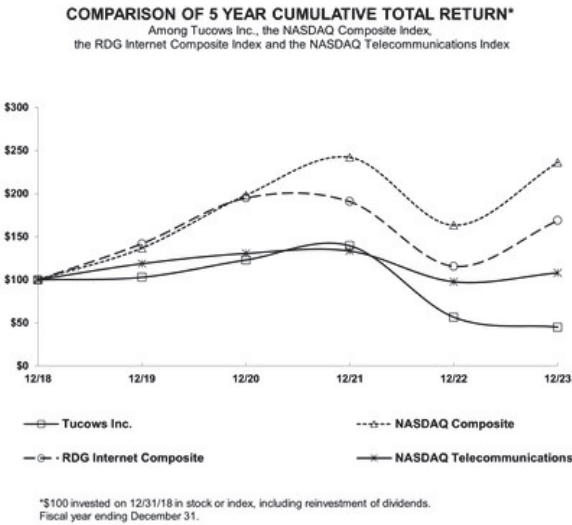
Net Exercise of Stock Options:

Our current equity-based compensation plans include provisions that allow for the "net exercise" of stock options by all plan participants. In a net exercise, any required payroll taxes, federal withholding taxes and exercise price of the shares due from the option holder can be paid for by having the option holder tender back to the Company a number of shares at fair value equal to the amounts due. These transactions are accounted for by the Company as a purchase and retirement of shares and are included in the table below as common stock received in connection with share-based compensation.

	Year Ended December 31,		
	2023	2022	2021
Common stock received in connection with share-based compensation			
Number of shares	-	3,053	45,824
Aggregate market value of shares (in thousands)	\$ -	\$ 197	\$ 3,669
Average price per share	\$ -	\$ 64.67	\$ 80.07

STOCK PERFORMANCE GRAPH

The following graph and table compares the Company's stock performance to three stock indices over a five-year period assuming a \$100 investment was made on the last day of fiscal year 2018.



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
Ting:		
Fiber Internet Services	\$ 50,937	\$ 42,425
Wavelo:		
Platform Services	37,082	22,594
Other professional services	1,588	1,750
Total Wavelo	38,670	24,344
Tucows Domains:		
Wholesale		
Domain Services	189,013	187,542
Value Added Services	17,712	20,712
Total Wholesale	206,725	208,254
Retail	35,372	34,904
Total Tucows Domains	242,097	243,158
Tucows Corporate:		
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	10%	11%
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.

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%	

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	6%	7%
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%

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)

	Year ended December 31,	
	2023	2022
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)

	Year ended December 31,	
	2023	2022
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:

Maturity date (Dollar amounts in thousands of U.S. dollars)	Notional amount of U.S. dollars	Weighted average exchange rate of U.S. dollars	Fair value
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>	<u>1.3681</u>	<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.

As of December 31, 2023, we had an outstanding balance of \$211.9 million on the 2023 Credit Facility. The 2023 Credit Agreement added SOFR Loans as a form of advance available under the 2023 Credit Facility to replace LIBOR Rate Advances, and such SOFR Loans may bear interest based on Adjusted Daily Simple SOFR (defined to be the applicable SOFR rate published by the Federal Reserve Bank of New York plus 0.10% per annum subject to a floor of zero) or Adjusted Term SOFR (defined to be the applicable SOFR rate published by CME Group Benchmark Administration Limited plus 0.10% for one-month, 0.15% for three-months, and 0.25% for six-months per annum). As of December 31, 2023, an adverse change of 100 bps on the interest rate would have the effect of increasing our annual interest payment on the 2023 Credit Agreement by approximately \$2.1 million, assuming that the loan balance as of December 31, 2023 is outstanding for the entire period.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our consolidated financial statements and supplementary data required by this item are attached to this Annual Report on Form 10-K beginning on page F-1.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) of the Exchange Act, management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated, as of the end of the period covered by this report, the effectiveness of our disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that due to the material weakness in our internal control over financial reporting that is described below in Management's Annual Report on Internal Control over Financial Reporting, our disclosure controls and procedures were not effective as of December 31, 2023.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America and includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America
- Provide reasonable assurance that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, such as resource constraints, human error, lack of knowledge or awareness and the possibility of intentional circumvention of these controls, internal control over financial reporting may not prevent or detect misstatements. Furthermore, the design of any control system is based, in part, upon assumptions about the likelihood of future events, for which assumptions may ultimately prove to be incorrect. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2023. In making this assessment, our management used the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on the results of our evaluation, management has determined that due to the material weakness described below, our internal control over financial reporting was not effective as of December 31, 2023.

Material Weakness in Internal Control Over Financial Reporting

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP. In connection with our audit of consolidated financial statements for the year ended December 31, 2023, we identified certain control deficiencies in the design and operation of our internal control over financial reporting that constituted a material weakness in two components of internal control as defined by COSO 2013 (Control Activities, and Information and Communication).

As a result of the identified material weaknesses, management, including the CEO and CFO, concluded that internal control over financial reporting was not effective as of December 31, 2023. Deloitte LLP, the independent registered public accounting firm that audited our financial statements included in this annual report, has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2023. Their attestation report is included in this annual report.

We did not design and maintain effective controls over certain information technology (“IT”) general controls for information systems that are relevant to the preparation of our financial statements. Specifically, we did not design and maintain (i) program change management controls for certain financial systems to ensure that IT program and data changes affecting certain IT systems and underlying accounting records are identified, tested, authorized and implemented appropriately and (ii) user access controls that adequately restrict user access to certain financial systems, programs and data to appropriate company personnel.

These IT deficiencies did not result in a material misstatement to the Annual Financial Statements for the period ended December 31, 2023, however, the deficiencies, when aggregated, could impact the effectiveness of IT-dependent controls (such as automated controls that address the risk of material misstatement to one or more assertions, and underlying data that support the effectiveness of system-generated reports used in related process-level manual controls that rely on information generated from the affected information technology systems) that could result in misstatements potentially impacting all financial statement accounts and disclosures that would not be prevented or detected. Accordingly, management has determined these deficiencies in the aggregate constitute a material weakness.

Deloitte LLP, our independent registered public accounting firm, has audited our consolidated financial statements and expressed an unqualified opinion thereon. Deloitte has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2023. These reports set forth at the beginning of Part II, Item 8 if this Annual Report on Form 10-K.

Remediation Plan for Material Weakness in Internal Control Over Financial Reporting

To remediate the material weakness described above, the Company's remediation efforts included evaluating access controls to key financial systems and implementing enhanced procedures for regular access reviews. Under the oversight of the Audit Committee, management will continue to remediate and maintain effective IT controls over impacted financial systems. These steps will include training for IT control owners, enhanced change management procedures, and improved documentation that will clearly identify management's expectations of the control activities. The material weakness will not be considered remediated until the applicable remedial controls operate for a sufficient period. The Company has made progress in the remediation efforts but cannot estimate when these efforts will be completed.

The material weaknesses that were previously disclosed as of December 31, 2022 were remediated as of December 31, 2023. See “Item 9A. Controls and Procedures — Management's Annual Report on Internal Control over Financial Reporting” and “Item 9A. Controls and Procedures — Remediation Plan for Material Weaknesses in Internal Control over Financial Reporting” contained in the Company's report on Form 10-K for the fiscal year ended December 31, 2022 and “Item 4. Controls and Procedures” contained in the Company's subsequent quarterly reports on Form 10-Q during 2023, for disclosure of information about the material weaknesses that were reported as a result of the Company's annual assessment as of December 31, 2022 and the remediation plan for that material weaknesses. As disclosed in the quarterly reports on Form 10-Q for the first three quarters of 2023, the Company has monitored the controls necessary to remediate the material weaknesses, and as of December 31, 2023, such controls were successfully tested and the material weaknesses were remediated.

Changes in Internal Control over Financial Reporting

Other than the material weaknesses noted above, there were no changes made in our internal controls over financial reporting occurred during Fiscal 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Rule 10b5-1 Trading Plans

During the three months ended December 31, 2023, no director or officer of the Company adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Robin Chase

Chair of the Board since September 2021 and Director since October 2014

Robin Chase, 65, is a transportation entrepreneur. She is co-founder and former CEO of Zipcar, founded in 2000, the world's leading car sharing network; as well as co-founder of Veniam, founded in 2012, a network company that moves terabytes of data between vehicles and the cloud. In 2019, she co-founded her first nonprofit, NUMO, a global alliance to channel the opportunities presented by new urban mobility technologies to build cities that are sustainable and just. Her book is *Peers Inc: How People and Platforms are Inventing the Collaborative Economy and Reinventing Capitalism*.

In addition to Ms. Chase's position as Chair of the Tucows Board, she sat on the board of World Resources Institute from 2009 to 2022, and served on the Dutch multinational DSM's Sustainability Advisory Board from 2016 to 2023. In the past, she served on the boards of Veniam and the Massachusetts Department of Transportation, the French National Digital Agency, the National Advisory Council for Innovation & Entrepreneurship for the US Department of Commerce, the Intelligent Transportation Systems Program Advisory Committee for the US Department of Transportation, the OECD's International Transport Forum Advisory Board, the Massachusetts Governor's Transportation Transition Working Group, and Boston Mayor's Wireless Task Force.

Ms. Chase lectures widely, has been frequently featured in the major media, and has received many awards in the areas of innovation, design, and environment, including the prestigious Urban Land Institute's Nicols Prize as Urban Visionary, Time 100 Most Influential People, Fast Company Fast 50 Innovators, and BusinessWeek Top 10 Designers. Robin graduated from Wellesley College and MIT's Sloan School of Management, was a Harvard University Loeb Fellow, and received an honorary Doctorate of Design from the Illinois Institute of Technology.

Ms. Chase's experience operating companies at the chief executive officer level along with her numerous experiences on these boards and councils qualify her to be a director of Tucows.

Allen Karp

Director since October 2005 and Chair Emeritus since September 2021

Mr. Karp, 83, was with Cineplex Odeon Corporation in various positions from 1986 to 2005, retiring as Chairman and Chief Executive Officer in 2002 and as Chairman Emeritus in 2005. From 1966 to 1986, he practiced law at the law firm of Goodman and Carr LLP, where he was named partner in 1970. Mr. Karp was until 2011 a Director of Brookfield Real Estate Services Inc., where he also served on the Audit Committee and as the Chair of the Corporate Governance Committee. From 2004 to 2014, Mr. Karp was Chairman of the Board of Directors of IBI Group Inc., as well as Chairman of the Nominating, Governance and Compensation Committee. Mr. Karp is a past director of the Toronto International Film Festival Group, where he served as Chairman of the Board from 1999 to 2007 and served as Chairman of its Corporate Governance Committee from 2007 to 2012. Additionally, Mr. Karp has previously served as director of several other public corporations.

Mr. Karp has extensive executive leadership skills, long-standing senior management experience, a strong ethics and compliance focus and audit committee experience. These skills and qualifications, in addition to his recent service on the boards of directors of other public companies, enable him to bring valuable perspectives to our Board, particularly with respect to corporate governance matters, and qualify him to be a director of Tucows.

Erez Gissin

Director since August 2001

Mr. Gissin, 65, has served since 2010 as a managing partner in Helios Energy Investment, a renewable energy investment fund. From 2005 to 2010, Mr. Gissin served as the Chief Executive Officer of BCID Ltd., an investment company focusing on infrastructure development projects in China. From 2000 to 2005, Mr. Gissin served as the Chief Executive Officer of IP Planet Networks Ltd., an Israeli satellite communication operator providing Internet backbone connectivity and solutions to Internet Service Providers. From 1995 to 2000, Mr. Gissin was Vice President, Business Development of Eurocom Communications Ltd., a holding company that controls several telecommunications services, equipment and Internet companies in Israel.

Mr. Gissin has a strong background in the internet communications industry and has gained significant institutional knowledge in his long tenure as one of our directors. Mr. Gissin also has significant leadership experience as the Chief Executive Officer of BCID Ltd. and IP Planet Networks Ltd. and has extensive financial acumen derived from his years of executive experience and PE fund management. All of these qualities qualify Mr. Gissin to be a director of Tucows.

Elliot Noss

Director since August 2001

Mr. Noss, 61, is our President and Chief Executive Officer and has served in such capacity since the completion of our merger with Tucows Delaware in August 2001. From May 1999 until completion of the merger in August 2001, Mr. Noss served as President and Chief Executive Officer of Tucows Delaware. Before that, from April 1997 to May 1999, Mr. Noss served as Vice President of Corporate Services of Tucows Interactive Ltd., which was acquired by Tucows Delaware in May 1999.

Mr. Noss's lengthy service as our Chief Executive Officer has provided him with extensive knowledge of, and experience with, Tucows' operations, strategy and financial position. In addition, Mr. Noss has widespread knowledge of the internet and software industry generally that, coupled with his operational expertise, qualifies him to be a director of Tucows.

Jeffrey Schwartz

Director since June 2005

Mr. Schwartz, 61, has served as a director of Dorel Industries since 1987 and as Executive Vice President and Chief Financial Officer since 2003. Mr. Schwartz is a graduate of McGill University in Montreal and has a degree in the field of business administration.

Mr. Schwartz has a significant amount of public-company financial expertise, particularly in his executive experience as the chief financial officer of Dorel Industries, Inc. This executive experience, along with Mr. Schwartz's service as one of our Audit Committee members (and as Chairperson of our Audit Committee since 2005), qualifies him to be a director of Tucows.

Marlene Carl

Director since September 2021

Marlene Carl, 34, became Chief Financial Officer ("CFO") at CHAPTERS Group AG (formerly MEDIQON group AG) in 2021, a German publicly traded company focused on entrepreneurial and long-term investments in companies with scalable business models from a variety of sectors including a number of software companies. Prior to joining CHAPTERS Group AG in 2020, Ms. Carl worked in financing for eight years focusing on digital infrastructure in Europe from FTTH roll-outs in rural areas to data center construction for banks, including Berenberg and NIBC Bank N.V. based in Hamburg, London and Frankfurt. Ms. Carl holds a Master of Science from Frankfurt School of Finance & Management with focus on Capital Markets.

Ms. Carl's experience in investment management and infrastructure financing, including FTTH projects, qualify her to be a director of Tucows.

Lee Matheson

Director since September 2023

Lee Matheson, 42, has been a Partner at EdgePoint Investment Group Inc. since June of 2020. Previously, Mr. Matheson was a partner at Ewing Morris & Co., co-founder of Broadview Capital Management Inc., and portfolio manager of the Broadview Dark Horse LP, a long/short fund focused on Canadian small cap securities. Mr. Matheson has extensive public company experience having served on the boards of Echelon Financial Holdings Inc. from 2018 to 2020, RDM Corporation from 2011 to 2017, AlarmForce Industries Inc. from 2016 to 2018, WesternOne Inc. from 2016 to 2018, Medworxx Solutions Inc. from 2013 to 2015, and Strad Inc. from 2019 to 2020. Mr. Matheson has been a director of AutoCanada Inc. and Optiva Inc. since 2020 and is a Chartered Financial Analyst Charterholder.

Mr. Matheson's experience in investment management, financing, and SaaS businesses qualify him to be a director of Tucows.

Gigi Sohn

Director since September 2023

Gigi Sohn, 61, is the Executive Director of the American Association of Public Broadband (AAPB), a Benton Institute Senior Fellow and Public Advocate and a Distinguished Fellow at the Georgetown Law Institute for Technology Law & Policy. She is one of the nation's leading public advocates for open, affordable and democratic communications networks. In October 2021, President Biden nominated her to serve on the Federal Communications Commission. From 2013 to 2016, Ms. Sohn was Counselor to the former Chairman of the Federal Communications Commission, Tom Wheeler. She spent the previous 12 years as Co-Founder and CEO of Public Knowledge, a leading communications and intellectual property policy advocacy organization serving the interests of consumers in Washington. Ms. Sohn was previously a Project Specialist in the Ford Foundation's Media, Arts and Culture unit and Executive Director of the Media Access Project, the first public interest communications law firm. In 1997, President Clinton appointed Ms. Sohn to serve as a member of his Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters. Ms. Sohn is a long-time advocate for LGBTQ+ equality and has served as President of the Gay and Lesbian Lawyers (now the LGBT Bar Association) of Washington, DC from 1994-1997 and was elected as the first openly LGBTQ+ member of the District of Columbia Bar Board of Governors. Ms. Sohn's experience in telecommunications policy and regulation, and consumer interests qualify her to be a director of Tucows.

Our directors are elected annually and serve until the election or appointment and qualification of their successors or their earlier death, resignation or removal.

Executive Officers

The required information regarding our executive officers is set forth in Part I, Item 1 hereof under the caption "Information about our Executive Officers and Key Employees" and is incorporated herein by reference.

Governance Principles

The governance principles of our Board include the charters of our Audit Committee and our Corporate Governance, Nominating and Compensation Committee. Our governing principles also include our Code of Business Conduct and Ethics which includes specifics for our senior officers, including our Chief Executive Officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Each of these documents can be obtained without charge from our Internet web site at tucows.com. Amendments and waivers of our ethics policy for our senior officers will either be posted on our website or filed with the SEC on a Current Report on Form 8-K.

Ms. Chase serves as Chair of the Board. The Board currently consists of eight directors, all of whom, except for Elliot Noss, are "independent" within the meaning of the independence requirements prescribed by the listing standards of the NASDAQ Capital Market. The Board believes that this structure, which provides an overwhelming majority of independent directors, coupled with the Board meeting in executive session without any management directors or non-independent directors present, is an appropriate structure for Tucows' Board. We believe that this structure provides appropriate and independent oversight by the Board. The Board regularly consults with our Chief Executive Officer, who is also a director, and our Corporate Governance, Nominating and Compensation Committee to review the various types of risk that affect Tucows and the strategies to mitigate such risks. The Board believes that this structure has been effective.

Executive Sessions of Independent Directors

A majority of the independent directors meet quarterly in executive sessions without members of our management present. Ms. Chase is responsible for chairing the executive sessions.

Policy Regarding Attendance

Directors are expected, but are not required, to attend board meetings, meetings of committees on which they serve, and shareholder meetings, and to spend the time needed and meet as frequently as necessary to discharge their responsibilities properly. Elliot Noss attended our 2023 annual meeting of shareholders held virtually. The remainder of the Board were available on request.

Committees

Our Board has two committees, an audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended, and a corporate governance, nominating and compensation committee. Our committees generally meet in connection with regularly scheduled quarterly and annual meetings of the Board, with additional meetings held as often as its members deem necessary to perform its responsibilities. From time to time, depending on the circumstances, the Board may form a new committee or disband a current committee.

The Audit Committee currently consists of Mr. Schwartz (Chair), Ms. Carl, Mr. Karp and Mr. Gissin, all of whom are independent directors as prescribed by the listing standards of the NASDAQ Capital Market.

The Audit Committee held five meetings during Fiscal 2023. Each member of the Audit Committee attended at least 75% of the total number of meetings of the committee during Fiscal 2023. The Audit Committee's purposes are to:

- Provide oversight of the Company's accounting and financial reporting processes and the audit of the Company's financial statements;
- Assist the Board in oversight of (i) the integrity of the Company's financial statements, (ii) the Company's compliance with legal and regulatory requirements, (iii) the qualifications, independence and performance of the Company's independent registered public accounting firm, and (iv) the Company's internal accounting and financial controls;
- Provide to the Board such information and materials as it may deem necessary to make the Board aware of significant financial matters that require the attention of the Board; and
- Oversee the management of risks associated with the Company's financial reporting, accounting and auditing matters.

Each of the members of our Audit Committee is an independent director and satisfies the independence standards as prescribed by the listing standards of the NASDAQ Capital Market and Rule 10A-3 under the Exchange Act and is able to read and understand fundamental financial statements including balance sheets, income statements and cash flow statements. Additionally, the Board has determined that Mr. Schwartz qualifies as an "audit committee financial expert" as defined under Item 407(d)(5) of Regulation S-K. The Board has adopted a written charter for the Audit Committee, which the Audit Committee has reviewed and determined to be in compliance with the rules prescribed by the listing standards of the NASDAQ Capital Market and which is available at tucows.com.

The Corporate Governance, Nominating and Compensation Committee currently consists of Ms. Chase (Chair), Mr. Karp, Ms. Sohn, and Mr. Matheson. Mr. Schwartz served on the committee until September, 2023. Each member of our Corporate Governance, Nominating and Compensation Committee is an independent director as defined in the listing standards of the NASDAQ Capital Market and also satisfies the applicable compensation committee member independence standards as prescribed by the listing standards of the NASDAQ Capital Market and Rule 10C-1 under the Exchange Act.

The *Corporate Governance, Nominating and Compensation Committee* held five meetings during Fiscal 2023. Each member of the Corporate Governance, Nominating and Compensation Committee attended at least 75% of the total number of meetings of the committee during Fiscal 2023. The Corporate Governance, Nominating and Compensation Committee's purposes are to:

- Identify individuals qualified to become board members, consistent with criteria approved by the Board.
- Select, or recommend that the Board select, the director nominees for election at each annual meeting of stockholders.
- Oversee the evaluation of the Board and management.
- Review and approve corporate goals and objectives relevant to the CEO compensation, evaluate the CEO's performance in light of those goals and objectives, and, either as a committee or together with the other independent directors (as directed by the Board), determine and approve the CEO's compensation level based on this evaluation.
- Review and approve non-CEO Executive compensation including incentive compensation and equity-based compensation.
- Provide oversight of the Company's compensation policies and plans and benefits programs, and overall compensation philosophy.
- Administer the Company's equity compensation plans for its executive officers and employees and the granting of equity awards pursuant to such plans or outside of such plans; and
- Cause to be prepared the report of the Corporate Governance, Nominating and Compensation required by the rules and regulations of the SEC.

The Corporate Governance, Nominating and Compensation Committee may delegate authority to one or more members of this committee or one or more members of management when appropriate, but no such delegation is allowed if the authority is required by law, regulation or listing standard to be exercised by the Corporate Governance, Nominating and Compensation Committee as a whole. The Board has adopted a written charter for the Corporate Governance, Nominating and Compensation Committee, which the Corporate Governance, Nominating and Compensation Committee has reviewed and determined to be in compliance with the rules prescribed by the listing standards of the NASDAQ Capital Market and which is available at tucows.com.

Our executive officers do not play a formal role in determining their compensation. However, our People Team reviews (i) information the Company purchased from Payscale (formerly known as Payfactor) and (ii) published trends for the year from a variety of public sources, and, after consulting with Mr. Noss, our Chief Executive Officer, provides consolidated information outlining management's recommendation regarding executive officer compensation based on title to the Corporate Governance, Nominating and Compensation Committee. The Corporate Governance, Nominating and Compensation Committee then reviews and discusses the information provided with our CEO and Chief People Officer and then determines the total compensation for each named executive office, as it deems appropriate.

Board Leadership Structure and Responsibilities

Our Board of Directors oversees management's performance on behalf of our shareholders. Our Board's primary responsibilities are to (1) monitor management's performance to assess whether we are operating in an effective, efficient and ethical manner to create value for our shareholders, (2) periodically review our long-range plans, business initiatives, cyber security matters, capital projects and budget matters and (3) approve compensation for our President and Chief Executive Officer who, with senior management, manages our day-to-day operations.

Our Board and its committees meet throughout the year on a set schedule, and also hold special meetings and act by written consent from time to time as appropriate. The independent directors meet without management present at regularly scheduled executive sessions at each quarterly Board meeting and some special Board meetings. Our Board has delegated certain responsibilities and authority to its Audit Committee and Corporate Governance, Nominating and Compensation Committee. The Audit Committee periodically discusses with management the Company's policies and guidelines regarding risk assessment and risk management, as well as the Company's major financial risk exposures and the steps that management has taken to monitor and control such exposures. The Audit Committee also reviews, evaluates and recommends changes to the Company's financial reporting policies and procedures. The Corporate Governance, Nominating and Compensation Committee reviews and evaluates the risks underlying the Company's compensation policies and plans and recommends changes to these policies and plans accordingly. Our Board believes that risk oversight actions taken by our Board and its committees are appropriate and effective at this time.

We believe it is beneficial to separate the roles of Chief Executive Officer and Chairperson to facilitate their differing roles in the leadership of our company. The role of the Chairperson includes setting the agenda for, and presiding over, all meetings of our Board of Directors, including executive sessions of independent directors, providing input regarding information sent to our Board of Directors, serving as liaison between the Chief Executive Officer and the independent directors and providing advice and assistance to the Chief Executive Officer. The Chairperson is also a key participant in establishing performance objectives and overseeing the process for the annual evaluation of our Chief Executive Officer's performance. In addition, under our Bylaws, our Chairperson has the authority to call special meetings of our Board and shareholders. In contrast, our Chief Executive Officer is responsible for handling our day-to-day management and direction, serving as a leader to the management team and formulating corporate strategy.

Currently our Chairperson is Ms. Chase, while Mr. Noss serves as our Chief Executive Officer. Ms. Chase is an independent director. Ms. Chase has extensive executive leadership skills, long-standing senior management and board experience, and a strong ethics and compliance focus.

We believe that this leadership structure for our Board provides us with the most effective level of oversight over the Company's business operations while at the same time enhancing our Board's ability to oversee our enterprise-wide approach to risk management and corporate governance and best serves the interests of our shareholders. It allows for a balanced corporate vision and strategy, which is necessary to address the challenges and opportunities we face at this time and demonstrates our commitment to good corporate governance. In addition, it allows for appropriate oversight of the Company by our Board, fosters appropriate accountability of management and provides a clear delineation of responsibilities for each position.

Board Diversity

We believe it is important that our Board is composed of individuals reflecting the diversity represented by our employees, our customers, and our communities. With the addition of Marlene Carl in 2021 and Gigi Sohn in 2023, we have expanded the diversity of our Board. Below, we provide an enhanced disclosure regarding the diversity of our Board as required by the listing standards of the NASDAQ Capital Market.

Board Diversity Matrix (As of April 1, 2024)				
Total Number of Directors	8			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identify				
Directors	3	5	0	0
Part II: Demographic Background				
African American or Black	0	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	0	0	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	3	5	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+	1			
Did Not Disclose Demographic Background	0			

Board Diversity Matrix (As of March 15, 2023)				
Total Number of Directors	7			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identify				
Directors	2	5	0	0
Part II: Demographic Background				
African American or Black	0	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	0	0	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	2	5	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+	0			
Did Not Disclose Demographic Background	0			

Role of the Board in Risk Oversight

One of our Board's key functions is providing oversight of our risk management process. Our Board does not have a standing risk management committee, but rather administers this oversight function directly through our Board as a whole, as well as through Board of Directors standing committees that address risks inherent in their respective areas of oversight. In particular, our Audit Committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, our Corporate Governance, Nominating and Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking, monitors our major legal compliance risk exposures and our program for promoting and monitoring compliance with applicable legal and regulatory requirements, and our Board is responsible for monitoring and assessing strategic risk exposure and other risks not covered by our committees.

The full Board (or the appropriate committee in the case of risks that are under the purview of a particular committee) receives reports on the risks we face from our Chief Executive Officer or other members of management to enable us to understand our risk identification, risk management and risk mitigation strategies. When a committee receives the report, the chairperson of the relevant committee reports on the discussion to the full Board during that committee's reports portion of the next Board meeting. However, it is the responsibility of the committee chairs to report findings regarding material risk exposures to our Board as quickly as possible.

Director Nomination

Our Corporate Governance, Nominating and Compensation Committee is responsible for identifying potential nominees to our Board. In considering candidates for nomination, our Corporate Governance, Nominating and Compensation Committee seeks individuals who evidence strength of character, mature judgment, career specialization, relevant technical skills or financial acumen, diversity of viewpoint and industry knowledge. As set forth in the charter of our Corporate Governance, Nominating and Compensation Committee, our Board endeavors to have directors who collectively possess a broad range of skills, expertise, industry and other knowledge and business and other experience useful to the effective oversight of our business. In addition, our Board also seeks members from diverse backgrounds so that our Board consists of members with a broad spectrum of experience and expertise and with a reputation for integrity. In determining whether to nominate a current director for re-election, our Corporate Governance, Nominating and Compensation Committee will take into account these same criteria as well as the director's past performance, including his or her participation in and contributions to the activities of the Board.

Our Corporate Governance, Nominating and Compensation Committee will evaluate and consider recommendations for director candidates from shareholders using the same criteria described above. As set forth in the charter of the Corporate Governance, Nominating and Compensation Committee, recommendations submitted by the Company's shareholders shall be submitted, along with the following to the attention of the Chairperson of the Corporate Governance, Nominating and Compensation Committee at 96 Mowat Avenue, Toronto, Ontario M6K 3M1 Canada at least 120 days before the first anniversary of the date on which we first mailed our proxy materials for our prior year's annual meeting of shareholders:

- the name and address of the recommending shareholder;
- the candidate's name and the information about the individual that would be required to be included in a proxy statement under the rules of the SEC;
- information about the relationship between the candidate and the recommending shareholder;
- the consent of the candidate to serve as a director; and
- proof of the number of shares of our common stock that the recommending shareholder owns and the length of time the shares have been owned.

Communications with our Board of Directors

A Tucows' shareholder who wishes to communicate with our Board may send correspondence to the attention of our Secretary at 96 Mowat Avenue, Toronto, Ontario M6K 3M1 Canada. The Secretary will submit the shareholder's correspondence to the Chairperson of the Board, the Chairperson of the appropriate committee, or the appropriate individual director, as applicable.

Director Compensation

Under the terms of our 2006 Amended and Restated Equity Compensation Plan (the "2006 Plan"), we make automatic formula grants of nonqualified stock options to our non-employee directors and members of committees of our Board as described below. All stock-based compensation for our non-employee directors is governed by our 2006 Plan or its predecessor, our 1996 Equity Compensation Plan (the "1996 Plan"). All options granted under the automatic formula grants vest after one year, have an exercise price equal to the fair market value per common share as determined by the per share price as of the close of business on the date of grant and have a five-year term. Options are granted to directors under the 2006 Plan as follows:

- on the date a non-employee director becomes a director, he or she is granted options to purchase 4,375 shares of our common stock;
- on the date a director becomes a member of the Audit Committee, he or she is granted options to purchase 3,750 shares of our common stock;
- on the date a director becomes a member of the Corporate Governance, Nominating and Compensation Committee, he or she is granted options to purchase 2,500 shares of our common stock; and
- on each date on which we hold our annual meeting of shareholders, each non-employee director in office immediately before and after the annual election of directors receives an automatic grant of options to purchase 3,750 shares of our common stock.

Directors who are employees receive no additional or special compensation for serving as directors.

All annual fees are paid to our directors in quarterly installments.

On each date on which we hold our annual meeting of shareholders, each non-employee director in office immediately before and after the annual election of directors receives an automatic grant of options to purchase shares of our common stock. The initial grant is set at 3,750 options. Each non-employee member of the Board will receive \$30,000 annually, the Chairperson of the Board will additionally receive \$15,000; each Chair of the Audit Committee and Corporate Governance, Nomination and Compensation Committee will additionally receive \$7,500; and each member of the Audit Committee and Corporate Governance, Nomination and Compensation Committee will additionally receive \$12,000.

We also purchase directors and officer's liability insurance for the benefit of our directors and officers as a group in the amount of \$30 million. We also reimburse our directors for their reasonable out-of-pocket expenses incurred in attending meetings of our Board or its committees.

The table below shows all compensation paid to each of our non-employee directors during 2023. Each of the directors listed below served for the entire year except for Lee Matheson and Gigi Sohn, who joined in September 2023.

Name	Fees earned or paid in cash (\$)	Option awards \$(1)(2)	Total (\$)
(a)	(b)	(d)	(h)
Allen Karp	\$ 54,000	\$ 27,211	\$ 81,211
Brad Burnham (3)	22,500	-	22,500
Erez Gissin	42,000	27,211	69,211
Gigi Sohn	11,455	51,065	62,520
Jeffrey Schwartz	60,091	27,211	87,302
Lee Matheson	10,000	51,065	61,065
Marlene Carl	32,000	49,947	81,947
Robin Chase	64,500	27,211	91,711
	\$ 296,546	\$ 260,921	\$ 557,467

- (1) The amounts reported in this column represent the aggregate grant date fair value of the option grants calculated in accordance with the FASB Accounting Standards Codification ("ASC") 718 and based on the Black-Scholes option-pricing model using the same assumptions that are set forth in "Note 16 – Stock Option Plans" of the Notes to the Consolidated Financial Statements including Part II, Item 8 of this Annual Report. Under the 2006 Plan, these options vest one year after the grant date and have a five-year term.
- (2) On September 7, 2023, each of our re-elected non-employee directors at the time were awarded automatic formula option grants with an exercise price of \$19.78 and a grant date fair value of \$7.26; directors newly elected to the Board at the Company's annual meeting, Ms. Sohn and Mr. Matheson, were awarded automatic formula option grants of 4,375 shares with an exercise price of \$19.78 and a grant date fair value of \$7.26 in connection with becoming a director. On November 2, 2023, Ms. Carl was awarded an automatic formula option grant of 3,750 with an exercise price of \$16.47 and a grant date fair value of \$6.06 in connection to Ms. Carl's appointment to the Audit Committee. On November 17, 2023, Ms. Sohn was awarded an automatic formula option grant of 2,500 options with an exercise price of \$21.07 and a grant date fair value of \$7.73 in connection with Ms. Sohn's appointment to the Corporate Governance, Nomination and Compensation Committee. On November 17, 2023, Ms. Matheson was awarded an automatic formula option grant of 2,500 options with an exercise price of \$21.07 and a grant date fair value of \$7.73 in connection with Mr. Matheson's appointment to the Corporate Governance, Nomination and Compensation Committee. The aggregate number of option awards outstanding at December 31, 2023 is as follows for each of the following non-employee directors: 22,500 for Mr. Karp; 22,500 for Mr. Gissin; 6,875 for Ms. Sohn; 22,500 for Mr. Schwartz; 6,875 for Mr. Matheson; 15,625 for Ms. Carl; and 22,500 for Ms. Chase.
- (3) Mr. Burnham did not stand for re-election during the Company's 2023 meeting of the shareholders.

DELINQUENT SECTION 16(a) REPORTS

Section 16(a) of the Exchange Act, requires our directors and executive officers and persons who own more than ten percent of a registered class of our equity securities to file with the SEC reports of ownership and reports of changes in ownership of our common stock and our other equity securities. These persons are required by SEC regulation to furnish us with copies of all Section 16(a) reports they file.

We believe that, under the SEC's rules and based solely upon our review of the copies of the Forms 3, 4 and 5 furnished to us, or written representations from certain reporting persons, any such reports have been filed in a timely manner with the following exceptions: The Form 4's filed September 18, 2023 for the grants of options to each of Mr. Matheson and Ms. Sohn with a transaction date of September 7, 2023; and the Form 4's filed on July 5, 2023 for the grants of options for executives (Messrs. Nos, Singh, Woroch, Fausett, and Koenig) with a transaction date of June 29, 2023; and the Form 4 filed on February 28, 2024 for the grant of options to Mr. Matheson with a transaction date of November 16, 2023.

Stock ownership of management

We encourage stock ownership by our directors, officers and employees to align their interests with the interests of shareholders. Under Section 16(a) of the Exchange Act, directors, officers and certain beneficial owners of the Company's equity securities are required to file reports of their transactions in the Company's equity securities with the SEC on specified due dates.

ITEM 11. EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

Philosophy

We recognize that our success depends to a great degree on the integrity, knowledge, imagination, skill, diversity and teamwork of our employees. To this end, attracting and retaining the level of executive talent we need to be successful in accomplishing our mission of providing simple useful services that help people unlock the power of the Internet is a key objective of our executive compensation program. Our executive compensation program is designed to ensure we have the talent we need to maintain our current high-performance standards and grow our business for the future. As such, we aim to provide competitive compensation packages for all our key positions, including our Named Executive Officers (“NEOs”) that are guided by market rates and tailored to account for the specific needs and responsibilities of the particular position as well as the performance and unique qualifications of the individual employee. For Fiscal 2023, our NEOs included Messrs. Noss, Singh, Reilly, Woroch and Fausett.

This Compensation Discussion and Analysis (“CD&A”) provides comprehensive information about our executive compensation program for our Fiscal 2023 NEOs, who are listed below, and provides context for the decisions underlying the compensation reported in the executive compensation tables in this Annual Report. Our NEOs are:

Elliot Noss	President and CEO, Tucows Inc. and Ting
Davinder Singh	Chief Financial Officer (“CFO”)
Justin Reilly	Chief Executive Officer, Wavelo
David Woroch	Chief Executive Officer, Tucows Domains
Bret Fausett	Chief Legal Officer & Vice-President, Regulatory Affairs

Our philosophy is to provide a mix of compensation that motivates our executives to achieve our short and long- term performance goals in a market-competitive and fiscally responsible way, which in turn will create value for our shareholders. We achieve our objectives by designing our executive compensation program so that a substantial amount of our NEOs’ compensation is performance-based to ensure the actual compensation paid to our executives is appropriately aligned with our Company’s performance, and shareholder long-term interests. Beginning in Fiscal 2023 to better link individual compensation to Company performance, the Company will determine variable compensation based on a scorecard of organizational targets that are specific to each executive’s business segment performance. In addition, we also link individual compensation to Company performance by virtue of the parent company or subsidiary stock options granted by the Company. More specifically, our executive compensation programs are designed to:

- provide an appropriate mix of fixed and variable compensation to attract, retain and motivate key executives;
- provide a substantial portion of our executive compensation that is performance-based, on a company or service basis, to support creation of long-term shareholder value, financial growth and operational efficiency without encouraging excessive risk taking;
- target compensation at the 50th percentile of market levels, as measured by Payscale; and
- promote internal equity by offering comparable pay to executives whom we expect to make roughly equivalent contributions, while differentiating executives’ compensation arrangements when appropriate.

Overview of Pay Elements and Linkage to Compensation Philosophy and Objectives

We believe the following elements of our compensation program help us to realize our compensation philosophy and objectives:

Pay Element	Characteristics	Compensation Philosophy and Objectives	Factors Considered to Determine Awards
Salary	Annual fixed cash compensation	Provides a competitive and stable component of income to our executives	<ul style="list-style-type: none"> • Job responsibilities • Experience • Individual contributions • Future potential • Internal pay equity • Effect on other elements of compensation and benefits including target bonus amounts
Short-Term Incentive Bonus	Annual variable cash compensation based on the achievement of pre-established annual performance measures, for Fiscal 2022, these were based on parent company Adjusted EBITDA for Compensation and starting Fiscal 2023, these were based on balanced scorecards for each business which include a mix of performance measures tailored to each business segment	Provides competitive short- term incentive opportunities for our executives to earn annual cash bonuses based on performance objectives that, if attained, can reasonably be expected to (i) promote our business and strategic objectives and (ii) correspond to those paid to similarly-situated and comparably skilled executives at peer companies	<ul style="list-style-type: none"> • Company performance measures • Service performance measures
Stock Options Grants	Annual long-term equity awards, which can be in our Company ("Company Options") that vest over 4 years or non-recurring options in one or more of our subsidiaries of Wavelo or Ting ("Subsidiary Options") that vest over 3 years	Provides variable compensation that helps to retain executives and ensures our executives' interests are aligned with those of shareholders to grow long-term value	<ul style="list-style-type: none"> • Job responsibilities • Individual contributions • Future potential • Value of vested and unvested outstanding equity awards • Internal pay equity

The weight of each of these components has to date not been determined by any particular formula, although our overall mix of total compensation has historically emphasized retention value. The specific mix of components has been and will continue to be within the discretion and business judgment of our Board and the Corporate Governance, Nominating and Compensation Committee, which has placed greater emphasis on considerations specific to the individual holding a particular executive position rather than on general market data.

At the 2023 Annual Meeting, a majority of our stockholders approved, as recommended by our Board, a proposal for our stockholders to be provided with the opportunity to cast a non-binding advisory vote on compensation of our NEOs every three years. Our Board believed that this frequency would be appropriate as a triennial vote would provide the Company with sufficient time to engage with stockholders to understand and respond to the “say-on-pay” vote results and to put in place any changes to the Company’s compensation program as a result of such discussions, if necessary. The next stockholder advisory (non-binding) vote on executive compensation will be held at our 2026 Annual Meeting.

Determining Total Compensation

Base Salary

With respect to each NEO, in determining total compensation, the Corporate Governance, Nominating and Compensation Committee considers the Company’s compensation philosophy as outlined above, comparative market data and specific factors relative to each NEO’s responsibilities and performance. We do not specifically benchmark compensation for our NEOs in terms of picking a particular percentile relative to other people with similar titles at peer group companies. We believe that many subjective factors unique to each NEO’s responsibilities and performance are not adequately reflected or otherwise accounted for in a percentile-based compensation determination.

In addition, in determining the appropriate level of total compensation for our NEOs, the Corporate Governance, Nominating and Compensation Committee (i) reviews and considers the performance of each NEO, and (ii) considers, for each NEO, the estimated amount of total compensation:

- we would be willing to pay to retain that person;
- we would have to pay to replace the person; and
- the individual could otherwise command in the employment marketplace.

Our People Team leadership reviews comparative data derived from market research and publicly available information for each of the NEOs and then recommends compensation levels for all employees to our CEO. The CEO then, after consultation with our People Team, makes recommendations to the Corporate Governance, Nominating and Compensation Committee regarding total compensation for each NEO. The Corporate Governance, Nominating and Compensation Committee reviews and discusses the information and then determines the total compensation for each NEO, as it deems appropriate.

The CEO’s total compensation is determined by the Corporate Governance, Nominating and Compensation Committee outside the presence of the CEO. The Committee’s decision regarding total compensation for the CEO is based on the philosophy outlined above and includes a review of comparative data and consideration of the accomplishments of the CEO in developing the business strategy for the Company, the performance of the Company relative to this strategy and his ability to attract and retain senior management. In establishing the CEO’s total compensation, the Corporate Governance, Nominating and Compensation Committee is also mindful of the prior results of the shareholder’s Advisory Vote on Executive Compensation.

We provide a base salary to our NEOs to compensate them for services rendered on a day-to-day basis during the year and to provide sufficient fixed cash compensation to allow them to focus on their ongoing responsibilities. The base salaries of all executive officers are reviewed annually and adjusted when necessary to reflect individual roles and performance as well as market conditions.

Annual Cash Incentive Bonuses

We use annual cash incentive bonuses to communicate specific goals that are of primary importance during the coming year and motivate our senior officers and NEOs to achieve these goals. Each year, we assess if our corporate financial and strategic objectives are optimally aligned with our management incentive compensation plan to motivate and reward our senior executives, including our NEOs, to attain specific short-term performance objectives that, in turn, further our long-term business objectives. These objectives are based upon corporate or service-related targets, rather than individual objectives. In setting target payout levels under our management incentive compensation plan, our Corporate Governance, Nominating and Compensation Committee considers historical payouts, the total cost to the company should performance objectives be achieved and our retention needs.

In Fiscal 2023, due to the Corporate Governance, Nominating and Compensation Committee's reassessment and the realignment of Tucows' operating segments in 2022, annual cash incentive bonuses were structured based on balanced scorecards for each business segment, including specific performance measures. Notably, bonuses were distributed semi-annually; of the first installment, 50% was paid in Company common stock, effectively meaning a quarter of the annual bonus was issued in stock. This procedure was unique to Fiscal 2023 and does not indicate a permanent policy shift.

The Corporate Governance, Nominating and Compensation Committee determines the initial level of funding for the annual incentive bonus pools during the annual budgeting process and approves provisional quarterly payments, computed on a pro-rata basis, based on quarterly minimum year-to-date targets for our senior officers, including NEOs, taking into account the Company's actual performance on a year-to-date basis. The future holdback percentage could be adjusted for each semi-annual period should circumstances warrant it. The Corporate Governance, Nominating and Compensation Committee retains the right to interpret, rescind, prescribe, amend or suspend payment under our management incentive compensation plan at any time. Changes made by the Corporate Governance, Nominating and Compensation Committee will however only be on a prospective basis so will not impact any semi-annual rights our NEO's and senior officers may have up to the date of the change.

The performance goals under our management incentive compensation plan consists of two components; namely, an incentive bonus and an overachievement bonus, each with established thresholds and maximum achievement levels.

For the incentive bonus component, achievement of established targets for each NEO will equate to 100% of the bonus being paid. Where 75% of an established target is achieved ("floor level") this will result in 50% of the bonus being paid. Below the floor level no bonus is payable. In those cases, where achievement is between the floor level and the established target, straight-line interpolation is applied from the established target levels.

The table below summarizes the 2023 and 2024 incentive bonus opportunities for our NEOs.

Unaudited				
Named Officer	2024		2023	
	Target incentive Bonus Opportunity(1)	Basis for Target incentive Bonus for 2024	Target incentive Bonus Opportunity(1)	Basis for Target incentive Bonus for 2023
Elliot Noss	\$ 490,686	50% Ting targets, 20% Wavelo targets and 30% Tucows Domains targets	\$ 362,859	50% Ting targets, 30% Wavelo targets and 20% Tucows Domains targets
Davinder Singh	\$ 181,176	50% Ting targets, 25% Wavelo targets and 25% Tucows Domains targets	\$ 153,277	50% Ting targets, 15% Wavelo targets and 35% Tucows Domains targets
Justin Reilly	\$ 355,104	100% Wavelo targets	\$ 347,343	100% Wavelo targets
David Woroch	\$ 181,176	100% Domain Services targets	\$ 157,064	100% Domain Services targets
Bret Fausett	\$ 210,000	50% Ting targets, 25% Wavelo targets and 25% Tucows Domains targets	\$ 158,828	50% Ting targets, 15% Wavelo targets and 35% Tucows Domains targets

- (1) All dollar amounts below are shown U.S. dollars. Amounts payable in Canadian dollars for 2023 have been converted into U.S. dollars based upon the exchange rate of 1.3500 Canadian dollars for each U.S. dollar, the average OANDA exchange rate for 2023 as at December 31, 2023. Amounts payable in Canadian dollars during the 2023 fiscal year have been converted into U.S. dollars based upon the exchange rate of 1.338 Canadian dollars for each U.S. dollar, which represents the year-end exchange rate as at December 31, 2023.

Our Corporate Governance, Nominating and Compensation Committee met in March 2024 and determined the achievement of the financial objectives applicable under the management incentive compensation plan for 2023 had been partially achieved.

In connection with the Corporate Governance, Nominating and Compensation Committee's annual review process, the Committee also approved a new set of performance goals under our management incentive compensation plan for Fiscal 2024 and decided not to increase the incentive bonus target opportunity for our NEOs.

Equity-Based Awards

We believe that equity-based awards encourage our NEOs to focus on the long-term performance of our business. Our Board grants equity awards to executives and other employees in order to enable them to participate in the long-term appreciation of our stock price. Additionally, we believe our equity awards provide an important retention tool for our NEOs, as they are subject to multi-year vesting. The equity awards can be Company Options and Subsidiary Options. To date, we have not adopted stock ownership guidelines for our NEOs.

Historically, we have granted equity-based awards in the form of Company Options, including options granted at the commencement of employment and additional awards each year. The size of the initial option grant made to each NEO upon joining our company is primarily based on competitive conditions applicable to the NEO's specific position. For subsequent equity grants to our NEOs, our Corporate Governance, Nominating and Compensation Committee receives input from our CEO and the People Team leadership.

The Company granted Ting Subsidiary Options to certain NEOs on January 16, 2023. The Ting Equity Compensation Plan (ECP) includes private subsidiary stock which have been established for the benefit of the employees, officers, directors and certain consultants of Ting. The Ting stock options were introduced in order to provide variable compensation that helps retain executives and ensures that our executives' interests are aligned with those stakeholders of the business to grow the long-term value. The maximum number of Ting common units that have been set aside for issuance under the plan is 10 million units, currently there are 100 million common units outstanding. Generally, options issued under the ECP vest over a four-year period and have a term not exceeding seven years. Compensation costs for awards of stock-based compensation settled in shares are determined based on the fair value of share-based instrument at the time of the grant and are recognized as expense over the vesting period of the share-based instrument. No Company Option grants have yet been awarded for Fiscal 2024.

In connection with its annual review process, the Corporate Governance, Nominating and Compensation Committee approved, effective June 29, 2023, the following Company Option awards to our NEOs. These options vest in equal installments on each of the first four anniversaries of the grant date, generally subject to the NEO's continued employment with us.

The following table sets forth the number of Company Options granted in Fiscal 2023 and their corresponding aggregate grant date fair value as of December 31, 2023.

Name	Number of Company Options	Aggregate Grant Date Fair Value (US Dollars)
Elliot Noss	5,000	\$ 55,815
Davinder Singh	5,000	\$ 55,815
Justin Reilly	-	-
David Woroch	5,000	\$ 55,815
Bret Fausett	3,500	\$ 39,070

The following table sets forth the number of Subsidiary Options granted in Fiscal 2023 and their corresponding aggregate grant date fair value as of December 31, 2023

Name	Number of Subsidiary Options	Aggregate Grant Date Fair Value (US Dollars)
Elliot Noss	2,000,000	\$ 201,700
Davinder Singh	50,000	\$ 5,043
Bret Fausett	50,000	\$ 5,043

During Fiscal 2023 options exercised and vested for our named executive officers were as follows:

Name	Company options exercised during Fiscal 2023	Company options vested during Fiscal 2023	Subsidiary options exercised during Fiscal 2023	Subsidiary options vested during Fiscal 2023 Wavelo	Subsidiary options vested during Fiscal 2023 Ting
Elliot Noss	-	4,750	-	500,000	945,945
Davinder Singh	-	3,625	-	75,000	23,648
Justin Reilly	-	5,063	-	2,250,000	-
David Woroch	-	4,625	-	-	-
Bret Fausett	-	3,625	-	75,000	23,648

Severance and Change of Control Benefits

Our Board believes that it is necessary to offer senior members of our executive team severance benefits to ensure that they remain focused on executing our strategic plans, including in the event of a proposed or actual acquisition. We have entered into employment agreements with our NEOs to provide them with additional severance benefits upon an involuntary termination of employment under specified circumstances prior to and following a change of control. The terms of these agreements are described below in "Potential Payments on Termination or Change in Control."

Perquisites

We do not provide any significant perquisites or other personal benefits to our NEOs.

Benefits

We provide the following benefits to our NEOs. We believe these benefits are typical of the companies with which we compete for employees:

- healthcare insurance;
- life insurance and accidental death and dismemberment insurance;
- long term disability insurance;
- a registered retirement savings matching program;
- a healthcare spending account;
- a car allowance;
- an annual medical; and
- an employee assistance program.

Certain Corporate Governance Considerations

We currently do not require our executive officers to own a particular number of shares of our common stock. The Corporate Governance, Nominating and Compensation Committee is satisfied that stock and option holdings among our executive officers are sufficient at this time to provide motivation and to align their interests with those of our stockholders. However, we prohibit all directors and employees from hedging their economic interest in the Company securities that they hold.

Tax Considerations

We do not provide any tax gross-ups to our executive officers or directors.

In designing our compensation programs, the Corporate Governance, Nominating and Compensation Committee considers the financial accounting and tax consequences to Tucows as well as the tax consequences to our employees. In determining the aggregate number and mix of equity grants in any fiscal year, the Corporate Governance, Nominating and Compensation Committee and management consider the size and share-based compensation expense of the outstanding and new equity awards.

Section 162(m) of the Internal Revenue Code generally disallows a federal income tax deduction to public companies for annual compensation over \$1 million (per individual) paid to their chief executive officer, chief financial officer and the next three most highly compensated executive officers (as well as certain other officers who were covered employees in years after 2016). As a result, most of the compensation payable to our NEOs in excess of \$1 million per person in a year will not be fully deductible.

Tax deductibility is not the primary factor used by the Committee in setting compensation, however, and corporate objectives may not necessarily align with the requirements for full deductibility under Section 162(m). Our Corporate Governance, Nominating and Compensation Committee has not adopted a formal policy regarding tax deductibility of compensation paid to our NEOs. We believe it is important and in the best interests of our shareholders to preserve flexibility in administering compensation programs as corporate objectives may not always be consistent with the requirements for full deductibility under Section 162(m).

Compensation Risk Assessment

The Corporate Governance, Nominating and Compensation Committee oversaw the performance of a risk assessment of our Executive Compensation Program to ascertain any potential material risks that may be created by this program. Because performance-based incentives are used in our executive compensation program, it is important to ensure that these incentives do not result in our NEOs taking unnecessary or excessive risks or any other actions that may conflict with our long-term interests. The Corporate Governance, Nominating and Compensation Committee considered the following attributes of our Executive Compensation Program:

- the balance between short- and long-term incentives;
- use of qualitative as well as quantitative performance factors in determining compensation payouts, including minimum and maximum performance thresholds, funding that is based on actual results measured against pre-approved financial and operational goals and metrics that are clearly defined;
- incentive compensation that includes a stock component where value is best realized through long-term appreciation of stockholder value; and
- incentive compensation components that are paid or vest over an extended period.

The Corporate Governance, Nominating and Compensation Committee focuses primarily on the compensation of our NEOs because risk-related decisions depend predominantly on their judgment. The Corporate Governance, Nominating and Compensation Committee believes that risks arising from our policies and practices for compensation of other employees are not reasonably likely to have a material adverse effect on us.

Compensation Committee Report

The Corporate Governance, Nominating and Compensation Committee has reviewed and discussed the foregoing CD&A with management and, based on such review and discussions, the Corporate Governance, Nominating and Compensation Committee has recommended to the Board that the CD&A be included in this Annual Report.

Submitted by the following members of the Corporate Governance, Nominating and Compensation Committee:

Robin Chase (Chair)
Allen Karp
Gigi Sohn

Summary Compensation Table

The following Summary Compensation table provides a summary of the compensation earned by our NEOs, comprising our Chief Executive Officer, our Chief Financial Officer, and our next three most highly compensated executive officers for services rendered in all capacities during 2023. Specific aspects of this compensation are dealt with in further detail in the tables that follow. All dollar amounts below are shown in U.S. dollars. If necessary, amounts that were paid in Canadian dollars during Fiscal 2023 were converted into U.S. dollars based upon the exchange rate of 1.300 Canadian dollars for each U.S. dollar, which represents the average exchange rate for 2023.

Name and Principal Position (a)	Year (b)	Salary (\$) (c)	Bonus (1)(2) (\$) (d)	Option Awards (3) (\$) (e)	All Other Compensation (4) (\$) (f)	Total (\$) (g)
<i>Elliot Noss</i>	2023	\$ 444,275	\$ 383,666	\$ 55,815	\$ 210,372	\$ 1,094,128
<i>President and Chief Executive Officer of Tucows and Ting</i>	2022	409,156	281,452	73,781	495,571	1,259,960
	2021	397,112	242,240	125,719	8,379	773,450
<i>Davinder Singh</i>	2023	281,859	157,828	55,815	16,920	512,421
<i>Chief Financial Officer</i>	2022	269,447	137,816	73,781	176,012	657,056
	2021	260,840	112,162	125,719	7,182	505,903
<i>Justin Reilly</i>	2023	581,085	348,652	-	1,482	931,219
<i>Chief Executive Officer, Wavelo</i>	2022	603,031	361,818	73,781	2,196,080	3,234,710
	2021	317,128	114,166	100,575	1,197	533,066
<i>David Woroch</i>	2023	287,894	161,002	55,815	7,041	511,752
<i>Chief Executive Officer, Tucows Domains</i>	2022	282,553	144,308	147,561	6,701	581,123
	2021	269,165	134,584	100,575	7,182	511,506
<i>Bret Fausett</i>	2023	321,760	167,290	39,070	17,913	546,034
<i>Chief Legal Officer and Vice-President, Regulatory Affairs</i>	2022	286,436	120,578	73,781	73,164	553,959
	2021	274,461	98,806	125,719	-	498,986

(1) Represents bonus earned under our incentive programs during the fiscal years ended December 31, 2023, 2022 and 2021.

Of the 2023 amount, the following amounts will be paid in March 2024 (unaudited):

Elliot Noss	\$ 174,887
Davinder Singh	\$ 74,942
Justin Reilly	\$ 106,531
David Woroch	\$ 84,585
Bret Fausett	\$ 79,883

Of the 2022 amount, the following amounts were paid in February 2023 (unaudited):

Elliot Noss	\$ 107,611
Davinder Singh	\$ 50,389
Justin Reilly	\$ 233,839
David Woroch	\$ 57,441
Bret Fausett	\$ 45,773

Of the 2021 amount, the following amounts were paid in February 2022 (unaudited):

Elliot Noss	\$	104,902
Davinder Singh	\$	48,646
Justin Reilly	\$	49,233
David Woroch	\$	59,539
Bret Fausett	\$	43,403

- (2) On August 14, 2023 the NEOs received grants of common stock of the Company in lieu of a portion of their cash bonuses.
- (3) Represents the aggregate grant date fair value of such Company Options, calculated in accordance with FASB ASC 718. Please see “Note 16– Stock Option Plans” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report, for a discussion of the assumptions underlying these calculations.
- (4) Amounts reported in this column are comprised of the following items:

Unaudited							
	Year	Additional Health Spending Credits (\$)	Car Allowance (\$)	One-Time Payment (\$)	Subsidiary Stock Options (1) (\$)	Retirement Allowance (\$)	All Other Compensation (\$)
Elliot Noss	2023	\$ 2,001	\$ 6,671	\$ -	\$ 201,700	\$ -	\$ 210,372
	2022	1,154	6,656	-	487,761	-	495,571
	2021	1,197	7,182	-	-	-	8,379
Davinder Singh	2023	-	5,559	-	5,043	6,318	16,920
	2022	1,154	5,547	96,147	73,164	-	176,012
	2021	1,197	5,985	-	-	-	7,182
Justin Reilly	2023	1,482	-	-	-	-	1,482
	2022	1,154	-	-	2,194,926	-	2,196,080
	2021	1,197	-	-	-	-	1,197
David Woroch	2023	1,482	5,559	-	-	-	7,041
	2022	1,154	5,547	-	-	-	6,701
	2021	1,197	5,985	-	-	-	7,182
Bret Fausett	2023	-	-	-	5,043	12,870	17,913
	2022	-	-	-	73,164	-	73,164
	2021	-	-	-	-	-	-

- (1) Represents the aggregate grant date fair value of such Subsidiary Options, calculated in accordance with FASB ASC 718. Please see “Note 16– Stock Option Plans” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report, for a discussion of the assumptions underlying these calculations.

Executive Pay Ratio

In August 2015 pursuant to a mandate of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC adopted a rule requiring annual disclosure of the ratio of the median employee’s annual total compensation to the total annual compensation of the principal executive officer (“PEO”). The Company’s PEO is Mr. Noss. The annual total compensation for fiscal year 2023 for our PEO was \$1,093,640, and for the median employee was \$60,937. The resulting ratio of our PEO’s pay to the pay of our median employee for fiscal year 2023 is 18 to 1.

The measurement was prepared as of December 31, 2023 based on active employees as at that date and total compensation for the annual period then ended. The Company utilized tax records to determine the total annual compensation based on gross employment income for each individual Form W-2 or equivalent for our international subsidiaries. Gross employment income includes salaries, bonus, company medical benefits, car allowance and benefits from exercise of stock-options. We determined the compensation of our median employee (i) by calculating the annual total compensation described above for each of our employees, (ii) ranking the annual total compensation of all employees except for the PEO from lowest to highest and (iii) determining the Median Employee. The Median Employee’s Fiscal 2023 compensation was then determined in a manner consistent with the Summary Compensation Table above and compared to the PEO to derive the ratio.

Grants of Plan-Based Awards

The following table sets forth information concerning Company plan-based awards granted to our NEOs in 2023:

Name	Grant Date	Estimated future payouts under non-equity incentive plan awards(1)			All other stock awards: Number of shares of stock or units (#)	Exercise or base price of option awards (\$/Sh)	Grant date fair value of stock and option awards(2)
		Threshold (\$)	Target (\$)	Maximum (\$)			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Elliot Noss	6/29/2023	\$ 181,429	\$ 362,859	\$ 362,859	5,000	\$ 26.78	\$ 55,815
Davinder Singh	6/29/2023	76,638	153,277	153,277	5,000	26.78	55,815
Justin Reilly	-	173,672	347,343	347,343	-	-	-
David Woroch	6/29/2023	78,532	157,064	157,064	5,000	26.78	55,815
Bret Fausett	6/29/2023	79,414	158,828	158,828	3,500	26.78	39,070

- (1) The amounts represent the range of payouts under the 2023 Annual Cash Incentive Bonus plan assuming the achievement of corporate and individual performance targets as further described in "Annual Cash Incentive Bonuses." Amounts above reflect adjustment for any changes in base pay and resulting target bonus percentage during 2023.
- (2) Represents the grant date fair value of such awards, calculated in accordance with FASB ASC 718. Please see "Note 16 – Stock Option Plans" of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report, for a discussion of the assumptions underlying these calculations.

The following table sets forth information concerning Subsidiary plan-based awards granted to our NEOs in 2023:

Name	Grant date	All other option awards: Number of shares underlying Subsidiary Options	Exercise or base price of Subsidiary Option awards	Grant date fair value of Subsidiary Option awards (1)
Elliot Noss	1/16/2023	2,000,000	\$ 6.00	\$ 201,700
Davinder Singh	1/16/2023	50,000	\$ 6.00	\$ 5,043
Justin Reilly	-	-	-	-
David Woroch	-	-	-	-
Bret Fausett	1/16/2023	50,000	\$ 6.00	\$ 5,043

- (1) Represents the grant date fair value of such awards, calculated in accordance with FASB ASC 718. Please see "Note 16 – Stock Option Plans" of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report, for a discussion of the assumptions underlying these calculations.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning Company Stock Options held by the named executive officers as of December 31, 2023:

Name	Number of Securities Underlying Unexercised Company Options (#) Exercisable	Number of Securities Underlying Unexercised Company Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
<i>Elliot Noss</i>	4,500	-	\$64.10	6/4/2025
	4,500	-	62.12	5/27/2026
	3,375	1,125	60.01	5/27/2027
	2,500	2,500	79.44	5/11/2028
	1,250	3,750	41.97	6/16/2029
	-	5,000	26.78	6/29/2030
	<u>16,125</u>	<u>12,375</u>		
<i>Davinder Singh</i>	2,000	-	\$55.65	7/23/2024
	2,250	-	64.10	6/4/2025
	2,250	-	62.12	5/27/2026
	1,687	563	60.01	5/27/2027
	2,500	2,500	79.44	5/11/2028
	1,250	3,750	41.97	6/16/2029
	-	5,000	26.78	6/29/2030
	<u>11,937</u>	<u>11,813</u>		
<i>Justin Reilly</i>	9,000	-	\$55.19	9/16/2026
	1,687	563	60.01	5/28/2027
	2,000	2,000	79.44	5/12/2028
	1,250	3,750	41.97	6/17/2029
	<u>13,937</u>	<u>6,313</u>		
<i>David Woroch</i>	2,250	-	\$64.10	6/4/2025
	2,250	-	62.12	5/27/2026
	1,687	563	60.01	5/27/2027
	2,000	2,000	79.44	5/11/2028
	2,500	7,500	41.97	6/16/2029
	-	5,000	26.78	6/29/2030
	<u>10,687</u>	<u>15,063</u>		
<i>Bret Fausett</i>	5,000	-	\$53.20	9/3/2024
	561	-	64.10	6/5/2025
	1,124	-	62.12	5/28/2026
	843	281	60.01	5/28/2027
	1,249	1,249	79.44	5/11/2028
	625	1,875	41.97	6/16/2029
	-	1,742	26.78	6/29/2030
	<u>9,402</u>	<u>5,147</u>		

The stock options grants listed in the above table were issued under our 2006 Plan.

Under the 2006 Plan, these options primarily vest over a period of four years and have a 7-year term. These options are not exercisable for one year after the grant. Thereafter they become exercisable at the rate of 25% per annum, becoming fully exercisable after the fourth year.

The following table sets forth information concerning subsidiary stock options held by the named executive officers as of December 31, 2023:

Name	Number of Securities Underlying Unexercised Subsidiary Options (#) Exercisable		Number of Securities Underlying Unexercised Subsidiary Options (#) Unexercisable		Option Exercise Price (\$)	Option Expiration Date
	Wavelo	Ting	Wavelo	Ting		
Elliot Noss	500,000	-	500,000	-	1.27	11/8/2029
	-	945,945	-	1,054,055	6.00	1/15/2030
	500,000	945,945	500,000	1,054,055		
Davinder Singh	75,000	-	75,000	-	1.27	11/8/2029
	-	23,648	-	26,352	6.00	1/15/2030
	75,000	23,648	75,000	26,352		
Justin Reilly	2,250,000	-	2,250,000	-	1.27	11/8/2029
	2,250,000	-	2,250,000	-		
Bret Fausett	75,000	-	-	-	1.27	11/8/2029
	-	23,648	-	1,352	6.00	1/15/2030
	75,000	23,648	-	1,352		

The stock option grants listed in the above table were issued under the Wavelo, Inc. 2022 Equity Compensation Plan ("Wavelo ECP") and the 2022 Ting Equity Compensation Plan ("Ting ECP") adopted in 2022 and 2023 respectively.

Under the Wavelo ECP, these options primarily vest over a period of three years and have a 7-year term. For the initial grants under the plan, the first 25% became exercisable within three months and vesting ratably monthly thereafter, after the third year.

Under the Ting ECP, these options primarily vest over a period of four years and have a 10-year term.

Director Compensation

The required information regarding our director compensation is set forth in Part III, Item 10 "Directors, Executive Officers and Corporate Governance" of this Annual Report and is incorporated herein by reference.

Potential Payments on Termination or Change in Control

We have certain agreements that require us to provide compensation to our NEO in the event of a termination of employment or a change in control of Tucows. These agreements are summarized following the table below and do not include any payment for termination for cause. The tables below show estimated compensation payable to each NEO upon various triggering events. Actual amounts can only be determined upon the triggering event.

Unaudited			
Elliot Noss (1)			
	2023	Termination without Cause (Dollar amounts in U.S. dollars)	Change in Control (Dollar amounts in U.S. dollars)
Compensation			
Base Salary/Severance (2)		\$ 963,534	\$ 2,963,534
Bonus Plan (3)		832,083	832,083
Acceleration of Unvested Equity Awards (4)		-	-
Benefits (5)			
Car Allowance		13,341	13,341
Healthcare Flexible Spending Account		4,002	4,002
		<u>\$ 1,812,960</u>	<u>\$ 3,812,960</u>
Unaudited			
Davinder Singh (1)			
	2023	Termination without Cause (Dollar amounts in U.S. dollars)	Change in Control (Dollar amounts in U.S. dollars)
Compensation			
Base Salary/Severance (2)		321,178	-
Bonus Plan (3)		179,845	-
Acceleration of Unvested Equity Awards (4)		-	-
Benefits (5)			
Car Allowance		6,022	-
Healthcare Flexible Spending Account		-	-
		<u>\$ 507,045</u>	<u>\$ —</u>
Unaudited			
Bret Fausett (1)			
	2023	Termination without Cause (Dollar amounts in U.S. dollars)	Change in Control (Dollar amounts in U.S. dollars)
Compensation			
Base Salary/Severance (2)		\$ 350,000	\$ -
Bonus Plan (3)		181,973	-
Acceleration of Unvested Equity Awards (4)		-	-
Benefits (5)			
Car Allowance		-	-
Healthcare Flexible Spending Account		-	-
		<u>\$ 531,973</u>	<u>\$ —</u>
Unaudited			
Justin Reilly (1)			
		Termination without Cause (Dollar amounts in U.S. dollars)	Change in Control (Dollar amounts in U.S. dollars)
Compensation			
Base Salary/Severance (2)		\$ 484,238	\$ -
Bonus Plan (3)		290,543	-
Acceleration of Unvested Equity Awards (4)		-	-
Benefits (5)			
Car Allowance		-	-
Healthcare Flexible Spending Account		1,235	-
		<u>\$ 776,016</u>	<u>-</u>

Unaudited		
David Woroch (1)	Termination without Cause (Dollar amounts in U.S. dollars)	Change in Control (Dollar amounts in U.S. dollars)
Compensation		
Base Salary/Severance (2)	\$ 592,944	\$ -
Bonus Plan (3)	331,597	-
Acceleration of Unvested Equity Awards (4)	-	-
Benefits (5)		
Car Allowance	11,118	-
Healthcare Flexible Spending Account	2,965	-
	<u>\$ 938,624</u>	<u>\$ -</u>

- (1) For the purpose of the table we assumed an annual base salary at the executive's level as of December 31, 2023.
- (2) Severance for Mr. Noss is compensation for one year plus one-month additional compensation for each completed year of service. Total compensation is capped at 24 months. For Messrs. Singh, Fausett, Reilly and Woroch, severance compensation is for six months plus one-month additional compensation for each completed year of service. Total compensation is capped at 24 months.
- (3) For the purpose of the table we assumed that the annual incentive bonus target as of December 31, 2023 had been achieved and that no overachievement bonus or special bonuses would be payable.
- (4) For purposes of the above table, we have assumed that if we terminate Mr. Noss without cause all his unvested options vest automatically and that for Messrs. Singh, Fausett, Reilly and Woroch, their options continue to vest through any severance period. On a change in control we have assumed that all unvested options for Mr. Noss vest automatically and that for Messrs. Singh, Fausett, Reilly and Woroch, their options continue to vest through and until the end of any severance period. Amounts disclosed in this table equal the closing market value of our common stock as of December 31, 2023, minus the exercise price, multiplied by the number of unvested shares of our common stock that would vest. The closing market value of our common stock on December 31, 2023 was 27.00.
- (5) Pay for unused vacation, extended health, matching registered retirement savings plan benefit, life insurance and accidental death and dismemberment insurance are standard programs offered to all employees and are therefore not reported.

Employment Agreements—Termination

Employment contracts are currently in place for each of the NEOs. These employment contracts detail the severance payments that will be provided on termination of employment and the consequent obligations of non-competition and non-solicitation.

The following details the cash severance payment that will be paid to each of the named executive officers in the event of termination without cause or termination for good reason.

Upon termination without cause, Messrs. Woroch, Singh, Reilly and Fausett are each entitled to a severance payment in the amount of six months' compensation plus one months' compensation for each additional completed year of service. Severance payments can be made in equal monthly installments. Messrs. Woroch, Singh, Reilly and Fausett are each bound by a standard non-competition covenant for a period of twelve months following their termination.

Mr. Noss's employment agreements is subject to early termination by us due to:

- the death or disability of the executive;
- for "cause;" or
- without "cause."

If we terminate Mr. Noss without "cause," he is entitled to receive 12 months of compensation plus one month of compensation for each year of service, to a maximum of 24 months of compensation.

For purposes of the employment agreements, "cause" is defined to mean the executive's conviction (or plea of guilty or nolo contendere) for committing an act of fraud, embezzlement, theft or other act constituting a felony or willful failure or an executive's refusal to perform the duties and responsibilities of his position, which failure or refusal is not cured within 30 days of receiving a written notice thereof from our Board.

Employment Agreements—Change in Control

Under his employment agreements, Mr. Noss is also entitled to the change in control benefits described in the following paragraph if:

- the executive resigns with or without “good reason” within the 30-day period immediately following the date that is six months after the effective date of the “change in control;” or
- within 18 months after a “change in control” and executive’s employment is terminated either:
- without “cause;” or
- by resignation for “good reason.”

If an executive’s employment is terminated following a change in control under the circumstances described in the preceding paragraph, the executive is entitled to receive a lump sum payment based upon the fair market value of the Company on the effective date of the “change in control” as determined by our Board in the exercise of good faith and reasonable judgment taking into account, among other things, the nature of the “change in control” and the amount and type of consideration, if any, paid in connection with the “change in control.” Depending on the fair market value of the company, the lump sum payments range from \$375,000 to \$2 million for Mr. Noss. In addition to the lump sum payments, all stock options held by Mr. Noss will be immediately and fully vested and exercisable as of the date of termination.

A “change in control” is generally defined as:

- the acquisition of 50% or more of our common stock;
- a change in the majority of our Board unless approved by the incumbent directors (other than as a result of a contested election); and
- certain reorganizations, mergers, consolidations, liquidations or dissolutions, unless certain requirements are met regarding continuing ownership of our outstanding common stock.

“Good reason” is defined to include the occurrence of one or more of the following:

- the executive’s position, management responsibilities or working conditions are diminished from those in effect immediately prior to the change in control, or he is assigned duties inconsistent with his position;
- the executive is required to be based at a location in excess of 30 miles from his principal job location or office immediately prior to the change in control;
- the executive’s base compensation is reduced, or the executive’s compensation and benefits taken as a whole are materially reduced, from those in effect immediately prior to the change in control; or
- we fail to obtain a satisfactory agreement from any successor to assume and agree to perform our obligations to the executive under his employment agreement.

Compensation Committee Interlocks and Insider Participation

The members of the Corporate Governance, Nominating and Compensation Committee of our Board during 2023 were Ms. Chase (Chair), Mr. Karp, Mr. Schwartz (until November 2023), Ms. Sohn (beginning November 2023) and Mr. Matheson (beginning November 2023). To ensure that our compensation policies are administered in an objective manner, our Corporate Governance, Nominating and Compensation Committee is comprised entirely of independent directors. None of the members of our Corporate Governance, Nominating and Compensation Committee has ever been an officer or employee of the Company or its subsidiaries. None of our executive officers serves as a member of the Board or compensation committee of any entity that has one or more executive officers on our Board or Corporate Governance, Nominating and Compensation Committee.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth the beneficial ownership of our common stock, as of April 1, 2024, by each of our directors and NEOs, as well as by all of our directors and executive officers as a group. The information on beneficial ownership in the table and related footnotes is based upon data furnished to us by, or on behalf of, the persons referred to in the table. Unless otherwise indicated in the footnotes to the table, each person named has sole voting power and sole investment power with respect to the shares included in the table.

Name	Unaudited			
	Beneficial Ownership of Company Stock			
	Company Stock Beneficially Owned Excluding Options	Company Stock Options Exercisable within 60 Days of April 1, 2024	Total Common Stock Beneficially Owned	Percent of Class(1)
Elliot Noss				
96 Mowat Avenue				
Toronto, Ontario, Canada	685,680(2)	17,375	703,055	6.4%
Davinder Singh	8,082(5)	13,187	21,269	*
Justin Reilly	1,944	14,937	16,881	*
David Woroch	125,348(3)	11,687	137,035	1.3%
Bret Fausett	31,695(6)	10,652	42,347	*
Robin Chase	29,172	18,750	47,922	*
Erez Gissin	17,887	18,750	36,637	*
Jeffrey Schwartz	12,375	18,750	31,125	*
Allen Karp	18,014(4)	18,750	36,764	*
Marlene Carl	18	8,125	8,143	*
Gigi Sohn	-	-	-	*
Lee Matheson	-	-	-	*
All directors and executive officers as a group (12 persons)	930,215	150,963	1,081,178	11.6%

* Less than 1%.

(1) Based on 10,928,623 shares outstanding as of March 27, 2024, and stock options exercisable within 60 days of April 1, 2024.

(2) Includes an aggregate of 122,309 shares of common stock that are held in Mr. Noss's RRSP accounts. Includes 1,639 shares of common stock that are held in Mr. Noss's TFSA account. Includes 2,470 shares held by Mr. Noss's spouse, for which Mr. Noss disclaims ownership, and 38,968 shares of common stock that are held in Mr. Noss's former spouses name, over which he has voting power only, pursuant to a separation agreement of 2013. Includes 514,951 shares of Common Stock that are subject to a loan and pledge arrangement entered into by Mr. Noss in order to satisfy the required Canadian taxes and exercise price due in connection with the exercise of expiring options.

(3) Includes 54,984 shares of common stock that are held in Mr. Woroch's RRSP account and 10,750 shares of common stock held in his wife's RRSP account.

(4) Includes 3,000 shares of common stock that are held directly by Mr. Karp's wife.

(5) Includes 319 shares held in Mr. Singh's Deferred Profit Sharing Plan (DPSP) account.

(6) Includes 590 shares held in Mr. Fausett's 401(K) retirement savings plan.

Share Ownership of Certain Beneficial Owners

The following table sets forth information with respect to each shareholder known to us to be the beneficial owner of more than 5% of our outstanding common stock as of April 1, 2024 except for Mr. Noss, whose beneficial ownership of shares is described in the table above.

Name and Address of Beneficial Owner	Beneficial Ownership of Common Stock	
	Number of Shares Beneficially Owned	Percent of Class (1)
Edgepoint Investment Group, Inc. 150 Bloor Street West, Suite 500 Toronto, Ontario, Canada, M5S 2X9	2,106,165(3)	19.3%
Investmentaktiengesellschaft fuer langfristige Invetoren TGV Ruengsdorfer Str. 2e 53173 Bonn, Germany	2,013,932(2)	18.5%
Blacksheep Fund Management Limited Rock House, Main Street, Blackrock, Co Dublin, Ireland A94 YY39	915,154(4)	8.4%
BlackRock, Inc. 55 East 52nd Street New York, NY 10055	706,631(5)	6.5%
The Vanguard Group 100 Vanguard Blvd.	694,231(6)	6.4%

- (1) Based on 10,928,623 shares outstanding as of March 27, 2024.
- (2) Investmentaktiengesellschaft fuer langfristige Invetoren TGV has sole dispositive power and sole voting power over 2,013,932 shares of common stock. This information is based solely on a review of a Schedule 13G filed with the SEC on February 13, 2024 by Investmentaktiengesellschaft fuer langfristige Invetoren TGV.
- (3) Edgepoint Investment Group, Inc. has sole dispositive power and sole voting power over 1,947,291 shares of common stock, and shared dispositive and shared voting power over 158,874 shares of common stock. This information is based solely on a review of a Schedule 13G filed with the SEC on February 14, 2024 by Edgepoint Investment Group, Inc.
- (4) Blacksheep Fund Management Ltd. has shared voting power and shared dispositive power over 915,154 shares of common stock. This information is based solely on a review of a Schedule 13D/A filed with the SEC on January 17, 2024 by Blacksheep Fund Management Limited.
- (5) Blackrock Inc. has sole voting power over 696,183 shares of common stock and sole dispositive power over 706,631 shares of common stock. This information is based solely on a review of a Schedule 13G filed with the SEC on January 29, 2024 by Blackrock Inc.
- (6) The Vanguard Group has sole dispositive power over 681,730 shares of common stock, shared dispositive power over 12,501 shares of common stock, and shared voting power over 9,079 shares of common stock. This information is based solely on a review of a Schedule 13G filed with the SEC on February 13, 2024 by The Vanguard Group.

Equity Compensation Plan Information

The following table provides information for our Company equity compensation plans as of December 31, 2023:

Plan category	Number of securities to be issued upon exercise of outstanding Company Options, warrants and rights (#)	Weighted average exercise price of outstanding Company Options, warrants and rights (\$)	Number of securities remaining available for future issuance under the plan (excluding securities reflected in the first column) (#)
Equity compensation plans approved by security holders:			
2006 Equity Compensation Plan	1,126,382	\$ 54.82	1,028,584
Equity compensation plans not approved by security holders	-	-	-
Total	1,126,382	\$ 54.82	1,028,584

The following table provides information for our Wavelo equity compensation plans as of December 31, 2023:

Plan category	Number of securities to be issued upon exercise of outstanding Subsidiary Options, warrants and rights (#)	Weighted average exercise price of outstanding Subsidiary Options, warrants and rights (\$)	Number of securities remaining available for future issuance under the plan (excluding securities reflected in the first column) (#)
Equity compensation plans approved by security holders:			
2022 Wavelo Equity Compensation Plan	16,333,233	\$ 1.28	3,676,767
Equity compensation plans not approved by security holders	-	-	-
Total	16,333,233	\$ 1.28	3,676,767

The following table provides information for our Ting equity compensation plans as of December 31, 2023:

Plan category	Number of securities to be issued upon exercise of outstanding Subsidiary Options, warrants and rights (#)	Weighted average exercise price of outstanding Subsidiary Options, warrants and rights (\$)	Number of securities remaining available for future issuance under the plan (excluding securities reflected in the first column) (#)
Equity compensation plans approved by security holders:			
2023 Ting Equity Compensation Plan	7,504,269	\$ 6.00	2,495,731
Equity compensation plans not approved by security holders	-	-	-
Total	7,504,269	\$ 6.00	2,495,731

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Review, Approval or Ratification of Transactions with Related Persons

The Audit Committee of the Board is responsible for reviewing and, if appropriate, approving all related party transactions between us and any officer or director that would potentially require disclosure pursuant to the Audit Committee charter. As of the date of this Annual Report on Form 10-K, we expect that any transactions in which related persons have a direct or indirect interest will be presented to the Audit Committee for review and approval. While neither the Audit Committee nor the board have adopted a written policy regarding related party transactions, the Audit Committee makes inquiries to our management and our auditors when reviewing such transactions. Neither we nor the audit committee are aware of any transaction that was required to be reported with the SEC where such policies and procedures either did not require review or were not followed.

Director Independence

Our Board has determined that each of Messrs. Karp, Gissin, Matheson, and Schwartz, Ms. Chase, Ms. Carl, and Ms. Sohn are independent directors, as prescribed by the listing standards of the NASDAQ Capital Market. In this Annual Report, each of these seven directors are referred to individually as an “independent director” and collectively as the “independent directors”. In addition, our Board has determined that each member of our Audit Committee satisfies the applicable audit committee independence standards as prescribed by the listing standards of the NASDAQ Capital Market and Rule 10A-3 under the Exchange Act, and that each member of our Corporate Governance, Nomination and Compensation Committee satisfies the applicable compensation committee member independence standards as prescribed by the listing standards of the NASDAQ Capital Market and Rule 10C-1 under the Exchange Act.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

A summary of the fees of Deloitte LLP for the year ended December 31, 2023 and KPMG LLP for the year ended December 31, 2022 are set forth below:

	2023 Fees	2022 Fees
Audit Fees (1)	\$ 566,000	\$ 789,000
Tax Fees (2)	51,000	74,000
All Other Fees (3)	-	32,000
Total Fees	\$ 617,000	\$ 895,000

- (1) Consists of fees and expenses for (a) the annual audits of our consolidated financial statements and the accompanying attestation report regarding our ICFR contained in our Annual Report on Form 10-K, (b) the review of quarterly financial information included in our Quarterly Reports on Form 10-Q, and (c) audit services related to mergers and acquisitions.
- (2) Consists of fees and expenses for tax compliance and advisory services.
- (3) All other services not included in the above.

Audit Committee pre-approval of audit and permissible non-audit services of independent auditors.

The Audit Committee has adopted a pre-approval policy that provides guidelines for the audit, audit-related, tax and other non-audit services that may be provided to us by our independent auditors. Under this policy, the Audit Committee pre-approves all audit and certain permissible accounting and non-audit services performed by the independent auditors. These permissible services are set forth on an attachment to the policy that is updated at least annually and may include audit services, audit-related services, tax services and other services. For audit services, the independent auditor provides the audit committee with an audit plan including proposed fees in advance of the annual audit. The Audit Committee approves the plan and fees for the audit.

With respect to non-audit and accounting services of our independent auditors that are not pre-approved under the policy, the employee making the request must submit the request to our Chief Financial Officer. The request must include a description of the services, the estimated fee, a statement that the services are not prohibited services under the policy and the reason why the employee is requesting our independent auditors to perform the services. If the aggregate fees for such services are estimated to be less than or equal to \$50,000, our Chief Financial Officer will submit the request to the chairperson of the audit committee for consideration and approval, and the engagement may commence upon the approval of the chairperson. The chairperson is required to inform the full Audit Committee of the services at its next meeting. If the aggregate fees for such services are estimated to be greater than \$50,000, our Chief Financial Officer will submit the request to the full Audit Committee for consideration and approval, generally at its next meeting or special meeting called for the purpose of approving such services. The engagement may only commence upon the approval of full Audit Committee.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements. The financial statements listed in the accompanying index to consolidated financial statements and condensed financial statements of Tucows Inc. are filed as part of this Annual Report on Form 10-K.
2. Financial Statement Schedules. Schedules are not submitted because they are not required or are not applicable, or the required information is shown in the consolidated financial statements or notes thereto.
3. Exhibits. The Exhibits listed below are filed or incorporated by reference as part of this Annual Report on Form 10-K. Where so indicated by footnote, exhibits which were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated in the footnotes below.

Exhibit No.	Description
2.1	Stock Purchase Agreement, dated as of January 20, 2017, by and among Tucows Inc., Tucows (Emerald), LLC, Rightside Group, Ltd., Rightside Operating Co. and eNom, Incorporated (Incorporated by reference to Exhibit 2.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on January 23, 2017).
2.2	First Amendment, dated as of June 13, 2017, to Stock Purchase Agreement, dated as of January 20, 2017, by and among Tucows Inc., Tucows (Emerald), LLC, Rightside Group, Ltd., Rightside Operating Co. and eNom, Incorporated (Incorporated by reference to Exhibit 2.3 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on June 15, 2017, 2017).
2.3	Asset Purchase Agreement, dated as of March 18, 2019, by and among Tucows Inc., Ting Fiber, Inc., NetNames European Holdings ApS, NetNames GmbH, CSC Administrative Services Limited UK, Corporation Service Company and Ascio Technologies, Inc. (Incorporated by reference to Exhibit 2.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on March 20, 2019).
3.1.1	Fourth Amended and Restated Articles of Incorporation of Tucows Inc. (Incorporated by reference to Exhibit 3.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on November 29, 2007).
3.1.2	Articles of Amendment to Fourth Amended and Restated Articles of Incorporation of Tucows Inc. (Incorporated by reference to Exhibit 3.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on January 3, 2014).
97.1#	Compensation Recoupment Policy of Tucows Inc., dated November 17, 2023.
3.2	Second Amended and Restated Bylaws of Tucows Inc. (Incorporated by reference to Exhibit 3.2 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2006, as filed with the SEC on March 29, 2007).
3.3	Amendment No. 1 to Second Amended and Restated Bylaws of Tucows Inc. (Incorporated by Reference to Exhibit 3.3 filed with Tucows' Quarterly Report on Form 10-Q for the quarter ended June 30, 2012).
4.1	Description of Securities of the Registrant.
10.1*	2006 Equity Compensation Plan, as amended and restated, and approved by Shareholders as of September 8, 2020 (Incorporated by reference to Exhibit 4.1 filed with Tucows form S-8 as filed with the SEC on November 25, 2020).
10.2*	Employment Agreement, dated as of January 22, 2003, by and between Tucows.com Co. and Elliot Noss (Incorporated by reference to Exhibit 10.3 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2002, as filed with the SEC on March 28, 2003).
10.3	Lease between 707932 Ontario Limited and Tucows International Corporation, dated as of December 10, 1999 (Incorporated by reference to exhibit number 10.9 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2001, as filed with the SEC on April 1, 2002).
10.4	Lease extension between 707932 Ontario Limited and Tucows Inc. and Tucows.com Co., dated as of September 18, 2004 (Incorporated by reference to Exhibit 10.8 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2004, as filed with the SEC on March 24, 2005).
10.5	Third Lease Extension and Amending Agreement, dated as of January 1, 2019, by and between 707921 Ontario Limited and Tucows (Delaware) Inc. and Tucows.com Co., (Incorporated by reference to Exhibit 10.5 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on March 4, 2020).
10.6*	Description of Tucows Fiscal 2004 At Risk Compensation Plan (Incorporated by reference to Exhibit 10.9 filed with Tucows' Annual Report on Form 10-K for the year ended December 31, 2004, as filed with the SEC on March 24, 2005).
10.7	Amended and Restated Senior Secured Credit Agreement, dated as of June 14, 2019, by and among Tucows.com Co., Ting Fiber, Inc., Ting, Inc., Tucows (Delaware) Inc., Tucows (Emerald), LLC, as Borrowers, Tucows, Inc., as parent, Royal Bank of Canada, as Administrative Agent, and Royal Bank of Canada, Bank of Montreal, Bank of Nova Scotia, HSBC Bank Canada and Canadian Imperial Bank of Commerce, as Lenders (Incorporated by reference to Exhibit 10.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on June 18, 2019).

Exhibit No.	Description
10.8	Amending Agreement No. 1, dated as of November 27, 2019, to the Amended and Restated Senior Secured Credit Agreement, dated as of June 14, 2019 (Incorporated by reference to Exhibit 10.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on December 4, 2019).
10.9	<u>Second Amended and Restated Senior Secured Credit Agreement, dated as of October 26, 2021, by and among Tucows.com Co., Ting Fiber, Inc., Ting Inc., Tucows (Delaware) Inc., Tucows (Emerald), LLC, as Borrowers, Tucows Inc. and certain other subsidiaries thereof, as Guarantors, Royal Bank of Canada, as Administrative Agent, and Bank of Montreal, Royal Bank of Canada, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, HSBC Bank Canada and Toronto Dominion-Bank as Lenders</u> (Incorporated by reference to Exhibit 10.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on November 18, 2021).
10.10	Asset Purchase Agreement, dated as of August 1, 2020, by and between Tucows Inc., and DISH WIRELESS L.L.C. (Incorporated by reference to Exhibit 10.1 filed with Tucows' Quarterly Report on Form 10-Q on November 5, 2020).
10.11	Mobile Virtual Network Enabler ("MVNE") Master Services Agreement, dated as of August 1, 2020, by and between Ting Inc., and DISH WIRELESS L.L.C (Incorporated by reference to Exhibit 10.1 filed with Tucows' Quarterly Report on Form 10-Q on November 5, 2020).
10.12	<u>Third Amended and Restated Senior Secured Credit Agreement, dated as of August 8, 2022, by and among Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Tucows (Emerald), LLC, Wavelo Inc., as Borrowers, Tucows Inc. and certain other subsidiaries thereof, as Guarantors, Royal Bank of Canada, as Administrative Agent, and Bank of Montreal, Royal Bank of Canada, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, HSBC Bank Canada and Toronto Dominion-Bank as Lenders</u> (Incorporated by reference to Exhibit 10.3 filed with Tucows Quarterly Report on Form 10-Q on November 3, 2022).
10.13	Amending Agreement No. 1 to the Third Amended and Restated Senior Secured Credit Agreement, dated as of November 2, 2022, by and among Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Tucows (Emerald), LLC, Wavelo, Inc. as Borrowers, Tucows Inc. and certain other subsidiaries thereof, as Guarantors, Royal Bank of Canada, as Administrative Agent, and Bank of Montreal, Royal Bank of Canada, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, HSBC Bank Canada and Toronto Dominion-Bank as Lenders. (Incorporated by Reference to Exhibit 10.13 filed with Tucows' Quarterly Report on Form 10-K on March 15, 2023)
10.14	Amending Agreement No. 2 to the Third Amended and Restated Senior Secured Credit Agreement, dated as of March 14, 2023, by and among Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Tucows (Emerald), LLC, Wavelo, Inc. as Borrowers, Tucows Inc. and certain other subsidiaries thereof, as Guarantors, Royal Bank of Canada, as Administrative Agent, and Bank of Montreal, Royal Bank of Canada, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, HSBC Bank Canada and Toronto Dominion-Bank as Lenders. (Incorporated by Reference to Exhibit 10.14 filed with Tucows' Quarterly Report on Form 10-K on March 15, 2023)
10.15	<u>Series A Preferred Unit Purchase Agreement, dated as of August 8, 2022, by and among Ting Fiber, LLC, a Delaware limited liability company and Generate TF Holdings, LLC</u> (Incorporated by Reference to Exhibit 10.4 filed with Tucows' Quarterly Report on Form 10-Q on November 3, 2022).
10.16	Wavelo, Inc. 2022 Equity Compensation Plan (September 22, 2022) (Incorporated by Reference to Exhibit 10.16 filed with Tucows' Quarterly Report on Form 10-K on March 13, 2023)
10.17	Ting Fiber, LLC 2022 Equity Compensation Plan (December 15, 2022) (Incorporated by Reference to Exhibit 10.17 filed with Tucows' Quarterly Report on Form 10-K on March 13, 2023)
10.18	Credit Agreement, dated as of September 22, 2023, by and among, Tucows Inc. and its wholly owned subsidiaries, Tucows.com Co., Ting Inc., Tucows (Delaware) Inc., Wavelo Inc., and Tucows (Emerald), LLC, Bank of Montreal as Agent and other parties thereto (Incorporated by References to Exhibit 10.1 filed with Tucows' Current Report on Form 8-K, as filed with the SEC on September 25, 2023).

Exhibit No.	Description
21.1#	Subsidiaries of Tucows Inc.
23.1#	Consent of Deloitte LLP, Independent Registered Public Accounting Firm.
23.2#	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
31.1#	Chief Executive Officer's Rule 13a-14(a)/15d-14(a) Certification.
31.2#	Chief Financial Officer's Rule 13a-14(a)/15d-14(a) Certification.
32.1†	Chief Executive Officer's Section 1350 Certification.
32.2†	Chief Financial Officer's Section 1350 Certification.
101.INS#	Inline XBRL Instance Document (the Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH#	Inline XBRL Taxonomy Extension Schema
101.CAL#	Inline XBRL Taxonomy Extension Calculation
101.DEF#	Inline XBRL Taxonomy Extension Definition
101.LAB#	Inline XBRL Taxonomy Extension Labels
101.PRE#	Inline XBRL Taxonomy Extension Presentation
104	The cover page from this Annual Report on Form 10-K, formatted as Inline XBRL.
*	Management or compensatory contract.
#	Filed herewith.
†	Furnished herewith.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

INDEX TO FINANCIAL STATEMENTS
Consolidated Financial Statements of Tucows Inc.

	Pages
Consolidated Financial Statements of Tucows Inc.	F-1
Report of Independent Registered Public Accounting Firm (Deloitte LLP, Toronto, Canada PCAOB ID: 1208)	F-2
Report of Independent Registered Public Accounting Firm (Deloitte LLP, Toronto, Canada PCAOB ID: 1208)	F-3
Report of Independent Registered Public Accounting Firm (KPMG LLP, Toronto, Ontario, PCAOB ID: 85)	F-5
Consolidated Balance Sheets as of December 31, 2023 and 2022	F-6
Consolidated Statements of Comprehensive Income for the years ended December 31, 2023, 2022 and 2021	F-7
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2023, 2022 and 2021	F-8
Consolidated Statements of Cash Flows for the years ended December 31, 2023, 2022 and 2021	F-9
Notes to Consolidated Financial Statements	F-10

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Tucows Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Tucows Inc. and subsidiaries (the “Company”) as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, because of the effect of the material weakness identified below on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as at and for the year ended December 31, 2023 of the Company and our report dated April 1, 2024, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Material Weakness

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management’s assessment: Ineffective information technology general controls specifically associated with user access and program change management controls. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the consolidated financial statements as of and for the year ended December 31, 2023, of the Company, and this report does not affect our report on such financial statements.

/s/ Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants
Toronto, Canada
April 1, 2024

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Tucows Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Tucows Inc. and subsidiaries (the "Company") as of December 31, 2023, the related consolidated statements of comprehensive income, stockholders' equity, and cash flows, for the year ended December 31, 2023, and the related notes and the schedule of the Condensed Financial Statements of Tucows Inc. (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows the year ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 1, 2024, expressed an adverse opinion on the Company's internal control over financial reporting because of a material weakness.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue — Refer to notes 11 and 21 to the financial statements

Critical Audit Matter Description

The Company's revenues are derived from (a) the provisioning of retail fiber internet services, through Ting, (b) software solutions and professional services through Wavelo; and from (c) domain name registration contracts, other domain related value-added services, domain sale contracts, and other advertising revenue through Tucows Domains Services ("Tucows Domains").

Given the Company's process to record revenue for Ting and Tucows Domains is highly dependent on information technology systems ("IT systems"), and is impacted by the material weakness identified by management as described in Management's Annual Report on Internal Control over Financial Reporting, we identified the evaluation of the nature and sufficiency of audit evidence over revenue as a critical audit matter, as it required an especially high level of auditor judgment. Auditing revenue resulted in an increased extent of audit effort and the nature of audit procedures were designed to obtain and evaluate audit evidence outside of the IT systems.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to revenue for Ting and Tucows Domains, taking into account ineffectiveness of certain key IT general controls, included the following, among others:

- Reconciled the extract of revenue transactions from the billing systems to the general ledger;
- For a sample of revenue transactions from the general ledger, obtained and inspected source documents, including contracts, invoices, proof of service, subsequent cash receipts, and history of customer payments where applicable; and
- For a sample of Tucows Domains revenue transactions, agreed them to third party registry information and Internet Corporation for Assigned Names and Numbers (ICANN) database.

Property and equipment— Refer to notes 2 and 4 to the financial statements

Critical Audit Matter Description

The Company has been investing in its Ting fiber network. The buildout of the fiber network includes costs relating to the design, procurement of materials, construction of primary infrastructure and customer installation. The Company's accounting for additions to the fiber network assets include costs relating to material, labor, capitalized interest, vehicle, installation, and construction costs associated with the construction of cable transmission and distribution facilities.

The process to determine which labor costs are eligible for capitalization is manual in nature, requires management judgment and the use of complex calculations based on various inputs and assumptions. We identified the auditing of capitalized labor additions as a critical audit matter, as it required a high level of auditor judgment and an increased extent of audit effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to capitalized labor additions included the following, among others:

- Evaluated management's policy for determining activities eligible for capitalization by analyzing specific facts and circumstances against relevant accounting guidance; and
- For a sample of additions (i) evaluated whether the activities were eligible for capitalization, (ii) obtained evidence to support the accuracy of inputs in the calculation, such as labor rate and time incurred by relevant personnel, and (iii) conducted inquiries with management and project personnel outside of finance to further assess the reasonableness of time allocated to the capitalized activities.

/s/ Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants
Toronto, Canada
April 1, 2024

We have served as the Company's auditor since 2023.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Tucows Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Tucows Inc. (the Company) as of December 31, 2022, the related consolidated statements of comprehensive income, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2022, and the related notes, and the schedule of the Condensed Financial Statements of Tucows Inc. as of December 31, 2022 and for each of the years in the two-year period ended December 31, 2022 (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

We had served as the Company's auditor from 2001 - 2023.

Vaughan, Canada

March 15, 2023, except for the schedule of the Condensed Financial Statements of Tucows Inc., which is as of April 1, 2024.

Tucows Inc.
Consolidated Balance Sheets
(Dollar amounts in thousands of U.S. dollars)

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 92,687	\$ 23,496
Restricted cash (note 9)	3,639	-
Accounts receivable, net of allowance for doubtful accounts of \$511 as of December 31, 2023 and \$693 as of December 31, 2022	22,206	18,404
Contract asset, net current portion	1,417	5,159
Inventory	6,786	7,284
Prepaid expenses and deposits	17,387	17,005
Derivative instrument asset, current portion (note 7)	2,277	1,903
Deferred costs of fulfillment, current portion (note 12 (b))	95,649	94,198
Income taxes recoverable	709	2,471
Total current assets	<u>242,757</u>	<u>169,920</u>
Contract asset, net long-term portion (note 11)	-	2,328
Deferred costs of fulfillment, long-term portion (note 12(b))	15,419	16,476
Investments	2,012	2,012
Secured notes reserve funds (note 9)	8,652	-
Property and equipment (note 4)	339,644	281,495
Right of use operating lease asset	27,467	20,489
Contract costs (Note 12(a))	2,581	1,827
Intangible assets (note 5)	29,484	39,790
Goodwill (note 5)	130,410	130,410
Total assets	<u>\$ 798,426</u>	<u>\$ 664,747</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 12,676	\$ 17,171
Accrued liabilities	35,356	22,653
Customer deposits	19,335	15,783
Derivative instrument liability, current portion (note 7)	-	389
Operating lease liability, current portion (note 13)	5,397	4,642
Deferred revenue, current portion (note 11)	126,733	122,894
Accreditation fees payable, current portion	609	809
Income taxes payable	1,235	2,248
Other current liabilities	-	1,600
Total current liabilities	<u>201,341</u>	<u>188,189</u>
Deferred revenue, long-term portion (note 11)	21,350	22,237
Accreditation fees payable, long-term portion	-	142
Operating lease liability, long-term portion (note 13)	18,255	12,438
Syndicated revolver (note 8)	210,354	238,930
Notes payable (note 9)	222,895	-
Redeemable preferred units - no par value, 33,333,333 shares authorized; 15,243,600 shares issued and outstanding as of December 31, 2023 and 14,583,333 shares issued and outstanding as of December 31, 2022 (note 14)	111,390	90,434
Deferred tax liability (note 10)	2,966	15,720
Stockholders' equity (note 15)		
Common stock - no par value, 250,000,000 shares authorized; 10,903,405 shares issued and outstanding as of December 31, 2023 and 10,817,110 shares issued and outstanding as of December 31, 2022	34,373	31,868
Additional paid-in capital	14,072	8,106
Retained earnings (Accumulated deficit)	(40,298)	55,899
Accumulated other comprehensive income (loss) (note 7)	1,728	784
Total stockholders' equity	<u>9,875</u>	<u>96,657</u>
Total liabilities and stockholders' equity	<u>\$ 798,426</u>	<u>\$ 664,747</u>
Commitments and contingencies (note 20)		

See accompanying notes to consolidated financial statements

Tucows Inc.
Consolidated Statements of Comprehensive Income
(Dollar amounts in thousands of U.S. dollars, except per share amounts)

	2023	Year ended December 31, 2022	2021
Net revenues (note 11)	\$ 339,337	\$ 321,142	\$ 304,337
Cost of revenues (note 11)			
Cost of revenues	202,256	196,268	193,039
Network expenses	28,222	17,433	14,769
Network, depreciation of property and equipment (note 4)	35,864	27,589	17,452
Network, amortization of intangible assets (note 5)	1,506	1,512	583
Impairment of property and equipment (note 4)	4,822	92	201
Total cost of revenues	272,670	242,894	226,044
Gross profit	66,667	78,248	78,293
Expenses:			
Sales and marketing	67,806	53,937	39,471
Technical operations and development	19,217	14,187	14,310
General and administrative	33,406	30,845	22,370
Depreciation of property and equipment (note 4)	567	598	534
Loss (gain) on disposition of property and equipment	-	461	234
Amortization of intangible assets (note 5)	9,323	9,882	9,424
Gain on currency forward contracts (note 7)	-	-	(277)
Total expenses	130,319	109,910	86,066
Income from operations	(63,652)	(31,662)	(7,773)
Other income (expenses):			
Interest expense, net (note 18)	(41,771)	(14,456)	(4,617)
Loss on debt extinguishment (note 14)	(14,680)	-	-
Income earned on sale of transferred assets, net (note 18)	17,033	18,507	20,030
Other expense, net	-	(177)	(370)
Total other income (expenses)	(39,418)	3,874	15,043
Income before provision for income taxes	(103,070)	(27,788)	7,270
Provision for (recovery of) income taxes (note 10)	(6,873)	(217)	3,906
Net income (loss) for the period	(96,197)	(27,571)	3,364
Other comprehensive income, net of tax			
Unrealized income (loss) on hedging activities (note 7)	1,830	418	572
Net amount reclassified to earnings (note 7)	(886)	23	(2,565)
Other comprehensive income (loss) net of tax expense (recovery) of \$299, \$141 and (\$595) for the years ended December 31, 2023, 2022 and 2021 (note 7)	944	441	(1,993)
Comprehensive income (loss), net of tax for the period	\$ (95,253)	\$ (27,130)	\$ 1,371
Basic earnings (loss) per common share (note 19)	\$ (8.85)	\$ (2.56)	\$ 0.32
Shares used in computing basic earnings per common share (note 19)	10,864,086	10,769,280	10,662,337
Diluted earnings per common share (note 19)	\$ (8.85)	\$ (2.56)	\$ 0.31
Shares used in computing diluted earnings per common share (note 19)	10,864,086	10,769,280	10,817,468

See accompanying notes to consolidated financial statements

Tucows Inc.
Consolidated Statements of Stockholders' Equity
(Dollar amounts in thousands of U.S. dollars)

	Common stock		Additional	Retained	Accumulated	Total
	Number	Amount	paid in	earnings	other	stockholders'
			capital		comprehensive	equity
					income (loss)	
Balances, December 31, 2020	10,612,414	20,798	1,458	80,106	2,336	104,698
Exercise of stock options	180,827	7,588	(2,770)	-	-	4,818
Shares deducted from exercise of stock options for payment of withholding taxes and exercise consideration	(45,824)	-	(387)	-	-	(387)
Stock-based compensation (note 16)	-	129	4,463	-	-	4,592
Net income	-	-	-	3,364	-	3,364
Other comprehensive income (loss) (note 7)	-	-	-	-	(1,993)	(1,993)
Balances, December 31, 2021	10,747,417	\$ 28,515	\$ 2,764	\$ 83,470	\$ 343	\$ 115,092
Exercise of stock options	40,459	1,593	(497)	-	-	1,096
Shares deducted from exercise of stock options for payment of withholding taxes and exercise consideration	(3,053)	-	-	-	-	-
Stock-based compensation (note 16)	32,287	1,760	5,839	-	-	7,599
Net income (loss)	-	-	-	(27,571)	-	(27,571)
Other comprehensive income (loss) (note 7)	-	-	-	-	441	441
Balances, December 31, 2022	10,817,110	\$ 31,868	\$ 8,106	\$ 55,899	\$ 784	\$ 96,657
Stock-based compensation (note 16)(1)	86,295	2,505	5,966	-	-	8,471
Net income (loss)	-	-	-	(96,197)	-	(96,197)
Other comprehensive income (loss) (note 7)	-	-	-	-	944	944
Balances, December 31, 2023	10,903,405	\$ 34,373	\$ 14,072	\$ (40,298)	\$ 1,728	\$ 9,875

See accompanying notes to consolidated financial statements

(1) The Company capitalizes stock-based compensation costs directly attributable to the development of qualifying assets. Qualifying assets include internally use software (IUS), assets under construction (AUC), equipment, or other long-lived assets that meet the capitalization criteria prescribed by ASC 350. During the twelve months ended December 31, 2023 the Company capitalized \$0.3 million of stock-based compensation directly attributable to the development of certain IUS assets.

Tucows Inc.
Consolidated Statements of Cash Flows
(Dollar amounts in thousands of U.S. dollars)

	2023	Year ended December 31, 2022	2021
Cash provided by:			
Operating activities:			
Net income (loss) for the period	\$ (96,197)	\$ (27,571)	\$ 3,364
Items not involving cash:			
Depreciation of property and equipment	36,431	28,187	17,986
Impairment of property and equipment	4,822	92	201
Amortization of debt discount and issuance costs	3,331	685	300
Amortization of intangible assets	10,829	11,394	10,007
Net amortization contract costs	(754)	(748)	(717)
Accretion of contingent consideration	-	248	383
Deferred income taxes (recovery)	(13,040)	(6,981)	(1,328)
Excess tax benefits on share-based compensation expense	-	(193)	(1,554)
Net Right of use operating assets/Operating lease liability	(406)	(897)	(2,204)
Loss on disposal of domain names	5	7	1
Accretion of redeemable preferred units	14,163	3,896	-
Loss on debt extinguishment	14,680	-	-
Write-off of debt discount and issuance cost	277	-	-
Loss (gain) on change in the fair value of forward contracts	1,624	281	606
Amortization of discontinued cash flow hedge	(1,144)	(761)	-
Stock-based compensation	8,134	7,599	4,592
Remeasurement of contingent consideration	-	(400)	-
Change in non-cash operating working capital:			
Accounts receivable	(3,802)	(3,825)	1,586
Contract assets	6,070	(6,709)	(778)
Inventory	361	(4,007)	(787)
Prepaid expenses and deposits	(382)	3,981	(3,974)
Deferred costs of fulfillment	(394)	2,037	(1,645)
Income taxes recoverable	734	3,355	(1,394)
Accounts payable	(5,319)	6,754	4,068
Accrued liabilities	9,044	7,411	4,857
Customer deposits	3,552	(1,191)	645
Deferred revenue	2,952	(2,667)	(4,495)
Accreditation fees payable	(342)	(101)	(83)
Net cash provided by (used in) operating activities	(4,771)	19,876	29,637
Financing activities:			
Proceeds received on exercise of stock options	-	1,096	4,818
Proceeds from issuance of notes payable	227,258	-	-
Redeemable preferred units redemption	(45,718)	87,500	-
Proceeds from redeemable preferred units	35,000	-	-
Deferred notes payable financing costs	(6,738)	-	-
Deferred preferred financing costs	145	(1,016)	-
Payment of tax obligations resulting from net exercise of stock options	-	-	(387)
Proceeds received on syndicated revolver	52,382	48,300	69,000
Repayment of syndicated revolver	(80,182)	(748)	(296)
Deferred syndicate revolver issued	(1,711)	-	-
Contingent consideration for acquisitions	(1,600)	(3,125)	-
Net cash (used in) provided by financing activities	178,836	132,007	73,135
Investing activities:			
Additions to property and equipment	(92,055)	(136,710)	(73,175)
Proceeds on disposal of property and equipment	-	-	510
Acquisition of Uniregistry, (note 3(a))	-	-	(2,499)
Acquisition of Simply Bits, net of cash of \$801 (note 3(b))	-	-	(24,028)
Acquisition of other intangible assets	(528)	(782)	(774)
Investment in securities	-	-	(2,012)
Net cash used in investing activities	(92,583)	(137,492)	(101,978)
Increase (decrease) in cash and cash equivalents, restricted cash, and restricted cash equivalents	81,482	14,391	794
Cash and cash equivalents, restricted cash, and restricted cash equivalents beginning of year	23,496	9,105	8,311
Cash and cash equivalents, restricted cash, and restricted cash equivalents end of year	\$ 104,978	\$ 23,496	\$ 9,105
Reconciliation of cash, cash equivalents, restricted cash, and restricted cash equivalents within the consolidated balance sheets to the amounts shown in the consolidated statements of cash flows above:			
Cash and cash equivalents	92,687	23,496	9,105
Restricted cash included in funds held by trustee	3,639	-	-
Restricted cash included in secured notes reserve funds	8,652	-	-
Total Cash and cash equivalents, restricted cash, and restricted cash equivalents end of period	\$ 104,978	\$ 23,496	\$ 9,105
Supplemental cash flow information:			
Interest paid	\$ 24,736	\$ 10,289	\$ 4,485
Income taxes paid, net	\$ 4,929	\$ 3,883	\$ 8,828
Supplementary disclosure of non-cash investing and financing activities:			
Property and equipment acquired during the period not yet paid for	\$ 6,948	\$ 501	\$ 99

See accompanying notes to consolidated financial statements

Tucows Inc.

Notes to Consolidated Financial Statements
(Dollar amounts in thousands of U.S. dollars, except per share amounts)

1. Organization of the Company:

Tucows Inc. (referred to as the "Company", "Tucows", "we", "us" or through similar expressions) is a corporate parent, allocating capital and providing efficient shared services to its three businesses Ting, Wavelo and Tucows Domains Services. Ting provides retail consumers and small businesses with high-speed fixed Internet access in a number of towns and cities across the United States. Wavelo offers platform services which provide solutions to support Communication Service Providers ("CSPs") including subscription and billing management, network orchestration and provisioning, individual developer tools, and other professional services. Tucows Domains Services is a global distributor of Internet services, including domain name registration, digital certificates, and email. It provides these services primarily through a global Internet-based distribution network of Internet Service Providers, web hosting companies and other providers of Internet services to end-users.

2. Significant Accounting Policies:

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and are stated in U.S. dollars, except where otherwise noted.

(a) Basis of presentation

These consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated on consolidation.

(b) Use of estimates

The preparation of the consolidated financial statements in accordance with U.S. 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. On an on-going basis, management evaluates its judgements and estimates, the recoverability of goodwill and intangible assets which requires judgment over qualitative indicators of impairment and loss contingencies. 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. 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.

(c) Cash and cash equivalents

All highly liquid investments, with an original term to maturity of three months or less are classified as cash and cash equivalents. This classification also extends to amounts in transit from payment providers and other clearing accounts. These in-transit balances have been initiated and collected from customers prior to the reporting date and are expected to settle shortly after the reporting date. Cash and cash equivalents are stated at cost which approximates market value.

(d) Restricted cash

Restricted cash is solely in connection with the 2023 Term Notes as defined in "Note 9 - Notes Payable" and consists of (i) securitized assets cash receipts held by trustee related to securitized assets and (ii) liquidity reserve funds. The non-current portion of the restricted cash is presented in "Secured notes reserve funds" on the Consolidated Balance Sheet.

(e) Inventory

Inventory primarily consists of Internet optical network terminals and customer installation equipment. All inventory is stated at the lower of cost or net realizable value. Cost is determined based on actual cost of the mobile device, accessory shipped or optical network terminals.

The net realizable value of inventory is analyzed for signs of obsolescence or damage on a regular basis. If assessments regarding the above factors adversely change, we may be required to write down the value of inventory.

(f) Property and equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is provided on a straight-line basis so as to depreciate the cost of depreciable assets over their estimated useful lives at the following rates:

Asset	Rate
Computer equipment	30%
Computer software	33 1/3 - 100%
Furniture and equipment	20%
Vehicles and tools	20%
Fiber network (years)	15
Customer equipment and installations (years)	3
Leasehold improvements	Over term of lease
Capitalized internal use software (years)	3 - 7

The Company reviews the carrying values of its property and equipment for potential impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If the estimated undiscounted future cash flows expected to result from the use of the group of assets and their eventual disposition is less than their carrying amount, they are considered to be impaired. The amount of the impairment loss recognized is measured as the amount by which the carrying value of the asset exceeds the fair value of the asset, with fair value being determined based upon discounted cash flows or appraised values, depending on the nature of the assets. In instances where inventory is found to be damaged, it is written off.

Additions to the fiber network are recorded at cost, including all material, labor, capitalized interest, vehicle and installation and construction costs associated with the construction of cable transmission and distribution facilities. While the Company's capitalization is based on specific activities, once capitalized, costs are tracked by fixed asset category at the fiber network level and not on a specific asset basis. For assets that are retired, the estimated historical cost and related accumulated depreciation is removed.

Additions to land are recorded at cost, and include any direct costs associated with the purchase, as well as any direct costs incurred to bring it to the condition necessary for its intended use, such as legal fees associated with the acquisition and the cost of permanent improvements. Land is not depreciated.

We capitalize costs for software to be used internally when we enter the application development stage. This occurs when we complete the preliminary project stage, management authorizes and commits to funding the project, and it is feasible that the project will be completed and the software will perform the intended function. We cease to capitalize costs related to a software project when it enters the post implementation and operation stage.

Costs capitalized during the application development stage consist of payroll and related costs for employees who are directly associated with, and who devote time directly to, a project to develop software for internal use. External contractor costs who are directly associated with, and who devote time directly to, a project to develop software for internal use are also capitalized. Generally, we do not capitalize any general and administrative or overhead costs or costs incurred during the application development stage related to research and development, training or data conversion costs. Research and development costs and data conversion costs may be capitalized as Costs to fulfill a contract, if they relate to a specific professional services customer contract (see Note 12 - Costs to obtain and fulfill a contract). Costs related to upgrades and enhancements to internal-use software, if those upgrades and enhancements result in additional functionality, are capitalized. If upgrades and enhancements do not result in additional functionality, those costs are expensed as incurred.

In determining and reassessing the estimated useful life over which the cost incurred for the software should be amortized, we consider the effects of obsolescence, technology, competition and other economic factors.

(g) Derivative Financial Instruments

The Company uses derivative financial instruments to manage foreign currency exchange risk.

The Company accounts for these instruments in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 815, "Derivatives and Hedging" ("Topic 815"), which requires that every derivative instrument be recorded on the balance sheet as either an asset or liability measured at its fair value as of the reporting date. Topic 815 also requires that changes in our derivative financial instruments' fair values be recognized in earnings, unless specific hedge accounting and documentation criteria are met (i.e., the instruments are accounted for as hedges). The Company recorded the effective portions of the gain or loss on derivative financial instruments that were designated as cash flow hedges in accumulated other comprehensive income in our accompanying Consolidated Balance Sheets.

For certain foreign currency contracts, when the Company has not complied with the documentation standards required for its forward foreign exchange contracts to be accounted for as hedges the Company accounts for such forward foreign exchange contracts at their fair values with the changes in fair value recorded in net income.

The fair value of the forward exchange contracts is determined using an estimated credit adjusted mark-to-market valuation which takes into consideration the Company's and the counterparty's credit risk. The valuation technique used to measure the fair values of the derivative instruments is a discounted cash flow technique, with all significant inputs derived from or corroborated by observable market data, as no quoted market prices exist for the derivative instruments. The discounted cash flow techniques use observable market inputs, such as foreign currency spot, SOFR rates, forward currency and interest rates.

(h) Goodwill and Other Intangible assets

Goodwill

Goodwill represents the excess of purchase price over the fair values assigned to the net assets acquired in business combinations. The Company does not amortize goodwill. Impairment testing for goodwill is performed annually in the fourth quarter of each year or more frequently if impairment indicators are present. Impairment testing is performed at the operating segment level. The Company has determined that it has three operating segments, Ting, Wavelo and Tucows Domains.

The Company performs a qualitative assessment to determine whether there are events or circumstances which would lead to a determination that it is more likely than not that goodwill has been impaired. If, after this qualitative assessment, the Company determines that it is not more likely than not that goodwill has been impaired, then no further quantitative testing is necessary. In performance of the qualitative test, an evaluation is made of the impact of various factors to the expected future cash flows attributable to its operating segments and to the assumed discount rate which would be used to present value those cash flows. Consideration is 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. In the event that the qualitative tests indicate that there may be impairment, quantitative impairment testing is required.

If required to perform the quantitative test, the Company uses a discounted cash flow or income approach in which future expected cash flows at the operating segment level are converted to present value using factors that consider the timing and risk of the future cash flows. The estimate of cash flows used is prepared on an unleveraged debt-free basis. The discount rate reflects a market-derived weighted average cost of capital. The Company believes that this approach is appropriate because it provides a fair value estimate based upon the Company's expected long-term operating and cash flow performance for its operating segment. The projections are based upon the Company's best estimates of projected economic and market conditions over the related period including growth rates, estimates of future expected changes in operating margins and cash expenditures.

Other significant estimates and assumptions include terminal value growth rates, terminal value margin rates, future capital expenditures and changes in future working capital. If assumptions and estimates used to allocate the purchase price or used to assess impairment prove to be inaccurate, future asset impairment charges could be required.

Intangibles Assets Not Subject to Amortization

Intangible assets not subject to amortization consist of surname domain names and direct navigation domain names. While the domain names are renewed annually, through payment of a renewal fee to the applicable registry, the Company has the exclusive right to renew these names at its option. Renewals occur routinely and at a nominal cost. Moreover, the Company has determined that there are currently no legal, regulatory, contractual, economic or other factors that limit the useful life of these domain names on an aggregate basis and accordingly treat the portfolio of domain names as indefinite life intangible assets. The Company re-evaluates the useful life determination for domain names in the portfolio each year to determine whether events and circumstances continue to support an indefinite useful life.

The Company reviews individual domain names in the portfolio for potential impairment throughout the fiscal year in determining whether a particular name should be renewed. Impairment is recognized for names that are not renewed.

Intangible Assets Subject to Amortization

Intangible assets subject to amortization, consist of brand, customer relationships, technology and network rights and are amortized on a straight-line basis over their estimated useful lives as follows:

	(in years)
Technology	2 - 7
Brand	7
Customer relationships	3 - 7
Network rights	15

The Company continually evaluates whether events or circumstances have occurred that indicate the remaining estimated useful lives of its intangible assets subject to amortization may warrant revision or that the remaining balance of such assets may not be recoverable. The Company uses an estimate of the related undiscounted cash flows over the remaining life of the asset in measuring whether the asset is recoverable.

(i) Revenue recognition

See “Note 11 – Revenue” for a description of the Company’s revenue recognition policy and a further description of the principal activities – separated by reportable segments – from which the Company generates its revenue.

(j) Contract balances

The Company accounts for contract assets and liabilities (deferred revenue) on a contract-by-contract basis, with each contract presented as either a net contract asset or a net contract liability accordingly. Contract assets are recorded for services delivered under contracts, to the extent that the services delivered exceed the services which have been billed to the customer at the reporting date. Contract assets are transferred to receivables when the rights to consideration become unconditional. Contract assets primarily relate to long-term mobile platform services contracts. Deferred revenue primarily relates to the unearned portion of revenues received in advance related to the unexpired term of registration fees from domain name registrations and other domain related Internet services, on both a wholesale and retail basis, net of external commissions. To a lesser extent, deferred revenue also includes a portion of the transaction price received from other professional services.

(k) Contract Costs

See “Note 12 – Costs to obtain and fulfill a contract” for a description of the Company’s contract cost recognition policy.

(l) Contract Modifications

Contracts may be amended to account for changes in contract specifications and requirements. Contract modifications exist when the amendment either creates new, or changes existing, enforceable rights and obligations. When contract modifications create new performance obligations and the increase in consideration approximates the standalone selling price for services related to such new performance obligations as adjusted for specific facts and circumstances of the contract, the modification is considered to be a separate contract. If a contract modification is not accounted for as a separate contract, the Company accounts for the promised services not yet transferred at the date of the contract modification (the remaining promised services) prospectively, as if it were a termination of the existing contract and the creation of a new contract, if the remaining services are distinct from the services transferred on or before the date of the contract modification. The Company accounts for a contract modification as if it were a part of the existing contract if the remaining services are not distinct and, therefore, form part of a single performance obligation that is partially satisfied at the date of the contract modification. In such case the effect that the contract modification has on the transaction price, and on the entity’s measure of progress toward complete satisfaction of the performance obligation, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) at the date of the contract modification (the adjustment to revenue is made on a cumulative catch-up basis).

(m) Leases

Under ASC 842, we determine if an arrangement is a lease at inception. Our lease agreements generally contain lease and non-lease components. Payments under our lease arrangements are primarily fixed. Non-lease components primarily include payments for maintenance and utilities. We combine fixed payments for non-lease components with lease payments and account for them together as a single lease component which increases the amount of our lease assets and liabilities.

Certain lease agreements contain variable payments, which are expensed as incurred and not included in the lease assets and liabilities. These amounts include payments affected by payments contingent on the number of Ting internet subscribers connected to a leased fiber network, and payments for maintenance and utilities.

We have elected to consider leases with a term of 12 months or less as short-term, and as such these have not been recognized on the balance sheet. We recognize lease expense for short-term leases on a straight-line basis over the lease term.

Lease assets and liabilities are recognized at the present value of the future lease payments at the lease commencement date. The interest rate used to determine the present value of the future lease payments is our incremental borrowing rate, because the interest rate implicit in our leases is not readily determinable. Our incremental borrowing rate is estimated to approximate the interest rate on a collateralized basis with similar terms and payments, and in economic environments where the leased asset is located. Our lease terms include periods under options to extend or terminate the lease when it is reasonably certain that we will exercise that option. We generally use the base, non-cancelable, lease term when determining the lease assets and liabilities. Lease assets also include any prepaid lease payments.

Operating lease expense is recognized on a straight-line basis over the lease term.

(n) Accreditation fees payable

In accordance with ICANN rules, the Company has elected to pay ICANN fees incurred on the registration of Generic Top-Level Domains on an annual basis. Accordingly, accreditation fees that relate to registrations completed prior to ICANN rendering a bill are accrued and reflected as accreditation fees payable.

(o) Translation of foreign currency transactions

The Company's functional currency is the United States dollar. Monetary assets and liabilities of the Company and of its wholly owned subsidiaries that are denominated in foreign currencies are translated into United States dollars at the exchange rates prevailing at the balance sheet dates. Non-monetary assets and liabilities are translated at the historical exchange rates. Transactions included in operations are translated at the rate at the date of the transactions.

(p) Income taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in net income in the year that includes the enactment date. A valuation allowance is recorded if it is not likely that a deferred tax asset will be realized.

The Company recognizes the impact of an uncertain income tax position at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority and includes consideration of interest and penalties. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. The liability for unrecognized tax benefits is classified as non-current unless the liability is expected to be settled in cash within 12 months of the reporting date.

(q) Redeemable preferred units

See "Note 14 - Redeemable preferred units" for the description and treatment of the Company's Series A Preferred Unit Purchase Agreement.

(r) Stock-based compensation

Stock-based compensation expense recognized during the period is based on the value of the portion of stock-based payment awards that is ultimately expected to vest, reduced for estimated forfeitures. The Company recognizes stock based compensation for both public company stock and private subsidiary stock - see "Note 16. Stock Option Plans."

(s) Earnings per common share

Basic earnings per common share has been calculated on the basis of net income for the year divided by the weighted average number of common shares outstanding during each year. Diluted earnings per share gives effect to all dilutive potential common shares outstanding at the end of the year assuming that they had been issued, converted or exercised at the later of the beginning of the year or their date of issuance. In computing diluted earnings per share, the treasury stock method is used to determine the number of shares assumed to be purchased from the conversion of common share equivalents or the proceeds of the exercise of options. When there is a net loss from operations, the Company considers all options anti-dilutive for the purposes of calculating a diluted earnings per share.

(t) Concentration of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash equivalents, restricted cash, accounts receivable, forward foreign exchange contracts and pay-fixed, receive-variable interest rate swap contracts. Cash equivalents consist of deposits with major commercial banks, the maturities of which are three months or less from the date of purchase. With respect to accounts receivable, the Company performs periodic credit evaluations of the financial condition of its customers and typically does not require collateral from them. The counterparty to any forward foreign exchange contracts is a major commercial bank which management believes does not represent a significant credit risk. Management assesses the need for allowances for potential credit losses by considering the credit risk of specific customers, historical trends and other information.

(u) Fair value measurement

Fair value of financial assets and liabilities is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The three-tier hierarchy for inputs used in measuring fair value, which prioritizes the inputs used in the methodologies of measuring fair value for assets and liabilities, is as follows:

- Level 1—Quoted prices in active markets for identical assets or liabilities
- Level 2—Observable inputs other than quoted prices in active markets for identical assets and liabilities
- Level 3—No observable pricing inputs in the market

Financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurements. Our assessment of the significance of a particular input to the fair value measurements requires judgment, and may affect the valuation of the assets and liabilities being measured and their placement within the fair value hierarchy.

The fair value of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accreditation fees payable, customer deposits, accrued liabilities, syndicated revolver, notes payable and redeemable preferred units (level 2 measurements) approximate their carrying values due to the relatively short periods to maturity of the instruments.

The fair value of the derivative financial instruments is determined using an estimated credit-adjusted mark-to-market valuation (a level 2 measurement) which takes into consideration the Company and the counterparty credit risk.

(v) *Investments*

The Company accounts for investment in entities over which it has the ability to exert significant influence, but does not control and is not the primary beneficiary of, using the equity method of accounting. The Company includes the proportionate share of earnings (loss) of the equity method investees in Other Income in the Consolidated Statements of Comprehensive Income. The proportional shares of affiliate earnings or losses accounted for under the equity method of accounting were not material for all periods presented. Equity investments without readily determinable fair value include ownership rights that do not provide the Company with control or significant influence. Such equity investments are recorded at cost, less any impairment, and adjusted for subsequent observable price changes as of the date that an observable transaction takes place. Subsequent adjustments are recorded in Other income (expense), net.

(w) *Segment reporting*

The Company operates in three operating segments, Ting, Wavelo and Tucows Domains. No operating segments have been aggregated to determine our reportable segments.

Our reportable operating segments and their principal activities consist of the following:

Ting	This segment derives revenue from the retail high speed Internet access to individuals and small businesses primarily through the Ting website. Revenues are generated in the United States
Wavelo	This segment derives revenue from platform and other professional services related to communication service providers, including Mobile Network Operators and Internet Service Providers, and are primarily generated in the United States.
Tucows Domains	This segment includes wholesale and retail domain name registration services and value added services. The Company primarily earns revenues from the registration fees charged to resellers in connection with new, renewed and transferred domain name registrations; the sale of retail Internet domain name registration and email services to individuals and small businesses. Domain Services revenues are attributed to the country in which the contract originates, primarily Canada and the United States.

Our segmented results include shared services allocations, including a profit margin, from Tucows Corporate for Finance, Human Resources and other technical services, to the operating units. In addition, Wavelo charges Ting a subscriber based monthly charge for services rendered. Financial impacts from these allocations and cross segment charges are eliminated as part of the Tucows Corporate results.

The Company's assets are primarily located in Canada, the United States and Europe.

(x) *Recent Accounting Pronouncements*

Recent Accounting Pronouncements Adopted

None.

Recent Accounting Pronouncements Not Yet Adopted

In November 2023, the FASB issued ASU 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures." The amendments in ASU 2023-07 improve financial reporting by requiring disclosure of incremental segment information, including significant segment expenses, on an annual and interim basis for all public entities to enable investors to develop more useful financial analyses. Currently, Topic 280 requires that a public entity disclose certain information about its reportable segments. For example, a public entity is required to report a measure of segment profit or loss that the Chief Operating Decision Maker ("CODM") uses to assess segment performance and make decisions about allocating resources. Topic 280 also requires other specified segment information, such as depreciation, amortization and depletion expense amounts, to be disclosed under certain circumstances. The amendments in ASU 2023-07 do not change or remove those disclosure requirements. The amendments in ASU 2023-07 also do not change how a public entity identifies its operating segments, aggregates those operating segments, or applies the quantitative thresholds to determine its reportable segments. The amendments in ASU 2023-07 are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. A public entity should apply the amendments in ASU 2023-07 retrospectively to all prior periods presented in the financial statements. The Company is currently evaluating the impact of this ASU on its consolidated financial statements and related disclosures.

In December 2023, the FASB issued ASU 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures." ASU 2023-09 is intended to improve the disclosures for income taxes to allow investors to better assess, in their capital allocation decisions, how an entity's worldwide operations and related tax risks and tax planning and operational opportunities affect its income tax rate and prospects for future cashflows. The amendments in ASU 2023-09 require consistent categories and greater disaggregation of information in the rate reconciliation disclosure as well as disclosure of income taxes paid disaggregated by jurisdiction. The amendments of ASU 2023-09 are effective for annual periods beginning after December 15, 2024, with early adoption permitted for annual financial statements that have not yet been issued or made available for issuance. The Company is currently evaluating the impact of this ASU on its consolidated financial statements and related disclosures.

In March 2024, the SEC adopted new rules relating to the disclosure of a range of climate-change-related physical and transition risks, data, and opportunities. The adopted rule contains several new disclosure obligations, including, (i) disclosure on how the board of directors and management oversee climate-related risks and certain climate-related governance items, (ii) disclosure of information related to a registrant's climate-related targets, goals, and/or transition plans, and (iii) disclosure on whether and how climate-related events and transition activities impact line items above a threshold amount on a registrant's consolidate financial statements, including the impact of the financial estimates and the assumptions used. This new rule will first be effective in our annual disclosures for the year ending December 31, 2027. We are in the process of assessing the impact on our consolidated financial statements and disclosures.

3. Acquisitions:

(a) Uniregistry

On October 1, 2021, the Company acquired the domain registry related assets of UNR Corp., UNR Inc. and Uni Naming and Registry Ltd. (each a seller and collectively "UNR"). The purchase price was \$3.0 million, less a purchase price adjustment of approximately \$0.5 million relating to a working capital deficit, for net purchase consideration of \$2.5 million.

Cash Consideration, including working capital adjustment	\$	2,499
Total purchase price		2,499
Accounts Receivables, net		538
Other current assets		23
Technology		3,039
Total identifiable assets		3,600
Accounts payable and accrued liabilities		1,101
Total liabilities assumed		1,101
Total net assets (liabilities) assumed		2,499
Total goodwill	\$	-

The technology assets acquired are amortized over periods of 5 - 7 years.

(b) Simply Bits

On November 8, 2021, the Company acquired 100% of Simply Bits, LLC via an Agreement and Plan of Merger with one of our wholly owned subsidiaries. The purchase price was \$25.0 million, plus a purchase price adjustment of approximately \$0.8 million relating to a working capital surplus and the estimated fair value of contingent consideration, for net purchase consideration of \$25.8 million. Included in the agreement was contingent consideration totaled up to \$1.0 million, which was due 60 days from December 31, 2021 and was paid in 2022.

Cash Consideration, including working capital adjustment	\$	24,829
Fair value of contingent payments		953
Total purchase price		25,782
Cash and Cash Equivalents		801
Accounts Receivables, net		87
Other current assets		759
Property and equipment		1,684
Right of use operating lease		1,804
Customer relationships		9,160
Total identifiable assets		14,295
Accounts payable and accrued liabilities		307
Deferred tax liability		20
Operating lease liability		1,794
Other liabilities		498
Total liabilities assumed		2,619
Total net assets (liabilities) assumed		11,676
Total goodwill	\$	14,106

4. Property and Equipment:

Property and equipment consist of the following (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023	December 31, 2022
Computer equipment	\$ 53,818	\$ 43,440
Computer software	1,926	1,935
Capitalized internal use software	38,379	25,172
Furniture and equipment	1,880	1,708
Vehicles and tools	10,594	9,144
Fiber network	215,205	168,587
Customer equipment and installations	48,041	36,382
Land	1,109	1,109
Buildings	9,118	8,864
Assets under construction	75,519	62,588
Leasehold improvements	727	624
	<u>456,316</u>	<u>359,553</u>
Less:		
Accumulated depreciation	116,672	78,058
	<u>\$ 339,644</u>	<u>\$ 281,495</u>

Depreciation of property and equipment (Dollar amounts in thousands of U.S. dollars):

	Year Ended December 31, 2023	Year Ended December 31, 2022	Year Ended December 31, 2021
Depreciation of property and equipment	\$ 36,431	\$ 28,187	\$ 17,986

During the years ended December 31, 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 statement 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.

5. Goodwill and Other Intangible Assets:

Goodwill

Goodwill represents the excess of the purchase price over the fair value of tangible and identifiable intangible assets acquired and liabilities assumed in our acquisitions.

Goodwill consists of the following (Dollar amounts in thousands of U.S. dollars):

	Ting	Wavelo	Tucows Domains	Total
Balances, December 31, 2022	\$ 22,724	\$ -	\$ 107,686	\$ 130,410
Balances, December 31, 2023	\$ 22,724	\$ -	\$ 107,686	\$ 130,410

The Company's Goodwill balance is \$130.4 million as of December 31, 2023 and \$130.4 million as of December 31, 2022. The Company's goodwill relates 83% (\$107.7 million) to its Tucows Domains operating segment and 17% (\$22.7 million) to its Ting operating segment.

Goodwill is not amortized, but is subject to an annual impairment test. The Company performed an impairment analysis as outlined in "Note 2(h) – Significant Accounting Policies" and there were no indications of impairment for Fiscal 2023 and Fiscal 2022.

Other Intangible Assets:

Intangible assets consist of acquired brand, technology, customer relationships, surname domain names, direct navigation domain names and network rights. The Company considers its intangible assets consisting of surname domain names and direct navigation domain names as indefinite life intangible assets. The Company has the exclusive right to these domain names as long as the annual renewal fees are paid to the applicable registry. Renewals occur routinely and at a nominal cost. The indefinite life intangible assets are not amortized, but are subject to impairment assessments performed throughout the year. During Fiscal 2023, we assessed whether the specific domain names acquired through the acquisition of Mailbank.com Inc. in June 2006, which were due for renewal should not be renewed. Upon review, the Company decided to renew these domain names. During the years ended December 31, 2023, December 31, 2022, and December 31, 2021, no impairment of indefinite life intangible assets was recorded.

Finite-life intangible assets, comprising brand, technology, customer relationships and network rights are being amortized on a straight-line basis over periods of two to fifteen years.

Throughout 2023, the Company purchased \$0.5 million in customer relationship assets through hosting agreements whereby customer assets and domain names were obtained. These customer assets are being amortized over seven years.

Acquired intangible assets consist of the following (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023			December 31, 2022		
	Gross Carrying Value	Accumulated Amortization	Total Net Book Value	Gross Carrying Value	Accumulated Amortization	Total Net Book Value
Brand	\$ 15,764	\$ 14,894	\$ 870	\$ 15,764	\$ 12,824	\$ 2,940
Customer relationships	65,892	52,589	13,303	65,463	44,650	20,813
Technology	10,157	8,009	2,148	10,157	7,387	2,770
Network Rights	1,515	631	884	1,515	532	983
Surname domain names	11,151	-	11,151	11,155	-	11,155
Direct navigation domain names	1,128	-	1,128	1,129	-	1,129
	\$ 105,607	\$ 76,123	\$ 29,484	\$ 105,183	\$ 65,393	\$ 39,790

Amortization period	Surname domain names indefinite life	Direct navigation domain names indefinite life	Brand 7 years	Customer relationships 3 - 7 years	Technology 2 - 7 years	Network rights 15 years	Total
Balances, December 31, 2021	\$ 11,156	\$ 1,135	\$ 5,010	\$ 28,634	\$ 3,392	\$ 1,082	\$ 50,409
Acquisition of customer relationship	-	-	-	782	-	-	782
Additions to/(disposals from) domain portfolio, net	(1)	(6)	-	-	-	-	(7)
Amortization expense	-	-	(2,070)	(8,603)	(622)	(99)	(11,394)
Balances December 31, 2022	\$ 11,155	\$ 1,129	\$ 2,940	\$ 20,813	\$ 2,770	\$ 983	\$ 39,790
Acquisition of customer relationship	-	-	-	528	-	-	528
Additions to/(disposals from) domain portfolio, net	(4)	(1)	-	-	-	-	(5)
Amortization expense	-	-	(2,070)	(8,038)	(622)	(99)	(10,829)
Balances December 31, 2023	\$ 11,151	\$ 1,128	\$ 870	\$ 13,303	\$ 2,148	\$ 884	\$ 29,484

The following table shows the estimated amortization expense for each of the next 5 years and thereafter, assuming no further additions to acquired intangible assets are made (Dollar amounts in thousands of U.S. dollars):

	Year ending December 31,
2024	\$ 5,582
2025	4,550
2026	2,703
2027	2,159
2028	2,159
Thereafter	52
Total	\$ 17,205

6. Fair Value Measurement:

For financial assets and liabilities recorded in our financial statements at fair value we utilize a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Equity investments without readily determinable fair value include ownership rights that do not provide the Company with control or significant influence. Such equity investments are recorded at cost, less any impairment, and adjusted for subsequent observable price changes as of the date that an observable transaction takes place. Subsequent adjustments are recorded in other income (expense), net.

The following table provides a summary of the fair values of the Company's derivative instruments measured at fair value on a recurring basis as at December 31, 2023 (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023			
	Fair Value Measurement Using			Assets at Fair value
	Level 1	Level 2	Level 3	
Derivative instrument asset, net	\$ -	\$ 2,277	\$ -	\$ 2,277
Total assets, net	\$ -	\$ 2,277	\$ -	\$ 2,277

The following table provides a summary of the fair values of the Company's derivative instruments measured at fair value on a recurring basis as at December 31, 2022 (Dollar amounts in thousands of U.S. dollars):

	December 31, 2022			
	Fair Value Measurement Using			Assets at Fair value
	Level 1	Level 2	Level 3	
Derivative instrument asset, net	\$ -	\$ 1,514	\$ -	\$ 1,514
Total assets, net	\$ -	\$ 1,514	\$ -	\$ 1,514

7. Derivative Instruments and Hedging Activities:

The Company is exposed to certain risks relating to its ongoing business operations. The primary risks managed by using derivative instruments are foreign exchange rate risk and interest rate risk.

Since October 2012, the Company has employed a hedging program with a Canadian chartered bank to limit the potential foreign exchange fluctuations incurred on its future cash flows related to a portion of payroll, taxes, rent and payments to Canadian domain name registry suppliers that are denominated in Canadian dollars and are expected to be paid by its Canadian operating subsidiary. In May 2020, the Company entered into a pay-fixed, receive-variable interest rate swap with a Canadian chartered bank to limit the potential interest rate fluctuations incurred on its future cash flows related to variable interest payments on the Second Amended 2019 Credit Facility. The notional value of the interest rate swap was \$70 million. During the third quarter of fiscal year 2022, the Company elected to discontinue its application of hedge accounting to its interest rate swaps prospectively. Until the interest rate swaps matured in June 2023, the derivatives continued to be carried at fair value in the accompanying Consolidated Balance Sheets with changes in their fair value from the date of discontinuance recognized in current period earnings in Interest expense, net in the Consolidated Statements of Operations and Comprehensive Loss. Unrealized gains and losses in Accumulated other comprehensive income (AOCI) as of the date of discontinuance were realized in net income over the remaining term of the underlying forecasted interest payments into interest expense over the original term of the hedged debt. Prior to the discontinuance, for the interest rate swap contracts, unrealized gains or losses on the effective portion of these contracts had been included in other comprehensive income (OCI) and reclassified to earnings when the hedged transaction settled. As of December 31, 2023, there are no interest swaps held by the Company.

The Company does not use hedging forward contracts for trading or speculative purposes. The foreign exchange contracts typically mature between one and twelve months, and the interest rate swap fully matured as of June 30, 2023.

The Company has designated certain of these foreign exchange transactions as cash flow hedges of forecasted transactions under ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities ("ASC Topic 815"). For certain contracts, as the critical terms of the hedging instrument, and of the entire hedged forecasted transaction, are the same, in accordance with ASC Topic 815, the Company has been able to conclude that changes in fair value and cash flows attributable to the risk being hedged are expected to completely offset at inception and on an ongoing basis. The Company designated the interest rate swap as a cash flow hedge of expected future interest payments at the inception of the contract. Accordingly, for the foreign exchange, unrealized gains or losses on the effective portion of these contracts were included within other comprehensive income and reclassified to earnings when the hedged transaction is settled. Cash flows from hedging activities were classified under the same category as the cash flows from the hedged items in the consolidated statements of cash flows. The fair value of the contracts, as of December 31, 2023 and December 31, 2022, is recorded as derivative instrument assets or liabilities. For certain contracts where the hedged transactions are no longer probable to occur, the loss on the associated forward contract is recognized in earnings.

As of December 31, 2023, the notional amount of forward contracts that the Company held to sell U.S. dollars in exchange for Canadian dollars was \$61.4 million, of which \$61.4 million met the requirements of ASC Topic 815 and were designated as hedges.

As of December 31, 2022 the notional amount of forward contracts that the Company held to sell U.S. dollars in exchange for Canadian dollars was \$49.7 million, of which \$49.7 million met the requirements of ASC Topic 815 and were designated as hedges.

As of December 31, 2021 the notional amount of forward contracts that the Company held to sell U.S. dollars in exchange for Canadian dollars was \$38.1 million, of which \$26.8 million met the requirements of ASC Topic 815 and were designated as hedges.

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

Maturity date (Dollar amounts in thousands of U.S. dollars)	Notional amount of U.S. dollars	Weighted average exchange rate of U.S. dollars	Fair value
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>	<u>1.3681</u>	<u>\$ 2,277</u>

Fair value of derivative instruments and effect of derivative instruments on financial performance

The effect of these derivative instruments on our consolidated financial statements as of, and for the years ended December 31, 2023 and 2022, were as follows (amounts presented do not include any income tax effects).

Fair value of derivative instruments in the consolidated balance sheets (see "Note 6 – Fair Value Measurement")

Derivatives (Dollar amounts in thousands of U.S. dollars)	Balance Sheet Location	As of December 31, 2023 Fair Value Asset	As of December 31, 2022 Fair Value Asset
Foreign Currency forward contracts designated as cash flow hedges (net)	Derivative instruments	\$ 2,277	\$ (84)
Interest rate swap contract designated as a cash flow hedge (net)	Derivative instruments	-	1,598
Total foreign currency forward contracts and interest rate swaps (net)	Derivative instruments	<u>\$ 2,277</u>	<u>\$ 1,514</u>

Movement in AOCI balance for the year ended December 31, 2023 (Dollar amounts in thousands of U.S. dollars)

	Gains and losses on cash flow hedges	Tax impact	Total AOCI
Opening AOCI balance - December 31, 2022	\$ 1,032	\$ (248)	\$ 784
Other comprehensive income (loss) before reclassifications	2,413	(583)	1,830
Amount reclassified from AOCI	(52)	14	(38)
Amortization of discontinued cash flow hedge	(1,118)	270	(848)
Other comprehensive income (loss) for the year ended December 31, 2023	1,243	(299)	944
Ending AOCI Balance - December 31, 2023	\$ 2,275	\$ (547)	\$ 1,728

Movement in AOCI balance for the year ended December 31, 2022 (Dollar amounts in thousands of U.S. dollars)

	Gains and losses on cash flow hedges	Tax impact	Total AOCI
Opening AOCI balance - December 31, 2021	\$ 450	\$ (107)	\$ 343
Other comprehensive income (loss) before reclassifications	550	(132)	418
Amount reclassified from AOCI	793	(193)	600
Amortization of discontinued cash flow hedge	(761)	184	(577)
Other comprehensive income (loss) for the year ended December 31, 2022	582	(141)	441
Ending AOCI Balance - December 31, 2022	\$ 1,032	\$ (248)	\$ 784

Movement in AOCI balance for the year ended December 31, 2021 (Dollar amounts in thousands of U.S. dollars)

	Gains and losses on cash flow hedges	Tax impact	Total AOCI
Opening AOCI balance - December 31, 2020	\$ 3,038	\$ (702)	\$ 2,336
Other comprehensive income (loss) before reclassifications	794	(222)	572
Amount reclassified from AOCI	(3,382)	817	(2,565)
Other comprehensive income (loss) for the year ended December 31, 2021	(2,588)	595	(1,993)
Ending AOCI Balance - December 31, 2021	\$ 450	\$ (107)	\$ 343

Effects of derivative instruments on income and other comprehensive income (OCI) (Dollar amounts in thousands of U.S. dollars)

Derivatives in Cash Flow Hedging Relationship	Amount of Gain or (Loss) Recognized in OCI, net of tax, on Derivative	Location of Gain or (Loss) Reclassified from AOCI into Income	Amount of Gain or (Loss) Reclassified from AOCI into Income
Foreign currency forward contracts for the year ended December 31, 2023	\$ 1,830	Operating expenses Cost of revenues	\$ 46 \$ 6
Foreign currency forward contracts for the year ended December 31, 2022	\$ (1,014)	Operating expenses Cost of revenues	\$ (691) \$ (171)
Interest rate swap contract for the year ended December 31, 2022	\$ 1,430	Interest expense, net	\$ 69
Foreign currency forward contracts for the year ended December 31, 2021	\$ (2,203)	Operating expenses Cost of revenues	\$ 2,652 \$ 615
Interest rate swap contract for the year ended December 31, 2021	\$ (210)	Interest expense, net	\$ 115

For those foreign currency forward contracts not designated as hedges, the Company recorded the following fair value adjustments, on settled and outstanding contracts (Dollar amounts in thousands of U.S. dollars):

Forward currency contracts not designated as hedges:	2023	Year Ended December 31, 2022	2021
Gain (loss) on settlement	\$ -	\$ -	\$ 883
Gain (loss) on change in fair value	-	-	(606)
	\$ -	\$ -	\$ 277

8. Syndicated Revolver:

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 delivered by BMO.

Prior to entering into the 2023 Credit Facility, during the year ended December 31, 2023 the Company made repayments of \$16.3 million on the 2019 Credit Facility.

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, "Tucows") 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 \$60 million 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 Agreement.

In connection with the 2023 Credit Facility, the Company incurred \$0.9 million of fees paid to the lenders and \$0.3 million of legal fees related to the debt issuance. These fees have been reflected as a reduction to the carrying amount of the loan payable and will be amortized over the term of the 2023 Credit Facility agreement. The Company evaluated the issuance of the 2023 Credit Facility and the termination of the 2019 Credit Facility (collectively referred to as the "Debt Transactions") under the loan modification and extinguishment guidance within ASC 470. The Debt Transactions were accounted for as a partial modification, partial extinguishment and new debt issuance at the syndicated lender level. Based on the application of the loan modification and extinguishment guidance within ASC 470 to the Debt Transactions, the Company has treated \$50.9 million of the loan principal under the 2019 Credit Facility as an extinguishment of debt and \$50.9 million of the loan principal under the 2023 Credit Facility as issuance of new debt. The remaining loan principal on the 2023 Credit Facility was treated as a loan modification within the guidance of ASC 470. In accordance with the debt extinguishment, the Company expensed \$0.1 million of the unamortized debt issuance costs to Interest expense, net in the Consolidated Statements of Comprehensive Income.

2023 Credit Facility Terms

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. The required principal repayment of \$211.9 million is due in 2026.

During the years ended December 31, 2023 and December 31, 2022 the Company was in compliance with the covenants under its credit agreements in effect at the time.

During the year ended December 31, 2023, the Company made net cash repayments of \$17.8 million and \$10.0 million under the 2019 Credit Facility and the 2023 Credit Facility respectively.

Borrowings under the 2023 Credit Agreement will accrue interest and standby fees based on the Company's Total Funded Debt to Adjusted EBITDA ratio and the availment type as follows:

Availment type or fee	If Total Funded Debt to Adjusted EBITDA is:				
	Less than 2.00	Greater than or equal to 2.00 and less than 2.75	Greater than or equal to 2.75 and less than 3.50	Greater than or equal to 3.50 and less than 4.00	Greater than or equal to 4.00
Canadian dollar borrowings based on the Canadian Dollar Offered Rate or U.S. dollar borrowings based on SOFR and letter of credit fees (Margin)	1.50%	2.00%	2.50%	3.00%	3.50%
Canadian borrowings based on Prime Rate or Canadian or U.S. dollar borrowings based on Base Rate (Margin)	0.25%	0.75%	1.25%	1.75%	2.25%
Standby fees	0.30%	0.40%	0.50%	0.60%	0.70%

The following table summarizes the Company's borrowings under the credit facilities (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023	December 31, 2022
Revolver	211,900	239,700
Less: unamortized debt discount and issuance costs	(1,546)	(770)
Total loan payable	210,354	238,930
Less: loan payable, current portion	-	-
Loan payable, long-term portion	210,354	238,930

The following table summarizes our scheduled principal repayments as of December 31, 2023 (Dollar amounts in thousands of U.S. dollars):

2024	-
2025	-
2026	211,900
	<u>\$ 211,900</u>

9. Notes Payable:

2023 Term Notes

On May 4, 2023 (the "Closing Date"), Tucows Inc. through its indirect and wholly owned subsidiaries, including Ting Fiber, LLC entered into a definitive agreement relating to a securitized financing facility related the 2023 Term Notes. On the Closing Date, Ting Issuer LLC, a Delaware limited liability company (the "Issuer"), a limited purpose, bankruptcy-remote, indirect wholly owned subsidiary of the Company issued (i) \$168,357,000 of its 5.95% Secured Fiber Revenue Notes, Series 2023-1, Class A-2, (ii) \$23,289,000 of its 7.40% Secured Fiber Revenue Notes, Series 2023-1, Class B and (iii) \$46,859,000 initial principal amount of 9.95% Secured Fiber Revenue Notes, Series 2023-1, Class C, together, the "2023 Term Notes". The offering was exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"). The net proceeds from the issuance of the 2023 Term Notes were \$220.5 million, after deducting a debt discount of \$11.2 million and issuing costs of \$6.7 million.

The debt discount and issuance costs of the 2023 Term Notes are being amortized using the straight line method over a five-year period between the Closing date and the anticipated repayment date. During the year ended December 31, 2023, the Company recognized \$2.4 million of interest expense related to the amortization of the debt discount and issuance costs of the 2023 Term Notes.

The 2023 Term Notes are issued under an indenture, dated May 4, 2023 (the "Base Indenture") between the Issuer and Citibank, N.A., as trustee (the "Indenture Trustee") as supplemented by the Series 2023-1 supplemental indenture dated May 4, 2023, (the "Series 2023-1 Supplement" and, together with the Base Indenture, the "Indenture"), between the Issuer and the Trustee. Interest payments on the 2023 Term Notes are payable on a monthly basis. The legal final maturity date of the 2023 Term Notes is in April of 2053, but, unless earlier prepaid to the extent permitted under the Indenture, the anticipated repayment date of the 2023 Term Notes will be in April 2028. If the Issuer has not repaid or refinanced the 2023 Term Notes prior to the anticipated repayment date, additional interest will accrue on the 2023 Term Notes in an amount equal to the greater of (A) 5.00% per annum and (B) a per annum interest rate equal to the excess, if any, by which the sum of the following exceeds the original interest rate of such 2023 Term Note (i) the yield to maturity (adjusted to a "mortgage equivalent basis" pursuant to the standards and practices of the Securities Industry and Financial Markets Association) on such anticipated repayment date of the United States Treasury Security having a term closest to 10 years, plus (ii) 5.00%, plus (iii) (x) for the 2023 Class A-2 Notes, 3.50%, (y) for the 2023 Class B Notes, 5.00% and (z) for the 2023 Class C Notes, 7.82%.

The 2023 Term Notes are secured by certain of the Company's revenue-generating assets, consisting principally of fiber-network related agreements, fiber-network assets and customer contracts (collectively, the "Securitized Assets") that are owned by certain other limited-purpose, bankruptcy-remote, wholly owned indirect subsidiaries of the Company that act as the Guarantors (collectively with the Issuer, the "Obligor") under the Base Indenture. The 2023 Term Notes are subject to a series of covenants, restrictions and other investor protections including (i) that the Issuer maintains specified reserve accounts to be used to make required payments in respect of the 2023 Term Notes, (ii) provisions relating to optional and mandatory prepayments and the related payment of specified amounts, (iii) certain indemnification payments (iv) the guarantors comply with standard bankruptcy-remoteness covenants, including not guaranteeing or being liable for other affiliates debts or liabilities and (v) covenants relating to recordkeeping, access to information, and similar matters.

As of December 31, 2023, the Company was in compliance with all required covenants. As of December 31, 2023, the Company's scheduled principal repayments for the 2023 Term Notes are set to occur after 2027.

The following table summarizes Ting's borrowings under the 2023 Term Notes (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023	December 31, 2022
Principal	\$ 238,505	\$ -
Less: unamortized issuance costs	(5,847)	-
Less: unamortized discount	(9,763)	-
Total notes payable	222,895	-
Less: notes payable, current portion	-	-
Note payable, long-term portion ⁽¹⁾	\$ 222,895	\$ -

(1) The Company capitalizes interest expenses directly attributable to the development of qualifying assets. Qualifying assets include internally use software (IUS), assets under construction (AUC), equipment, or other long-lived assets that meet the capitalization criteria prescribed by ASC 350. During the year ended December 31, 2023, the Company capitalized \$1.0 million of interest expenses pertaining to the 2023 Term Notes directly attributable to the development of certain AUC assets, respectively.

Restricted Cash

Under the terms of the Indenture, revenues generated from the Securitized Assets are deposited into accounts controlled by the Indenture Trustee within two business days of receipt. The Company has no access to or control of the funds held in trust until they are disbursed by the Indenture Trustee on the 20th day of each calendar month (the "Payment Date"). In accordance with the Indenture, on each Payment Date the Indenture Trustee disburses, on behalf of the Obligor, administration fees to service providers, interest payments to the noteholders, liquidity reserve top-ups (if required), and the remaining funds to accounts controlled by the Obligor. Funds held in trust with the Indenture Trustee at the reporting date are presented as "Restricted cash" on the Company's Consolidated Balance Sheet.

At December 31, 2023, Restricted cash totaled \$3.6 million.

Under the terms of the Indenture, the Company is also required to maintain a liquidity reserve fund equal to the sum of (A) six times the total amount of fund administration fees payable on each payment date after May 20, 2023 and (B) six times the total amount of monthly interest on the 2023 Notes due and payable on each payment date after May 20, 2023. The liquidity reserve is maintained with the Indenture Trustee until the maturity of the 2023 Term Notes and the balance is presented as "Secured notes reserve funds" on the Company's Consolidated Balance Sheet.

At December 31, 2023 Secured notes reserve funds totaled \$8.7 million.

10. Income Taxes:

The provision for income taxes differs from the amount computed by applying the statutory federal income tax rate of 21% for the years ended December 31, 2023, December 31, 2022 and December 31, 2021, to income before provision for income taxes as a result of the following (Dollar amounts in thousands of U.S. dollars):

	Year ended December 31,		
	2023	2022	2021
Income (loss) for the year before provision for income taxes	\$ (103,070)	\$ (27,788)	\$ 7,270
Computed federal tax expense	(21,644)	(5,836)	1,527
Increase (decrease) in income tax expense resulting from:			
State income taxes	(2,891)	845	314
Foreign earnings	5,976	386	382
Changes in valuation allowance	11,213	4,023	2,300
Foreign income tax deduction	(1,571)	-	-
Adjustments recognized in the current period for income tax of prior periods	1,569	250	377
Permanent differences	(90)	(112)	205
Shortfall (excess) tax benefits on share-based compensation	-	138	(1,556)
Others	565	89	357
Provision (recovery) for income taxes	\$ (6,873)	\$ (217)	\$ 3,906

Our effective tax rate is mainly driven by changes in valuation allowance on net operating losses, interest expense limitation that we are not expected to realize in future years, and the impact of foreign earnings.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities as of December 31, 2023, and December 31, 2022 are presented below (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023	December 31, 2022
Deferred tax assets:		
Net operating losses	\$ 55,574	\$ 2,468
Foreign tax credits	13,040	17,554
Deferred revenue	5,132	5,349
Interest expense limitation	4,606	1,047
Limited life intangible assets	2,034	-
Fixed assets	-	379
Accruals, including foreign exchange and other	5,122	3,909
Total deferred tax assets	85,508	30,706
Valuation allowance	(28,767)	(17,554)
Total deferred tax assets	\$ 56,741	\$ 13,152
Deferred tax liabilities:		
Investment in partnership	\$ (32,550)	\$ (6,727)
Prepaid registry fees and expenses	(19,216)	(17,941)
Fixed assets	(4,862)	-
Indefinite life intangible assets	(2,966)	(2,968)
Limited life intangible assets	-	(629)
Foreign branch deferred tax liabilities	(113)	(607)
Total deferred tax liabilities	\$ (59,707)	\$ (28,872)
Net deferred tax liabilities	\$ (2,966)	\$ (15,720)

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. In 2023, we have determined that it is not more likely than not that we will ultimately be able to fully utilize the net operating losses, foreign tax credits and interest expense limitation in future years. As of December 31, 2023, a valuation allowance of \$28.8 million is recorded against net deferred tax assets. The increase in the valuation allowance was primarily attributable to an increase in deferred tax assets resulting from the loss from operations and interest expense limitation. Should our operating results continue to improve and projections to show utilization of the deferred tax assets, we would take the positive evidence into consideration and reassess our valuation allowance position.

As of December 31, 2023, the Company had net federal and state operating loss carryforwards of approximately \$230.1 million and interest expense carryforwards of \$18.9 million respectively. The majority of the net operating loss and interest expense carryforwards can be carried forward indefinitely.

As of December 31, 2023, the Company had foreign tax credit carryforwards of \$13.0 million. The foreign tax credit will expire beginning in the year ending December 31, 2027 if not utilized.

The Company had nil total gross unrecognized tax benefits as of both December 31, 2023 and December 31, 2022. The Company does not expect its total gross unrecognized tax benefits will change within the next 12 months.

The Company recognizes interest and penalties related to income tax matters within the provision for income taxes. As of December 31, 2023, the Company recorded \$0.8 million of interest in income taxes, primarily due to Sec. 453A interest on deferred tax liability for U.S. tax purposes. No material interest and penalties were recognized as of December 31, 2022.

11. Revenue:

Significant accounting policy

The Company's revenues are derived from (a) the provisioning of retail fiber Internet services through Ting, (b) the CSP solutions and professional services through Wavelo; and from (c) domain name registration contracts, other domain related value-added services, domain sale contracts, and other advertising revenue through Tucows Domains Services. Certain revenues are disclosed under Tucows Corporate as they are considered non-core business activities including retail mobile services, Transition Services Agreement ("TSA") revenue and eliminations of intercompany revenue. Amounts received in advance of meeting the revenue recognition criteria described below are recorded as deferred revenue. All products are generally sold without the right of return or refund.

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

Nature of goods and services

The following is a description of principal activities – separated by reportable segments – from which the Company generates its revenue. For more detailed information about reportable segments See Note 21 – Segment Reporting.

(a) Ting

The Company generates Ting revenues primarily through the provisioning of fixed high-speed Internet access, Ting Internet.

Ting Internet contracts provide customers Internet access at their home or business through the installation and use of our fiber optic network. Ting Internet contracts are generally prepaid and grant customers with unlimited bandwidth based on a fixed price per month basis. Because consideration is collected before the service period, revenue is initially deferred and recognized as the Company performs its obligation to provide Internet access. Though the Company does not consider the installation of fixed Internet access to be a distinct performance obligation, the fees related to installation are immaterial and therefore revenue is recognized as billed.

Ting Internet access services are primarily contracted through the Ting website, for one month at a time and contain no commitment to renew the contract following each customer's monthly billing cycle. The Company's billing cycle for all Ting Internet customers is computed based on the customer's activation date. In addition, revenues associated with the sale of Internet hardware to subscribers are recognized when title and risk of loss is transferred to the subscriber and shipment has occurred. Incentive marketing credits given to customers are recorded as a reduction of revenue.

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

(b) Wavelo

The Company generates Wavelo revenues by providing billing and provisioning platform services to Communication Service Providers ("CSPs") to whom we also provide other professional services.

Platform service agreements contain both platform services and professional services. Platform services offer a variety of solutions that support CSPs, including subscription and billing management, network orchestration and provisioning, and individual developer tools through a single, cloud based service. Consideration under platform service arrangements includes both a variable component that changes each month depending on the number of subscribers hosted on the platform, as well as platform payments and credits. The Company estimates platform payment and credit consideration over the term of the contract and recognizes the portion related to platform services evenly over the term of the contract. The Company recognizes variable subscriber fees, as the fees are invoiced. Platform services represent a single promise to provide continuous access (i.e. a stand-ready performance obligation) to the platform. As each month of providing access to the platform is substantially the same and the customer simultaneously receives and consumes the benefits as access is provided, the performance obligation consists of a series of distinct service periods. Professional services provided under platform service arrangements can include implementation, training, consulting or software development/modification services. Revenues related to professional services are distinct from the other promises in the contract(s) and are recognized as the related services are performed, on the basis of hours consumed. Platform payment and credit consideration is allocated between the platform services and professional services performance obligations by estimating the standalone selling price ("SSP") of each performance obligation. The Company estimates the SSP of professional services based on observable standalone sales. The SSP of platform services is derived using the residual approach by estimating the total contract consideration and subtracting the SSP of professional services. Total contract consideration is estimated at contract inception, considering any constraints that may apply and updating the estimates as new information becomes available.

Other professional services consist of professional service arrangements with platform services customers which are billed based on separate Statement of Work ("SOW") arrangements for bespoke feature development. Revenues for professional services contracted through separate SOWs are recognized at a point-in-time when the final acceptance criteria have been met.

(c) Tucows Domains

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

Domain related value-added services like digital certifications, WHOIS privacy, website hosting and hosted email provide 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.

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

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

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

Disaggregation of Revenue

The following is a summary of the Company's revenue earned from each significant revenue stream (Dollar amounts in thousands of U.S. dollars):

	2023	2022	2021
Ting:			
Fiber Internet Services	\$ 50,937	\$ 42,425	\$ 25,327
Wavelo:			
Platform Services	37,082	22,594	13,031
Other professional services	1,588	1,750	3,750
Total Wavelo	38,670	24,344	16,781
Tucows Domains:			
Wholesale			
Domain Services	189,013	187,542	189,091
Value Added Services	17,712	20,712	20,942
Total Wholesale	206,725	208,254	210,033
Retail	35,372	34,904	35,543
Total Tucows Domains	242,097	243,158	245,576
Tucows Corporate:			
Mobile Services and eliminations	7,633	11,215	16,653
	\$ 339,337	\$ 321,142	\$ 304,337

As of December 31, 2023, one customer represented 39% of total accounts receivable. As of December 31, 2022 one customer represented 46% of total accounts receivable. As of December 31, 2021, one customer represented 46% of total accounts receivable.

During the year ended December 31, 2023 one customer accounted for 10.7% of revenue amounting to \$36.2 million, within the Wavelo segment. For the years ended December 31, 2022 and December 31, 2021 no customer accounted for more than 10% of total revenue.

The following is a summary of the Company's cost of revenue from each significant revenue stream (Dollar amounts in thousands of U.S. dollars):

	2023	2022	2021
<u>Ting:</u>			
Fiber Internet Services	\$ 20,151	\$ 17,004	\$ 12,035
<u>Wavelo:</u>			
Platform Services	1,337	1,294	504
Other professional services	1,289	1,632	804
Total Wavelo	2,626	2,926	1,308
<u>Tucows Domains:</u>			
<u>Wholesale</u>			
Domain Services	150,664	147,894	147,213
Value Added Services	2,249	2,514	2,544
Total Wholesale	152,913	150,408	149,757
<u>Retail</u>			
Total Tucows Domains	16,501	16,482	17,731
	169,414	166,890	167,488
<u>Tucows Corporate:</u>			
Mobile Services and eliminations	10,065	9,448	12,208
<u>Network Expenses:</u>			
Network, other costs	28,222	17,433	14,769
Network, depreciation and amortization costs	37,370	29,101	18,035
Network, impairment	4,822	92	201
Total Network Expenses	70,414	46,626	33,005
	\$ 272,670	\$ 242,894	\$ 226,044

Contract Balances

The following table provides information about contract liabilities (deferred revenue) from contracts with customers. The Company accounts for contract assets and liabilities on a contract-by-contract basis, with each contract presented as either a net contract asset or a net contract liability accordingly.

Some of the Company's long-term contracts with customers are billed in advance of service, such as domain contracts and some professional service contracts. Consideration received from customers related to performance obligations which have not yet been satisfied are contract liabilities and recorded as deferred revenues.

Deferred revenue primarily relates to the portion of the transaction price received in advance related to the unexpired term of domain name registrations and other domain related value-added services, on both a wholesale and retail basis, net of external commissions.

The opening balance of deferred revenue was \$145.1 million as of January 1, 2023. Significant changes in deferred revenue were as follows (Dollar amounts in thousands of U.S. dollars):

	Year ended December 31, 2023
Balance, beginning of period	\$ 145,131
Deferred revenue	250,130
Recognized revenue	(247,178)
Balance, end of period	\$ 148,083

Remaining Performance Obligations:

As the Company fulfills its performance obligations, the following table includes revenues expected to be recognized in the future related performance obligations that are unsatisfied (or partially unsatisfied) as at December 31, 2023 (Dollar amounts in thousands of U.S. dollars)

	December 31, 2023
2024	\$ 124,362
2025	9,940
2026	4,507
2027	2,703
2028	1,688
Thereafter	2,512
Total	<u>\$ 145,712</u>

For retail mobile and internet access services, where the performance obligation is part of contracts that have an original expected duration of one year or less (typically one month), the Company has elected to apply a practical expedient to not disclose revenues expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied).

Although domain registration contracts are deferred over the lives of the individual contracts, which can range from one to ten years, approximately 80 percent of our deferred revenue balance related to domain contracts is expected to be recognized within the next twelve months.

Deferred revenue related to Exact hosting contracts is also deferred over the lives of the individual contracts, which are expected to be fully recognized within the next twelve months.

Professional service revenue related to platform services may be deferred over the period not exceeding the term of the contract.

12. Costs to obtain and fulfill a contract

(a) Deferred costs of acquisition

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the period of benefit of those costs to be longer than one year and those costs are expected to be recoverable under the term of the contract. We have identified certain sales incentive programs and other customer acquisition fees that meet the requirements to be capitalized, and therefore, capitalized them as contract costs in the amount of \$2.6 million at December 31, 2023.

Capitalized contract acquisition costs are amortized into operating expense based on the transfer of goods or services to which the assets relate which typically range from two – ten years. For the year ended December 31, 2023, the Company capitalized \$2.0 million and also amortized \$1.2 million of contract costs, respectively. The breakdown of the movement in the deferred costs of acquisition balance for the year ended December 31, 2023 is as follows (Dollar amounts in thousands of U.S. dollars):

	Year ended December 31, 2023
Balance, beginning of period	\$ 1,827
Capitalization of costs	1,987
Amortization of costs	(1,233)
Balance, end of period	<u>\$ 2,581</u>

When the amortization period for costs incurred to obtain a contract with a customer is less than one year, we have elected to apply a practical expedient to expense the costs as incurred. These costs include our internal sales compensation program, certain partner sales incentive programs and other customer acquisition fees.

(b) Deferred costs of fulfillment

Deferred costs to fulfill contracts primarily consist of domain registration costs which have been paid to a domain registry, and are capitalized as deferred costs of fulfillment. These costs are deferred and amortized over the life of the domain which generally ranges from one to ten years. The Company also defers certain technology design and data migration costs it incurs to fulfil its performance obligations contained in our platform services arrangements. For the year ended December 31, 2023, the Company capitalized \$179.5 million and also amortized \$179.1 million of contract costs. There were no impairment losses recognized in relation to the costs capitalized during the year ended December 31, 2023. Amortization expense is primarily included in cost of revenue. The breakdown of the movement in the deferred costs of fulfillment balance for the year ended December 31, 2023 is as follows (Dollar amounts in thousands of U.S. dollars).

	Year ended December 31, 2023
Balance, beginning of period	\$ 110,674
Deferral of costs	179,477
Recognized costs	(179,083)
Balance, end of period	<u>\$ 111,068</u>

13. Leases

We lease datacenters, corporate offices, antenna tower and fiber-optic cables under operating leases. The Company does not have any leases classified as finance leases.

Our leases have remaining lease terms of 1 year to 20 years, some of which may include options to extend the leases for up to 5 years, and some of which may include options to terminate the leases within 1 year.

The components of lease expense were as follows (Dollar amounts in thousands of U.S. dollars):

	Year Ended December 31, 2023	Year Ended December 31, 2022
Operating lease cost (leases with a total term greater than 12 months)	\$ 5,710	\$ 4,200
Short-term lease cost (leases with a total term of 12 months or less)	196	244
Variable lease cost	1,878	1,223
Total lease cost	\$ 7,784	\$ 5,667

Lease Cost is presented in general and administrative expenses and direct cost of revenues within our consolidated statements of operations and comprehensive income.

Information related to leases was as follows (Dollar amounts in thousands of U.S. dollars):

	Year Ended December 31, 2023	Year Ended December 31, 2022
<i>Supplemental cashflow information:</i>		
Operating lease - operating cash flows (fixed payments)	\$ 6,088	\$ 4,896
Operating lease - operating cash flows (liability reduction)	\$ 5,170	\$ 3,984
New Right of Use assets - operating leases	\$ 11,388	\$ 6,726
<i>Supplemental balance sheet information related to leases:</i>		
Weighted average discount rate	6.92%	4.14%
Weighted average remaining lease term	10.57 yrs	6.56 yrs

Maturity of lease liability as of December 31, 2023 (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023
2024	\$ 6,717
2025	5,349
2026	3,478
2027	2,204
2028	1,769
Thereafter	15,307
Total future lease payments	34,824
Less interest	11,172
Total	\$ 23,652

Operating lease payments include payments under the non-cancellable term, without any additional amounts related to options to extend lease terms that are not reasonably certain of being exercised.

As of December 31, 2023, we have not entered into any lease agreements that have not yet commenced, and therefore are not included in the lease liability.

The Company has elected to use the single exchange rate approach when accounting for lease modifications. Under the single exchange rate approach, the entire right of use asset is revalued at the date of modification in the Company's functional currency provided the re-measurement is not considered a separate contract or if the re-measurement is related to change the lease term or assessment of a lessee option to purchase the underlying asset being exercised.

14. Redeemable preferred units:

The Company entered into a Series A Preferred Unit Purchase Agreement (the "Unit Purchase Agreement") with Generate TF Holdings, LLC, a Delaware limited liability company ("Generate") on August 8, 2022 (the "Effective Date"), and closed the transaction contemplated thereby on August 11, 2022 (the "Transaction Close") pursuant to which the Company issued and sold 10,000,000 units of its Series A Preferred Units to Generate at a cash purchase price of \$6.00 per unit ("Initial Funding"). Under the Unit Purchase Agreement, after the Transaction Close until the third anniversary of the Effective Date (the "End Date") and upon the achievement of pre-determined operational and financial drawdown milestones, the Company will issue and sell in subsequent fundings an aggregate of 23,333,333.34 units of additional Series A Preferred Units on the same terms and conditions as in the Initial Funding ("Milestone Fundings"). The investment provided the Company with \$60 million of capital upon the Initial Funding, with an additional \$140 million of capital commitments available to the Company over the subsequent three-year period if the milestones are achieved. From the Transaction Close until the earlier of (i) the End Date and (ii) the date upon which Generate has paid \$140 million pursuant to Milestone Fundings, the Company is required to pay Generate a standby fee at a rate of 0.50% of any portion of the unpaid \$140 million capital commitment which will be paid quarterly. The Series A Preferred Units accrue a preferred return to the holder at a rate of 15% per annum, subject to adjustments based on the value of approved projects under the Equity Capital Contribution Agreement (the "ECC Agreement"). The preferred return on the Series A Preferred Units purchased under the Unit Purchase Agreement may be adjusted down to a floor of 13% or up to a ceiling of 17% per annum based on commitment and contribution amounts under the ECC Agreement. The preferred return accrues daily, and is compounded quarterly. The preferred return accrued during the first two years is not payable unless and until the Series A Preferred Units are redeemed. The preferred return accrued after the second anniversary of the Transaction Close is payable by the Company quarterly. If the Company should redeem the Series A Preferred Units prior to the fourth anniversary of the Transaction Close, the Company is required to pay a make-whole premium, which is calculated as the cumulative and compounded preferred return that would have accrued (at the preferred return rate in effect immediately prior to such redemption) on the outstanding unreturned capital balance with respect to the Series A Preferred Units through and including the six-year anniversary of the Transaction Close had such Series A Preferred Unit not been redeemed, discounted at an agreed upon treasury rate plus 50 basis points, compounded quarterly (the "Make-Whole-Premium").

The Company's Amended and Restated Limited Liability Company Agreement (the "LLC Agreement"), states that in the event that (i) the Company fails to pay the preferred return for two consecutive quarters, (ii) the Company fails to pay the redemption price in connection with any redemption of the Series A Preferred Units, (iii) the Company materially breaches its obligations under the LLC Agreement, (iv) there occurs an event of default (or similar term) under Tucows Inc.'s or its affiliates' credit agreement, (v) there occurs material breach if not cured or otherwise remedied in accordance with the terms of any credit facility (taking into account any cure periods), by the Company or any of its Subsidiaries under any debt facilities where the Company or any of its Subsidiaries incurs indebtedness for borrowed money, or (vi) the Company breaches any covenant under the Unit Purchase Agreement, Generate has the option to either (i) convert Series A Preferred Units based on the Redemption Price into common units of the Company based on the then applicable conversion price ; or (ii) compelling the sale of certain assets of the Company or its subsidiaries of equal value to the Redemption Price.

Under the terms of the LLC Agreement, the Company is mandatorily required to redeem the redeemable preferred units prior to the earliest of (i) a sale of the Company, (ii) a public offering, (iii) an event of default (or similar term) by Tucows Inc. or any of its affiliates under, (iv) a material breach if not cured or otherwise remedied in accordance with the terms of any credit facility (taking into account any cure periods), by the Company or any of its Subsidiaries under any debt facilities where the Company or any of its Subsidiaries incurs indebtedness for borrowed money, (v) the Company failed to pay the preferred return for two consecutive quarters, and (vi) the six-year anniversary of the Transaction Close. Due to the fact that the redeemable preferred units are mandatorily redeemable, the redeemable preferred units are classified as a liability in the accompanying consolidated balance sheets. The liability was initially recorded at fair value and subsequently recorded at the present value of the settlement amount, which includes the preferred return payments required until the instrument's expected maturity on the sixth anniversary of the Transaction Close, August 10, 2028 using the implicit rate of return of the instrument, 15%. The Company recorded a \$16.6 million accretion expense on the redeemable preferred units for the year ended December 31, 2023, recorded as interest expense, net in the accompanying consolidated statements of comprehensive income.

The Company incurred \$0.8 million of legal fees related to the redeemable preferred unit issuance, which have been reflected as a reduction to the carrying amount of the redeemable preferred unit balance and will be amortized to interest expense, net in the accompanying consolidated statements of operations and comprehensive income (loss) over the expected six-year term instrument.

On January 30, 2023, the Company issued and sold an additional 5,000,000 units of its Series A Preferred Units to Generate at a cash purchase price of \$6.00 per unit. The Milestone Funding provided the Company with an additional \$30.0 million of capital.

On April 21, 2023, the Company issued and sold an additional 833,333 units of Series A Preferred Units to Generate at a cash purchase price of \$6.00 per unit pursuant to the Unit Purchase Agreement. The Milestone Funding provided the Company with an additional \$5.0 million of capital and reduced Generate's future capital commitment under the Unit Purchase Agreement to \$77.5 million.

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. Under the terms of the Redemption Agreement, Ting Fiber, LLC redeemed 5,173,067 Series A Preferred Units held by Generate at \$6 per unit, totaling a redemption of \$31 million. The terms of the redemption were modified by the Side Letter Agreement, which granted a 30% discount on the make-whole premium which amounted to \$14.7 million for a total redemption price of \$45.7 million inclusive of the make-whole premium. The Company has accounted for the redemption of the preferred units as an extinguishment of debt in accordance with ASC 470 - Debt. The resulting loss on debt extinguishment has been recognized as 'Other Income/Expense' in the financial statements. Terms of the Side Letter Agreement also preclude Ting Fiber, LLC from issuing additional Series A Preferred Units for 365 days from the closing of the Redemption Agreement during which time standby fees will be suspended.

As of December 31, 2023, the redeemable preferred units have an aggregate liquidation preference of \$91.5 million, plus a Make-Whole Premium should redemption occur before the fourth anniversary of the Transaction Date and are senior to the Ting Fiber, LLC common shares with respect to sale, dissolution, liquidation or winding up of the Company.

The following table summarizes the Company's borrowings under the preferred unit agreement (Dollar amounts in thousands of U.S. dollars):

	December 31, 2023	December 31, 2022
Opening Balance	\$ 91,396	\$ -
Add: Funding at Transaction Close	-	60,000
Add: Milestone Funding	35,000	27,500
Add: Accretion of redeemable preferred units(1)	16,541	3,896
Add: Loss on debt extinguishment	14,680	-
Less: Redemption of preferred units	(45,718)	-
Redeemable preferred units balance	111,899	91,396
Less: Deferred preferred financing costs	(509)	(962)
Total Redeemable preferred units	\$ 111,390	\$ 90,434

(1) The Company capitalizes interest expenses directly attributable to the development of qualifying assets. Qualifying assets include internally use software (IUS), assets under construction (AUC), equipment, or other long-lived assets that meet the capitalization criteria prescribed by ASC 350. During the year ended December 31, 2023, the Company capitalized \$2.4 million of interest expenses pertaining to the redeemable preferred units directly attributable to the development of certain AUC assets, respectively.

The following table summarizes our scheduled repayments as of December 31, 2023 (Dollar amounts in thousands of U.S. dollars):

2024	\$ 7,353
2025	18,639
2026	18,536
2027	18,639
2028	133,942
	<u>\$ 197,109</u>

15. Common Shares

The Company's authorized common share capital is 250 million shares of common stock without nominal or par value. On December 31, 2023, there were 10,903,405 shares of common stock outstanding (December 31, 2022: 10,817,110).

Repurchase of common shares:

(a) Normal Course Issuer Bids:

2024 Stock Buyback Program

On February 22, 2024, the Company announced that its Board of Directors ("Board") has approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 23, 2024 and is expected to terminate on February 22, 2025.

2023 Stock Buyback Program

On February 9, 2023, the Company announced that its Board of Directors ("Board") had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 10, 2023 and terminated on February 9, 2024. The Company did not repurchase shares under this program.

2022 Stock Buyback Program

On February 10, 2022, the Company announced that its Board of Directors ("Board") had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 11, 2022 and terminated on February 9, 2023. The Company did not repurchase shares under this program.

2021 Stock Buyback Program

On February 9, 2021, the Company announced that its Board of Directors ("Board") had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 10, 2021 and terminated on February 9, 2022. The Company did not repurchase shares under this program.

2020 Stock Buyback Program

On February 12, 2020, the Company announced that its Board had approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 13, 2020 and terminated on February 9, 2021. The Company did not repurchase shares under this program during the year ended December 31, 2021.

(b) Net Exercise of Stock Options

Our current equity-based compensation plans include provisions that allow for the “net exercise” of stock options by all plan participants. In a net exercise, any required payroll taxes, federal withholding taxes and exercise price of the shares due from the option holder can be paid for by having the option holder tender back to the Company a number of shares at fair value equal to the amounts due. These transactions are accounted for by the Company as a purchase and retirement of shares and are included in the table on the following page as common stock received in connection with share-based compensation.

The following table summarizes our share repurchase activity for the periods covered below (Dollar amounts in thousands of US dollars, except for share data):

	Year Ended December 31,		
	2023	2022	2021
Common stock received in connection with share-based compensation			
Number of shares	-	3,053	45,824
Aggregate market value of shares (in thousands)	\$ -	\$ 197	\$ 3,669
Average price per share	\$ -	\$ 64.67	\$ 80.07

16. Stock Option Plans:

2006 Tucows Equity Compensation Plan

On November 22, 2006, the shareholders of the Company approved the Company’s 2006 Equity Compensation Plan (the “2006 Plan”), which was amended and restated effective July 29, 2010 and which serves as a successor to the 1996 Plan. The 2006 Plan has been established for the benefit of the employees, officers, directors and certain consultants of the Company. The maximum number of common shares which have initially set aside for issuance under the 2006 Plan is 1.25 million shares. On October 8, 2010, the 2006 Plan was amended to increase the number of shares set aside for issuance by an additional 0.475 million shares to 1.725 million shares. In September 2015, the 2006 Plan was amended to increase the number of shares set aside for issuance by an additional 0.75 million shares to 2.475 million shares. In November 2020, the 2006 Plan was amended to increase the number of shares set aside for issuance by an additional 1.53 million shares to 4.0 million shares. Generally, options issued under the 2006 Plan vest over a four-year period and have a term not exceeding seven years, except for automatic formula grants of non-qualified stock options, which vest after one year and have a five-year term. Prior to the September 2015 amendment to the 2006 Plan, automatic formula grants of non-qualified stock options vested immediately upon grant.

Our current equity-based compensation plans include provisions that allow for the “net exercise” of stock options by all plan participants. In a net exercise, any required payroll taxes, federal withholding taxes and exercise price of the shares due from the option holder can be paid for by having the option holder tender back to the Company a number of shares at fair value equal to the amounts due. These transactions are accounted for by the Company as a purchase and retirement of shares.

The fair value of each option grant (“Company Option”) is estimated on the date of grant using the Black-Scholes option-pricing model. Because option-pricing models require the use of subjective assumptions, changes in these assumptions can materially affect the fair value of the options. The assumptions presented in the table below represent the weighted average of the applicable assumption used to value stock options at their grant date. The Company calculates expected volatility based on historical volatility of the Company’s common shares. The expected term, which represents the period of time that options granted are expected to be outstanding, is estimated based on historical exercise experience. The Company evaluated historical exercise behavior when determining the expected term assumptions. The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The Company determines the expected dividend yield percentage by dividing the expected annual dividend by the market price of Tucows Inc. common shares at the date of grant.

The fair value of Company Options granted during the years ended December 31, 2023, December 31, 2022 and December 31, 2021 was estimated using the following weighted average assumptions:

	Year Ended December 31,		
	2023	2022	2021
Volatility	42.6%	34.9%	35.7%
Risk-free interest rate	4.2%	3.4%	0.8%
Expected life (in years)	4.46	4.60	4.60
Dividend yield	0.0%	0.0%	0.0%
The weighted average grant date fair value for options issued, with the exercise price equal to market value on the date of grant	\$ 10.34	\$ 14.93	\$ 24.83

Details of Company Option transactions are as follows:

	Year Ended December 31, 2023		Year Ended December 31, 2022		Year Ended December 31, 2021	
	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share
Outstanding, beginning of period	1,036,748	\$ 59.97	904,151	\$ 64.36	845,020	\$ 55.31
Granted	172,305	25.04	262,980	42.15	282,625	79.30
Exercised	-	-	(40,459)	31.95	(179,321)	45.04
Forfeited	(41,126)	58.89	(55,234)	68.11	(41,240)	65.72
Expired	(35,295)	68.58	(34,690)	58.92	(2,933)	60.70
Outstanding, end of period	1,132,632	54.61	1,036,748	59.97	904,151	64.36
Options exercisable, end of period	731,945	\$ 61.05	520,679	\$ 62.74	415,925	\$ 56.44

As of December 31, 2023, the exercise prices, weighted average remaining contractual life of outstanding options and intrinsic values were for Company Options were as follows:

Exercise price	Options outstanding				Options exercisable			
	Number outstanding	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value	Number exercisable	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value
\$16.47 - \$19.78	31,250	\$ 19.38	4.7	\$ 238	-	\$ -	-	\$ -
\$21.07 - \$28.37	139,497	26.29	6.4	102	-	-	-	-
\$30.70 - \$30.74	20,000	30.71	5.9	-	5,000	30.71	5.9	-
\$40.04 - \$48.00	216,247	42.40	5.3	-	77,231	43.21	5.0	-
\$51.82 - \$59.98	193,633	55.72	1.0	-	225,837	55.70	0.9	-
\$60.01 - \$68.41	292,332	62.10	2.7	-	289,494	62.41	2.5	-
\$70.13 - \$79.51	223,173	78.50	4.1	-	124,258	78.28	4.0	-
\$80.61 - \$82.07	16,500	81.27	4.8	-	10,125	81.42	4.8	-
	1,132,632	\$ 54.61	3.8	\$ 340	731,945	\$ 61.05	2.6	\$ -

Total unrecognized compensation cost relating to unvested Company Options at December 31, 2023, prior to the consideration of expected forfeitures, is approximately \$5.5 million and is expected to be recognized over a weighted average period of 2.8 years.

There were no exercises of Company Options during the year ended December 31, 2023. The total intrinsic value of Company Options exercised during the years ended December 31, 2022 and December 31, 2021 was \$0.8 million and \$6.4 million, respectively. Cash received from the exercise of stock options during the years ended December 31, 2022 and December 31, 2021 was \$1.1 million and \$4.8 million respectively.

The Company recorded stock-based compensation for Company options amounting to \$6.0 million, \$5.8 million and \$4.6 million for the years ended December 31, 2023, 2022 and 2021 respectively. Stock-based compensation for the Company stock has been included in operating expenses as follows (Dollar amounts in thousands of US dollars):

	Year Ended December 31,			
	2023	2022	2021	
Network expenses	\$ 399	\$ 399	\$ 531	
Sales and marketing	1,423	1,498	1,941	
Technical operations and development	634	545	824	
General and administrative	3,577	3,337	1,296	
	\$ 6,033	\$ 5,779	\$ 4,592	

2022 Wavelo Equity Compensation Plan

On November 9, 2022 the Board of Wavelo approved Wavelo's Equity Compensation Plan (Wavelo ECP), which has been established for the benefit of the employees, officers, directors and certain consultants of Wavelo or Tucows. The Wavelo stock options were introduced in order to provide variable compensation that helps retain executives and ensures that our executives' interests are aligned with those stakeholders of the business to grow long-term value. Wavelo is a wholly owned subsidiary of Tucows. The maximum number of Wavelo common shares which have been set aside for issuance under the 2022 Plan is 20 million shares, currently there are 100 million shares outstanding. The options issued under the ECP primarily vest over a period of three years and have a 7-year term. For the initial grants under the plan, the first 25% became exercisable within three months and vesting ratably monthly thereafter, subsequently for three years. Compensation costs for awards of stock-based compensation settled in shares are determined based on the fair value of the share-based instrument at the time of the grant and are recognized as expense over the vesting period of the share-based instrument. The Company recognizes forfeitures as they occur.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model. Because option-pricing models require the use of subjective assumptions, changes in these assumptions can materially affect the fair value of the options. The Company calculates expected volatility based on the actual volatility of comparable publicly traded companies. The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The Company assumes the expected dividend yield to be zero.

The fair value of stock options granted during the year ended December 31, 2023 was estimated using the following weighted average assumptions:

	Year Ended December 31,		
	2023	2022	2021
Volatility	40.6%	40.7%	N/A
Risk-free interest rate	4.3%	4.4%	N/A
Expected life (in years)	4.17	4.16	N/A
Dividend yield	0.0%	0.0%	N/A
The weighted average grant date fair value for options issued, with the exercise price equal to market value on the date of grant	\$ 0.49	\$ 0.49	N/A

Details of Wavelo's stock option transactions are as follows:

	Year Ended December 31, 2023		Year Ended December 31, 2022		Year Ended December 31, 2021	
	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share
Outstanding, beginning of period	15,975,528	\$ 1.27	-	\$ -	N/A	N/A
Granted	865,000	1.37	15,975,528	1.27	N/A	N/A
Exercised	-	-	-	-	N/A	N/A
Forfeited	(451,708)	1.27	-	-	N/A	N/A
Expired	(55,587)	1.27	-	-	N/A	N/A
Outstanding, end of period	16,333,233	1.28	15,975,528	1.27	N/A	N/A
Options exercisable, end of period	7,752,114	\$ 1.27	15,975,528	\$ 1.27	N/A	N/A

As of December 31, 2023, the exercise prices, weighted average remaining contractual life of outstanding options and intrinsic values were for Wavelo stock options were as follows:

Exercise price	Options outstanding				Options exercisable			
	Number outstanding	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value	Number exercisable	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value
\$0.00 - \$1.74	16,333,233	\$ 1.28	5.9	\$ 7,588	7,752,114	\$ 1.27	5.9	\$ 3,643
	16,333,233	\$ 1.28	5.9	\$ 7,588	7,752,114	\$ 1.27	5.9	\$ 3,643

Total unrecognized compensation cost relating to unvested Wavelo stock options at December 31, 2023, prior to the consideration of expected forfeitures, is approximately \$4.5 million and is expected to be recognized over a weighted average period of 2.2 years.

Stock-based compensation for the Wavelo stock options has been included in operating expenses as follows (Dollar amounts in thousands of US dollars):

	Year Ended December 31,		
	2023	2022	2021
Network expenses	\$ 131	\$ 104	\$ -
Sales and marketing	931	508	-
Technical operations and development	259	407	-
General and administrative	434	801	-
	\$ 1,755	\$ 1,820	\$ -

2022 Ting Equity Compensation Plan

On January 16, 2023 the Board of Ting Fiber, LLC approved Ting's Equity Compensation Plan (Ting ECP), which has been established for the benefit of the employees, officers, directors and certain consultants of Ting or Tucows. The Ting stock options were introduced in order to provide variable compensation that helps retain executives and ensures that our executives' interests are aligned with those stakeholders of the business to grow the long-term value. The maximum number of Ting common units that have been set aside for issuance under the plan is 10 million units, currently there are 100 million common units outstanding. Generally, options issued under the ECP vest over a four-year period and have a term not exceeding seven years. Compensation costs for awards of stock-based compensation settled in shares are determined based on the fair value of share-based instrument at the time of the grant and are recognized as expense over the vesting period of the share based instrument.

The Company calculates expected volatility based on the actual volatility of comparable publicly traded companies. The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The Company assumes the expected dividend yield to be zero.

The fair value of stock options granted during the year ended December 31, 2023 was estimated using the following weighted average assumptions:

	Year Ended December 31,		
	2023	2022	2021
Volatility	35.8%	N/A	N/A
Risk-free interest rate	3.8%	N/A	N/A
Expected life (in years)	4.18	N/A	N/A
Dividend yield	0.0%	N/A	N/A
The weighted average grant date fair value for options issued, with the exercise price equal to market value on the date of grant	\$ 0.11	N/A	N/A

Details of Ting's stock option transactions are as follows:

	Year Ended December 31, 2023		Year Ended December 31, 2022		Year Ended December 31, 2021	
	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share
Outstanding, beginning of period	-	\$ -	N/A	N/A	N/A	N/A
Granted	8,044,000	6.00	N/A	N/A	N/A	N/A
Exercised	-	-	N/A	N/A	N/A	N/A
Forfeited	(438,381)	6.00	N/A	N/A	N/A	N/A
Expired	(101,350)	6.00	N/A	N/A	N/A	N/A
Outstanding, end of period	7,504,269	6.00	N/A	N/A	N/A	N/A
Options exercisable, end of period	3,156,281	6.00	N/A	N/A	N/A	N/A

As of December 31, 2023, the exercise prices, weighted average remaining contractual life of outstanding options and intrinsic values were for Ting stock options were as follows:

Exercise price	Options outstanding				Options exercisable			
	Number outstanding	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value	Number exercisable	Weighted average exercise price per share	Weighted average remaining contractual life (years)	Aggregate intrinsic value
\$0.00 - \$6.00	7,504,269	\$ 6.00	6.1	\$ -	3,156,281	\$ 6.00	6.0	\$ -
	7,504,269	\$ 6.00	6.1	\$ -	3,156,281	\$ 6.00	6.0	\$ -

Total unrecognized compensation cost relating to unvested stock options at December 31, 2023, prior to the consideration of expected forfeitures, is approximately \$0.6 million and is expected to be recognized over a weighted average period of 2.5 years.

Stock-based compensation for the Ting stock options has been included in operating expenses as follows (Dollar amounts in thousands of US dollars):

	Year Ended December 31,		
	2023	2022	2021
Network expenses	\$ 45	\$ -	\$ -
Sales and marketing	139	-	-
Technical operations and development	6	-	-
General and administrative	156	-	-
	\$ 346	\$ -	\$ -

The Company recorded stock-based compensation expense of \$8.1 million for year ended December 31, 2023 and \$7.6 million and \$4.6 million for the years ended December 31, 2022 and December 31, 2021, respectively. The Company details of the stock-based compensation expense are as follows:

	Year Ended December 31,		
	2023	2022	2021
Company options	\$ 6,060	\$ 5,779	\$ 4,592
Wavelo options	2,065	1,820	-
Ting options	346	-	-
Capitalized stock based compensation	(337)	-	-
Total Stock Based Compensation expense	\$ 8,134	\$ 7,599	\$ 4,592

The Company capitalizes stock-based compensation costs directly attributable to the development of qualifying assets. Qualifying assets include internal use software (IUS), assets under construction (AUC), equipment, or other long-lived assets that meet the capitalization criteria prescribed by ASC 350. During the year ended December 31, 2023, the Company capitalized \$0.3 million of stock based compensation directly attributable to the development of certain IUS assets.

17. Foreign Exchange:

A foreign exchange loss amounting to \$0.1 million has been recorded in general and administrative expenses during the year ended December 31, 2023. A foreign exchange loss amounting to \$0.2 million has been recorded in general and administrative expenses during the year ended December 31, 2022. A foreign exchange gain amounting to \$0.4 million has been recorded in general and administrative expenses during the year ended December 31, 2021.

18. Other Income (Expenses):

On August 1, 2020, the Company entered into an Asset Purchase Agreement (the "Purchase Agreement"), by and between the Company and DISH Wireless L.L.C. ("DISH"). Under the Purchase Agreement and in accordance with the terms and conditions set forth therein, the Company sold to DISH its mobile customer accounts that are marketed and sold under the Ting brand (other than certain customer accounts associated with one network operator) ("Transferred Assets"). For a period of 10 years following the execution of the Purchase Agreement, DISH will pay a monthly fee to the Company generally equal to an amount of net revenue received by DISH in connection with the transferred customer accounts minus certain fees and expenses, as further set forth in the Purchase Agreement. During the year ended December 31, 2023, the Company earned \$17.0 million under the Purchase Agreement.

	For the twelve months ended		
	2023	2022	2021
Income earned on sale of transferred assets	17,033	18,507	20,030
Income earned on sale of Ting customer assets	<u>\$ 17,033</u>	<u>\$ 18,507</u>	<u>\$ 20,030</u>

The Company recorded interest income amounting to \$4.5 million, \$0.1 million and nil for the years ended December 31, 2023, 2022 and 2021 respectively. This significant increase in 2023 was primarily due to the strategic investment of excess 2023 Term Notes proceeds into Money Market Deposit Accounts ("MMDAs") and Certificates of Deposit ("CDs"), which generated \$4.3 million in interest income. Interest expense, net has been included in "Other Income" as follows (Dollar amounts in thousands of US dollars):

	For the twelve months ended		
	2023	2022	2021
Interest expense	\$ (46,256)	\$ (14,588)	\$ (4,617)
Interest income	4,485	132	-
Interest expense, net	<u>\$ (41,771)</u>	<u>\$ (14,456)</u>	<u>\$ (4,617)</u>

19. Earnings Per Common Share:

The following table reconciles the numerators and denominators of the basic and diluted earnings per common share computation (Dollar amounts in thousands of US dollars, except for share data):

	Year ended December 31,		
	2023	2022	2021
Numerator for basic and diluted earnings per common share:			
Net income (loss) for the period	\$ (96,197)	\$ (27,571)	\$ 3,364
Denominator for basic and diluted earnings per common share:			
Basic weighted average number of common shares outstanding	10,864,086	10,769,280	10,662,337
Effect of outstanding stock options	-	-	155,132
Diluted weighted average number of shares outstanding	<u>10,864,086</u>	<u>10,769,280</u>	<u>10,817,468</u>
Basic earnings per common share	<u>\$ (8.85)</u>	<u>\$ (2.56)</u>	<u>\$ 0.32</u>
Diluted earnings per common share	<u>\$ (8.85)</u>	<u>\$ (2.56)</u>	<u>\$ 0.31</u>

For the year ended December 31, 2023, and December 31, 2022 the Company recorded a net loss, thus all outstanding options were considered anti-dilutive and excluded from the computation of diluted income per common share.

For the year ended December 31, 2021, options to purchase 39,889 common shares were outstanding but were not included in the computation of diluted income per common share because the options' exercise price was greater than the average market price of the common shares for the year.

20. Commitments and Contingencies:

(a) The Company has several non-cancelable lease and purchase obligations primarily for general office facilities, service contracts for mobile telephone services and equipment that expire over the next ten years. Future minimum payments under these agreements are as follows (Dollar amounts in thousands of US dollars):

Contractual Obligations for the year ending December 31,	Contractual Lease Obligations	Debt Obligations	Capital Purchase Obligations	Redeemable preferred units financing Obligations	Notes Payable financing Obligations	Purchase Obligations (1)(2)	Total Obligations
2024	\$ 6,717	\$ -	\$ 12,342	\$ 7,353	\$ -	\$ 19,403	\$ 45,815
2025	5,349	-	-	18,639	-	20,994	44,982
2026	3,478	211,900	-	18,536	-	5,098	239,012
2027	2,204	-	-	18,639	-	1,252	22,095
2028	1,769	-	-	133,942	238,505	1,179	375,395
Thereafter	15,307	-	-	-	-	4,724	20,044
	<u>\$ 34,824</u>	<u>\$ 211,900</u>	<u>\$ 12,342</u>	<u>\$ 197,109</u>	<u>\$ 238,505</u>	<u>\$ 52,650</u>	<u>\$ 747,343</u>

(1) Purchase obligations include all other legally binding service contracts for mobile telephone services and other operational agreements to be delivered during Fiscal 2024 and subsequent years.

(2) Purchase obligations include minimum revenue commitments of \$30.5 million with the Company's MNO partner between 2024 and 2026.

(b) On February 9, 2015 Ting Fiber, Inc. ("Ting") entered into a lease and network operation agreement with the City of Westminster, Maryland (the "City") relating to the deployment of a new fiber network throughout the Westminster area ("WFN").

Under the agreement, the City will finance, construct, and maintain the WFN which will be leased to Ting for a period of ten years. The network will be constructed in phases, the scope and timing of which shall be determined by the City, in cooperation with Ting.

Under the terms of the agreement, Ting may be required to advance funds to the City in the event of a quarterly shortfall between the City's revenue from leasing the network to Ting and the City's debt service requirements relating to financing of the network. Ting could be responsible for shortfalls between \$50,000 and \$150,000 per quarter. In Fiscal 2016, the City has entered into financing for the construction of the WFN which allows the City to draw up to \$21.0 million, from their lenders, over the next five years with interest only payments during that period with a loan maturity of 30 years. As of December 31, 2023, the City has drawn \$16.2 million and the City's revenues from Ting exceed the City's debt service requirements. The Company does not believe it will be responsible for any shortfall in Fiscal 2024.

(c) On September 17, 2018 Ting entered into a non-exclusive access and use agreement with SiFi Networks Fullerton, LLC ("SiFi"). The agreement memorializes a long-term (15-year) relationship wherein Ting will be granted the non-exclusive right to act as an Internet service provider for a fiber-optic network to be constructed in the city of Fullerton, California. Under the terms of the agreement, SiFi is fully responsible for constructing, operating and maintaining a wholesale fiber-optic network, as well as the financing of those activities.

Ting is responsible for paying a fee per subscriber to SiFi. Through a "take or pay" arrangement, Ting has agreed to certain minimum charges based on minimum subscriber rates. These minimum fees are variable based on the percentage completion of the fiber optic network, and thus have not been considered an unconditional purchase obligation for the purposes of the table in Note 20 (a).

(d) On November 4, 2019 Ting entered into an access and use agreement with Netly, LLC ("Netly"). The agreement memorializes a long-term (12-year) relationship wherein Ting will be granted the right to act as an Internet service provider for fiber-optic networks to be constructed in and around the cities of Solana Beach, California. Under the terms of the agreement, Ting will have a 3-year "Headstart" period over each completed segment of the network, whereby Ting shall be the exclusive provider of services to subscribers during the "Headstart" period. Netly is fully responsible for constructing, operating and maintaining a wholesale fiber optic network, as well as the financing of those activities.

Ting is responsible for paying a fee per subscriber to Netly, as well as an unlit door fee for each serviceable address not subscribed. Through a "take or pay" arrangement, Ting has agreed to certain minimum charges based on minimum subscriber rates. To the extent that construction of the fiber optic network is complete, our minimum commitments have been included in the contractual lease obligations of the table in Note 20 (a). With respect to future obligations based on the future construction of the fiber optic network, these minimum fees are variable and thus have not been considered an unconditional purchase obligation for the purposes of the table in Note 20 (a).

(e) On January 7, 2022, Ting Fiber, Inc., entered into a 25-year lease agreement with Colorado Springs Utilities ("CSU"), a municipally owned utility. The lease agreement named Ting Fiber the anchor tenant on a city-wide fiber network that is intended to pass 200,000 homes in Colorado Springs, Colorado. CSU began construction in Q2 of 2023. The lease obligates Ting, and its ultimate parent Tucows, Inc., to pay a per month fee for addresses passed by the network (as they are passed and become serviceable for customers to connect to the network) and for certain fiber infrastructure, including co-location space. Total costs of the lease, over its twenty-five-year term, are approximately \$593,000,000 based on a fully completed fiber-to-the-home network, however the minimum fees are variable based on the percentage completion of the fiber optic network. Future committed fees associated with completed portions of the network have been included in the contractual lease obligations of the table in Note 20(a). Future fees associated with portions of the network that have yet to be constructed have not been considered an unconditional purchase obligation for the purposes of the table in Note 20(a).

(f) On May 11, 2022, Ting Fiber, LLC, entered into a "Rights-of-Way" agreement with the City of Alexandria, Virginia whereby the City granted Ting Fiber the right to install, place, construct, maintain, operate, upgrade, repair, and replace a Communications System to provide Broadband Services within the Public Rights-of-Way (a space in, upon, above, along, across, over and below the public and City-owned property that is used as a public rights-of-way) for a fee. Per the agreement, Ting Fiber is to pay the City throughout the 20-year term of the agreement, an amount equal to 3% of Ting Fiber's Broadband Revenues once the network is live, and subscribers are obtained, and this fee is to be paid on a quarterly basis. The agreement commenced once Ting Fiber launched its network in Alexandria in March 2023. Since these fees are currently variable in nature, they have not been considered an unconditional purchase obligation for the purposes of the table in Note 20 (a).

(g) On November 1, 2023, the Company, entered into a Network Access and Use Agreement with Blue Suede Networks, LLC, which granted Ting Fiber the right to use the fiber communications network to be constructed by Blue Suede Networks, LLC to provide high-speed broadband Internet Access services to end-user residential and small and medium sized business customers in the city of Memphis, Tennessee. The agreement grants the Company an exclusivity period of 5 years. The agreement requires the Company to pay the greater of a minimum revenue commitment based on minimum subscriber rates and a revenue share. Future fees associated with portions of the network have not been considered an unconditional purchase obligation for the purposes of the table in Note 20(a).

(h) In the normal course of its operations, the Company becomes involved in various legal claims and lawsuits. The Company intends to vigorously defend these claims. While the final outcome with respect to any actions or claims outstanding or pending as of December 31, 2023 cannot be predicted with certainty, management does not believe that the resolution of these claims, individually or in the aggregate, will have a material adverse effect on the Company's financial position.

21. Segment Reporting:

Reportable operating segments:

We are organized and managed based on three operating segments which are differentiated primarily by their services, the markets they serve and the regulatory environments in which they operate. No operating segments have been aggregated to determine our reportable segments.

Certain revenues and expenses disclosed under the Corporate category are excluded from segment Adjusted EBITDA results as they are centrally managed and not monitored by or reported to our CEO by segment, including retail mobile services, eliminations of intercompany transactions, portions of Finance and Human Resources that are centrally managed, Legal and Corporate IT.

Our reportable operating segments and their principal activities consist of the following:

1. Ting - This segment derives revenue from the retail high speed Internet access to individuals and small businesses primarily through the Ting website. Revenues are generated in the United States.

2. Wavelo – This segment derives revenue from platform and other professional services related to communication service providers, including Mobile Network Operators and Internet Service Providers, and are primarily generated in the United States.

3. Tucows Domains – This segment includes wholesale and retail domain name registration services, value added services and portfolio services. The Company primarily earns revenues from the registration fees charged to resellers in connection with new, renewed and transferred domain name registrations; the sale of retail Internet domain name registration and email services to individuals and small businesses. Domain Services revenues are attributed to the country in which the contract originates, primarily Canada and the United States.

Our segmented results include shared services allocations, including a profit margin, from Tucows Corporate for Finance, Human Resources and other technical services, to the operating units. In addition, Wavelo charges Ting a subscriber based monthly charge services rendered. Financial impacts from these allocations and cross segment charges are eliminated as part of the Tucows Corporate results.

Key measure of segment performance:

The CEO, as the chief operating decision maker, regularly reviews the operations and performance by segment. The CEO reviews segment revenue, gross margin and Adjusted EBITDA (as defined below) as (i) key measures of performance for each segment and (ii) to make decisions about the allocation of resources. Sales and marketing expenses, technical operations and development expenses and general and administrative expenses and not reviewed or managed by the CEO separate from Adjusted EBITDA, and are thus not included as separate measurements of segment profitability. Depreciation of property and equipment, amortization of intangible assets, impairment of indefinite life intangible assets, gain on currency forward contracts and other expense net are organized along functional lines and are not included in the measurement of segment profitability. Total assets and total liabilities are centrally managed and are not reviewed at the segment level by the CEO.

Our key measures of segment performance and their definitions are:

1. Segment gross margin - Net revenues less Direct cost of revenues attributable to each segment.

2. Segment Adjusted EBITDA - segment gross margin as well as the recurring income earned on sale of transferred assets, less network expenses and certain operating expenses attributable to each segment, such as sales and marketing, technical operations and development, general and administration expenses but excludes gains and losses from unrealized foreign currency, stock-based compensation and transactions that are not indicative of on-going performance, including acquisition and transition costs. Certain revenues and expenses disclosed under the Tucows Corporate category are excluded from segment Adjusted EBITDA results as they are centrally managed and not monitored by or reported to our CEO by segment, including mobile retail services, eliminations of intercompany transactions, portions of Finance and Human Resources that are centrally managed, Legal and Corporate IT.

The Company believes that both segment gross margin and Adjusted EBITDA measures are important indicators of the operational strength and performance of its segments, by identifying those items that are not directly a reflection of each segment's performance or indicative of ongoing operational and profitability trends. Segment gross margin and segment Adjusted EBITDA both exclude depreciation of property and equipment, amortization of intangibles assets, impairment of indefinite life intangible assets that are included in the measurement of income before provision for income taxes pursuant to generally accepted accounting principles ("GAAP"). Total assets and total liabilities are centrally managed and are not reviewed at the segment level by the CEO.

Information by reportable segments (with the exception of disaggregated revenue, which is discussed in “Note 11 – Revenue”), which is regularly reported to the chief operating decision maker, and the reconciliations thereof to our income before taxes, are set out in the following tables (Dollar amounts in thousands of US dollars):

	Ting	Wavelo	Tucows Domains	Tucows Corporate and eliminations	Consolidated Totals
Year Ended December 31, 2023					
Net revenues					
External revenues	\$ 50,937	\$ 35,979	\$ 242,097	\$ 10,324	\$ 339,337
Intersegment revenues	-	2,691	-	(2,691)	-
Total net revenues	50,937	38,670	242,097	7,633	339,337
Direct cost of revenues	20,151	2,626	169,414	10,065	202,256
Segment gross margin	30,786	36,044	72,683	(2,432)	137,081
Network, other costs					28,222
Network, depreciation of property and equipment					35,864
Network, amortization of intangible assets					1,506
Network, impairment of property and equipment					4,822
Gross profit					66,667
Expenses:					
Sales and marketing					67,806
Technical operations and development					19,217
General and administrative					33,406
Depreciation of property and equipment					567
Amortization of intangible assets					9,323
Loss (gain) on currency forward contracts					-
Total expenses					130,319
Loss from operations					(63,652)
Other income (expenses):					
Interest expense					(46,256)
Interest income					4,485
Loss on debt extinguishment					(14,680)
Income earned on sale of transferred assets, net					17,033
Total other income (expenses)					(39,418)
Loss before provision for income taxes					\$ (103,070)
Adjusted EBITDA	\$ (44,151)	\$ 10,573	\$ 42,623	\$ 6,406	\$ 15,451

	Ting	Wavelo	Tucows Domains	Tucows Corporate and eliminations	Consolidated Totals
Year Ended December 31, 2022					
Net revenues					
External revenues	\$ 42,425	\$ 23,632	\$ 243,158	\$ 11,927	\$ 321,142
Intersegment revenues	-	712	-	(712)	-
Total net revenues	42,425	24,344	243,158	11,215	321,142
Direct cost of revenues	17,004	2,926	166,890	9,448	196,268
Segment gross margin	25,421	21,418	76,268	1,767	124,874
Network, other costs					17,433
Network, depreciation of property and equipment					27,589
Network, amortization of intangible assets					1,512
Network, impairment of property and equipment					92
Gross profit					78,248
Expenses:					
Sales and marketing					53,937
Technical operations and development					14,187
General and administrative					30,845
Depreciation of property and equipment					598
Loss (gain) on disposition of property and equipment					461
Amortization of intangible assets					9,882
Total expenses					109,910
Loss from operations					(31,662)
Other income (expenses):					
Interest expense					(14,588)
Interest income					132
Gain on sale of Ting customer assets, net					18,507
Other expense, net					(177)
Total other income (expenses)					3,874
Loss before provision for income taxes					\$ (27,788)
Adjusted EBITDA	\$ (21,557)	\$ 3,875	\$ 44,834	\$ 10,438	\$ 37,590

	Ting	Wavelo	Tucows Domains	Tucows Corporate and eliminations	Consolidated Totals
Year Ended December 31, 2021					
Net revenues					
External revenues	\$ 25,327	\$ 16,781	\$ 245,576	\$ 16,653	\$ 304,337
Intersegment revenues	-	-	-	-	-
Total net revenues	25,327	16,781	245,576	16,653	304,337
Direct cost of revenues	12,035	1,308	167,488	12,208	193,039
Segment gross margin	13,292	15,473	78,088	4,445	111,298
Network, other costs					14,769
Network, depreciation of property and equipment					17,452
Network, amortization of intangible assets					583
Network, impairment of property and equipment					201
Gross profit					78,293
Expenses:					
Sales and marketing					39,471
Technical operations and development					14,310
General and administrative					22,370
Depreciation of property and equipment					534
Loss (gain) on disposition of property and equipment					234
Amortization of intangible assets					9,424
Impairment of definite life intangible assets					-
Gain on currency forward contracts					(277)
Total expenses					86,066
Loss from operations					(7,773)
Other income (expenses):					
Interest expense, net					(4,617)
Gain on sale of Ting customer assets, net					20,030
Other expense, net					(370)
Total other income (expenses)					15,043
Income before provision for income taxes					\$ 7,270
Adjusted EBITDA	\$ (18,778)	\$ 7,334	\$ 47,765	\$ 12,500	\$ 48,821

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 represents transaction-related expenses, transitional expenses, such as redundant post-acquisition expenses, primarily related to our acquisition of Cedar in January 2020 and Simply Bits in November 2021 and the disposition of certain Ting Mobile assets in August 2020. Expenses include severance or transitional costs associated with department, operational or overall company restructuring efforts, including geographic alignments.

(b) The following is a summary of the Company's property and equipment by geographic region (Dollar amounts in thousands of US dollars):

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
Canada	\$ 943	\$ 1,240
United States	338,696	280,219
Europe	5	36
	<u>\$ 339,644</u>	<u>\$ 281,495</u>

(c) The following is a summary of the Company's amortizable intangible assets by geographic region (Dollar amounts in thousands of US dollars):

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
Canada	\$ 1,864	\$ 2,736
United States	15,341	24,770
	<u>\$ 17,205</u>	<u>\$ 27,506</u>

(d) Valuation and qualifying accounts (Dollar amounts in thousands of US dollars):

<u>Allowance for doubtful accounts</u>	<u>Balance at beginning of period</u>	<u>Charged to costs and expenses</u>	<u>Write-offs during period</u>	<u>Balance at end of period</u>
Year Ended December 31, 2023	\$ 693	\$	\$ (182)	\$ 511
Year Ended December 31, 2022	\$ 541	\$ 152	\$ -	\$ 693

22. Subsequent Events:

2024 Stock Buyback Program

On February 22, 2024, the Company announced that its Board of Directors (“Board”) has approved a stock buyback program to repurchase up to \$40 million of its common stock in the open market. The \$40 million buyback program commenced on February 23, 2024 and is expected to terminate on February 22, 2025. The previously announced \$40 million buyback program for the period February 10, 2023 to February 9, 2024 was terminated.

CONDENSED FINANCIAL STATEMENTS OF TUCOWS INC.

(PARENT COMPANY)

All operating activities of Tucows Inc. (the "Parent Company") are primarily conducted by its operating subsidiaries, Tucows.com Co ("Tucows.com Co"), eNom LLC ("eNom"), EPAG Domainservices GmbH ("EPAG"), Ascio Technologies, Corp ("Ascio"), Ting Inc. ("Ting Inc"), Wavelo, Inc. ("Wavelo") and Ting Fiber, LLC ("Ting Fiber").

The Parent Company holds a direct 100% ownership interest in Tucows (Delaware) Inc. ("Tucows Delaware"), which holds the Parent Company's interest in its operating subsidiaries. The Parent Company is a holding company that does not conduct any substantive business operations and does not have any assets or liabilities other than cash and cash equivalents, accounts receivables, prepaid expenses, intangible assets, derivative instruments, accounts payables, accrued liabilities, investments in its subsidiaries and due to related party. The operations of Ting Fiber, LLC are partially funded through Redeemable preferred units which have restrictions on the ability to pay dividends, loan funds and make other upstream distributions to the Parent Company without prior approval by the holder of the Redeemable preferred units.

These Condensed Parent Company financial statements have been prepared using the same accounting principles and policies described in the notes to the Consolidated Financial Statements. Refer to the Consolidated Financial Statements and notes presented above for additional information and disclosures with respect to these condensed financial statements.

PARENT COMPANY INFORMATION

TUCOWS INC

SCHEDULE I - CONDENSED BALANCE SHEETS
(Dollar amounts in thousands of U.S. dollars)

	December 31, 2023	December 31, 2022
Assets		
Cash and cash equivalents	\$ 7,051	\$ 3,897
Accounts receivable	-	482
Prepaid expenses and deposits	610	528
Income taxes recoverable	508	1,716
Derivative instrument	-	1,599
Investment in subsidiaries	81,636	178,786
Intangible assets	59	59
Total Assets	<u>89,864</u>	<u>187,067</u>
Liabilities		
Accounts payable	147	665
Accrued liabilities	459	265
Due to related parties	68,392	66,415
Deferred tax liability	10,991	23,065
Total Liabilities	<u>79,989</u>	<u>90,410</u>
Equity		
Share capital	34,321	31,816
Additional paid-in capital	21,235	17,679
Accumulated surplus (deficit)	(45,681)	46,314
Accumulated other comprehensive income	-	848
Total Equity	<u>9,875</u>	<u>96,657</u>
Total Liabilities and Equity	<u>\$ 89,864</u>	<u>\$ 187,067</u>

The accompanying notes to the condensed financial statements are an integral part of these financial statements

PARENT COMPANY INFORMATION

TUCOWS INC

SCHEDULE I - CONDENSED STATEMENTS OF INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)
(Dollar amounts in thousands of U.S. dollars)

	For the year ended December 31,		
	2023	2022	2021
Income (loss) of equity method investments	\$ (97,150)	\$ (25,348)	\$ 8,486
Operating expenses	(8,192)	(7,095)	(7,059)
Interest income (expense)	1,016	1,378	(376)
Income tax recovery	8,129	3,494	2,313
Net income (loss)	(96,197)	(27,571)	3,364
Other comprehensive income (loss) - Parent Company	(848)	1,408	-
Other comprehensive income (loss) - Subsidiaries	1,792	(967)	(1,993)
Comprehensive income (loss)	\$ (95,253)	\$ (27,130)	\$ 1,371

The accompanying notes to the condensed financial statements are an integral part of these financial statements

PARENT COMPANY INFORMATION

TUCOWS INC

SCHEDULE I - CONDENSED STATEMENTS OF CASH FLOWS
(Dollar amounts in thousands of U.S. dollars)

	For the year ended December 31,		
	2023	2022	2021
Operating activities			
Net income (loss)	\$ (96,197)	\$ (27,571)	\$ 3,364
Non-cash items affecting net income			
Excess tax benefits on stock-based compensation expense	-	(193)	(1,554)
Stock-based compensation	6,035	5,779	4,592
Deferred income taxes (recovery)	(11,804)	(6,689)	(1,251)
Amortization of discontinued cash flow hedge from Accumulated other income	(1,144)	(761)	-
Loss (gain) on change in the fair value of forward contracts	1,624	281	-
Equity in undistributed earnings of subsidiaries	97,150	25,348	(8,486)
Changes in non-cash balances related to operations			
Accounts receivable	381	(482)	-
Prepaid expenses and deposits	(82)	(49)	(191)
Income taxes recoverable	1,208	532	108
Accounts payable	(492)	507	102
Accrued liabilities	195	196	254
Customer deposits	-	(1)	-
Cash from operating activities	(3,126)	(3,103)	(3,062)
Financing activities			
Net proceeds received from (paid to) subsidiaries	6,280	1,101	(1,650)
Net Proceeds received on exercise of stock options	-	1,096	4,431
Cash from financing activities	6,280	2,197	2,781
Investing activities			
Investment in unrelated company	-	(2,012)	-
Acquisition of intangible assets	-	-	(59)
Cash from investing activities	-	(2,012)	(59)
Increase (decrease) in cash and cash equivalents	3,154	(2,918)	(340)
Cash and cash equivalents, beginning of period	3,897	6,815	7,155
Cash and cash equivalents, end of year	\$ 7,051	\$ 3,897	\$ 6,815

The accompanying notes to the condensed financial statements are an integral part of these financial statements

SCHEDULE I - NOTES TO THE CONDENSED FINANCIAL STATEMENTS

NOTE 1. BASIS OF PRESENTATION

Tucows Inc. (the “Parent Company”) is a holding company that conducts substantially all of its business operations through its subsidiaries. The Parent Company holds a direct 100% ownership interest in Tucows (Delware) Inc., which holds the Parent Company’s interest in Tucows.com Co (“Tucows.com Co”), eNom LLC (“eNom”), EPAG Domainservices GmbH (“EPAG”), Ascio Technologies, Corp (“Ascio”), Ting Inc. (“Ting Inc”), Wavelo, Inc. (“Wavelo”) and Ting Fiber, LLC (“Ting Fiber”).

The Parent Company was incorporated under the laws of the Commonwealth of Pennsylvania in November 1992 under the name Infonautics, Inc. In August 2001, we completed our acquisition of Tucows Inc., a Delaware corporation, and we changed our name from Infonautics, Inc. to Tucows Inc.

The Parent Company was established to allocate capital and manage internet and telecom infrastructure businesses. Through its operating subsidiaries, the Parent Company offers a broad range of services including fixed Internet access, billing and subscription management platform services for communication service providers and distribution of global internet services through the provision of domain name registrations, digital certificates and email services.

As of December 31, 2023 the restricted net assets for Ting Fiber LLC totaled \$89.3 million. The restrictions on these net assets primarily affect our ability to transfer funds from our subsidiaries without violating contractual agreements. The Company continuously evaluates the impact of these restrictions on our liquidity and capital resource planning.

The Company operates within a consolidated tax group, comprising the Parent Company and its wholly-owned subsidiaries. Deferred taxes are not separately identified and recorded at the parent level.

No dividends have been received from any of our subsidiaries in the past three years.

NOTE 2. COMMITMENTS AND CONTINGENCIES

The Parent Company and its subsidiaries, excluding Ting Fiber, LLC, have revolving credit facilities through third-party financial institutions. The total available amount on the credit facilities is \$240 million, and as at December 31, 2023, \$211.9 million was drawn on the credit facilities. The Parent Company had no other material commitments or contingencies during the reported periods.

NOTE 3. SHARE CAPITAL

The Company's authorized common share capital is 250 million shares of common stock without nominal or par value. As of December 31, 2023, and 2022, the number of outstanding shares of common stock was 10,903,405 and 10,817,110, respectively. The Parent Company issued 86,295, 40,459, and nil common stock during the twelve months ended December 31, 2023, December 31, 2022 and December 31, 2021, respectively related to stock based compensation. The Parent Company retired nil, 3,053 and 45,824 common stock during the twelve months ended December 31, 2023, December 31, 2022 and December 31, 2021, respectively related to stock options exercised.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DATE: April 1, 2024

Tucows Inc.

By: /s/ ELLIOT NOSS

Name: Elliot Noss

Title: *Chief Executive Officer and President*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons of behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ELLIOT NOSS</u> Elliot Noss	President, Chief Executive Officer (Principal Executive Officer) and Director	April 1, 2024
<u>/s/ DAVINDER SINGH</u> Davinder Singh	Chief Financial Officer (Principal Financial and Accounting Officer)	April 1, 2024
<u>/s/ ALLEN KARP</u> Allen Karp	Director	April 1, 2024
<u>/s/ MARLENE CARL</u> Marlene Carl	Director	April 1, 2024
<u>/s/ ROBIN CHASE</u> Robin Chase	Director	April 1, 2024
<u>/s/ EREZ GISSIN</u> Erez Gissin	Director	April 1, 2024
<u>/s/ JEFFREY SCHWARTZ</u> Jeffrey Schwartz	Director	April 1, 2024
<u>/s/ GIGI SOHN</u> Gigi Sohn	Director	April 1, 2024
<u>/s/ LEE MATHESON</u> Lee Matheson	Director	April 1, 2024

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

The following summary describes the common stock, no par value per share, of Tucows Inc. (the “Company”, “our”, “us”, or “we”), which are the only securities of the Company registered under Section 12 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The following is a summary and does not purport to be complete. The summary is subject to and qualified by the provisions of our Fourth Amended and Restated Articles of Incorporation (the “Articles”), Second Amended and Restated Bylaws (the “Bylaws”), and the Pennsylvania Business Corporation Law (“PBCL”).

Authorized Capital Stock

Our authorized capital stock consists of 250,000,000 shares of common stock, no par value per share, and 1,250,000 shares of preferred stock, no par value per share, all of which shares of preferred stock are undesignated.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of shareholders, and will be entitled to receive dividends and other distributions when and if declared by our Board of Directors at any regular or special meeting, subject to the rights of the holders of shares of any series of preferred stock.

If we are liquidated, subject to the rights, if any, of the holders of any outstanding shares of preferred stock, the holders of shares of our common stock will be entitled to share, ratably according to the number of shares of common stock held by them, in our remaining assets available for distribution to our stock.

The holders of shares of our common stock will not have preemptive rights to purchase or subscribe for any stock or any other of our securities. There are no conversion, redemption, or sinking fund provisions applicable to our common stock.

Preferred Stock

Under the terms of the Articles, our Board of Directors is authorized to issue shares of preferred stock from time to time in one or more series without shareholder approval. Our Board of Directors has the full authority to fix by resolution full, limited, fractional, or no voting rights, and such designations, preferences, qualifications, privileges, limitations, restrictions, options, conversion rights and other special or relative rights of any series of preferred stock. This authority is subject to the limitation that no shares of preferred stock may have more than one vote per share with respect to any matter on which shares of preferred stock vote together with shares of our common stock.

Anti-takeover Provisions of the Articles, Bylaws, and Pennsylvania Law

The provisions of the PBCL, the Articles, and Bylaws may have the effect of delaying, deferring, or discouraging another person from acquiring control of the Company.

Pennsylvania Law

The PBCL has several anti-takeover provisions which apply to registered corporations. A registered corporation is generally a corporation that has a class or series of shares entitled to vote in the election of directors registered under the Exchange Act.

We are a registered corporation, however, we have elected to opt-out of substantially all of the anti-takeover provisions of the PBCL, specifically Subchapters 25E, G, H and Section 2538 of Subchapter 25D. These provisions do not apply to us.

We are subject to the provisions of Subchapter 25F of the PBCL prohibiting business combination transactions with a person that becomes a beneficial owner of shares representing 20% or more of the voting power in an election of our directors unless:

- the business combination or the acquisition of the 20% interest is approved by our Board of Directors before the 20% interest is acquired;
- the person beneficially owns at least 80% of the outstanding shares and the business combination is approved by a majority vote of the disinterested shareholders, and satisfies minimum price and other conditions prescribed in the PBCL;
- the business combination is approved by a majority vote of the disinterested shareholders at a meeting called no earlier than five years after the date the 20% interest is acquired; or
- the business combination is approved by shareholder vote at a meeting called no earlier than five years after the date the 20% interest is acquired, and satisfies minimum price and other conditions prescribed in the PBCL.

A “business combination” includes mergers, consolidations, asset sales, share exchanges, divisions of a registered corporation or any subsidiary thereof and other transactions resulting in a disproportionate financial benefit to an interested shareholder.

The above description of Subchapter 25F of the PBCL merely summarizes the material anti-takeover provisions applicable to us that are contained in the PBCL, but are not a complete discussion of those provisions.

The PBCL contains other provisions applicable to us that may have an anti-takeover effect. For instance, under Section 1715 of the PBCL, our directors are not required to consider the interests of the shareholders as being dominant or controlling in considering our best interests. Our directors may consider, to the extent they consider appropriate, such factors as:

- the effects of any action upon any group affected by such action, including our shareholders, employees, suppliers, customers and creditors and upon communities in which we have offices or other establishments;
- our short-term and long-term interests, including benefits that may accrue to us from our long term plans and the possibility that these interests may be best served by our continued independence;
- the resources, intent and conduct of any person seeking to acquire control of us; and
- all other pertinent factors.

Section 1715 further provides that any act of our Board of Directors, a committee of the Board of Directors or an individual director relating to or affecting an acquisition or potential or proposed acquisition of control to which a majority of our disinterested directors have assented will be presumed to satisfy the standard of care set forth in the PBCL, unless it is proven by clear and convincing evidence that our disinterested directors did not consent to such act in good faith after reasonable investigation. As a result of this and the other provisions of Section 1715, our directors are provided with broad discretion with respect to actions that may be taken in response to acquisitions or proposed acquisitions of corporate control.

Fourth Amended and Restated Articles of Incorporation

Shareholders of the Company do not have the right to cumulate their votes with respect to the election of directors.

Second Amended and Restated Bylaws

Board of Director Vacancies

The Bylaws provide that vacancies in the Board of Directors, including vacancies resulting from an increase in the number of directors, may be filled by a majority vote of the remaining members of the Board of Directors though less than a quorum, or by a sole remaining director.

Shareholder Action; Special Meeting of Shareholders

The Bylaws provide that shareholders may not take any action by unanimous written consent or partial consent in lieu of a meeting. The Bylaws further provide that a special meeting of shareholders may only be called by the Chief Executive Officer, the Chairman of the Board of Directors, or the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors.

Advance Notice Requirements for Shareholder Proposals and Director Nominations

The Bylaws provide advance notice procedures for shareholders seeking to bring business before our annual meeting of shareholders, or to nominate candidates for election as directors at our annual meeting of shareholders. To be timely, a shareholder's notice must be delivered, in writing, to the Secretary at our principal executive offices not more than 90 days nor less than 60 days prior to the date on which the Company first mailed its proxy materials for the preceding year's annual meeting if the date of the annual meeting is not more than 30 days before and not more than 30 days after the first anniversary of the preceding year's annual meeting. If the date of the annual meeting is more than 30 days before or more than 30 days after the first anniversary of the preceding year's annual meeting, a shareholder's notice must be delivered not more than 120 days nor less than 90 days prior to such annual meeting, or no later than the tenth day following the public announcement of the annual meeting.

For a special meeting, to be timely, a shareholder notice must be delivered, in writing, to the Secretary at our principal executive offices not more than 90 days nor less than 60 days prior to the date of such special meeting, and no later than the tenth day following the public announcement of a special meeting.

The Bylaws also specify certain requirements regarding the form and content of the shareholder's notice.

These provisions might preclude our shareholders from bringing matters before our annual meeting of shareholders or special meetings or making nominations for directors at our annual meetings or special meetings.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol "TCX" and on the TSX Exchange under the symbol "TC".

Subsidiaries of Tucows Inc., a Pennsylvania corporation

1. Tucows (Delaware) Inc., a Delaware corporation, is a wholly owned subsidiary of Tucows Inc.
2. Tucows Domains Services, Inc., a Delaware corporation, is a wholly owned subsidiary of Tucows (Delaware) Inc.
3. Tucows.com Co., a Nova Scotia corporation, is a wholly owned subsidiary of Tucows Domains Services, Inc.
4. Wavelo, Inc., a Delaware corporation, is a wholly owned subsidiary of Tucows (Delaware) Inc.
5. Tucows (UK) Limited, a company incorporated in England and Wales, is a wholly owned subsidiary of Tucows.com Co.
6. Tucows (Australia) Pty Limited, a Victoria corporation, is a wholly owned subsidiary of Tucows.com Co.
7. EPAG Domainservices GmbH, a Bonn corporation, is a wholly owned subsidiary of Tucows.com Co.
8. Ting Inc., a Delaware corporation, is a wholly owned subsidiary of Tucows (Delaware) Inc.
9. Tucows Domains Inc., an Ontario corporation, is a wholly owned subsidiary of Tucows.com Co.
10. Contact Privacy Inc., an Ontario corporation, is a wholly owned subsidiary of Tucows.com Co.
11. Tucows Fiber, Inc, a Delaware corporation, is a wholly owned subsidiary of Tucows (Delaware) Inc.
12. Ting Fiber, LLC., a Delaware limited liability company, is a wholly owned subsidiary of Tucows Fiber, Inc.
13. Ting Virginia, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Issuer, LLC.
14. Blue Ridge Websoft, LLC, a Virginia limited liability company, is a wholly owned subsidiary of Ting Fiber, LLC.
15. Fiber Roads, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Virginia, LLC.
16. Navigator Network Services, LLC, a Virginia limited liability company, is a wholly owned subsidiary of Ting Fiber, LLC.
17. Tucows (Emerald), LLC, a Delaware limited liability company, is a wholly owned subsidiary of Tucows Domains Services, Inc.
18. eNom, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Tucows (Emerald), LLC.
19. eNom Canada Corp. a Nova Scotia corporation, is a wholly owned subsidiary of eNom, LLC.
20. Whois Privacy Protection Services, Inc, a Nevada corporation, is a wholly owned subsidiary of eNom, LLC.
21. Secure Business Services, Inc., a Nevada corporation, is a wholly owned subsidiary of eNom, LLC.
22. Ascio Technologies, Corp., a Nova Scotia corporation, is a wholly owned subsidiary of Tucows.com Co.
23. Cedar Holdings Group, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Issuer, LLC.
24. Zippytech, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Cedar Holdings Group, LLC.
25. Zippytech of New Mexico, LLC., a New Mexico limited liability company, is a wholly owned subsidiary of Cedar Holdings Group, LLC.
26. Ting Telecom California LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Fiber, LLC.
27. Simply Bits, LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Issuer, LLC.
28. Ting Holdco LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Fiber, LLC.
29. Ting Issuer LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Holdco, LLC.
30. Ting Internet LLC, a Delaware limited liability company, is a wholly owned subsidiary of Ting Issuer, LLC.
32. Zippytech of New Mexico, LLC., a Delaware limited liability company, is a wholly owned subsidiary of Cedar Holdings Group, LLC.
33. Ting-Memphis Co, a Delaware limited partnership, is a wholly owned subsidiary of Ting Fiber, LLC.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement Nos. 333-12279, 333-37545, 333- 61181, 333-30342, 333- 74010, 333-106961, 333-140985, 333-169848, 333-207863, 333-250959, 333-260785 and 333-271742, on Form S-8 of our reports dated April 1, 2024, relating to the financial statements of Tucows Inc. (the “Company”), and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K, for the year ended December 31, 2023.

/s/ Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants
Toronto, Canada
April 1, 2024

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Tucows Inc.

We consent to the incorporation by reference in registration statements (No. 333-12279, 333-37545, 333-61181, 333-30342, 333-74010, 333-106961, 333-140985, 333-169848, 333-207863, 333-250959, 333-260785 and 333-271742) on Form S-8 of our report dated March 15, 2023, except for the schedule of the Condensed Financial Statements of Tucows Inc., which is as of April 1, 2024, with respect to the consolidated financial statements, which comprise the consolidated balance sheet of Tucows Inc. as of December 31, 2022, the related consolidated statements of comprehensive income, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2022, and the related notes, and the schedule of the Condensed Financial Statements of Tucows Inc. as of December 31, 2022 and for each of the years in the two-year period ended December 31, 2022 included in this Annual Report on Form 10-K.

/s/ KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

April 1, 2024
Vaughan, Canada

**Certification Pursuant to
Rules 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as Amended**

I, Elliot Noss, certify that:

1. I have reviewed this annual report on Form 10-K of Tucows Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13-a15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent function):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 1, 2024

/s/ ELLIOT NOSS
Elliot Noss
Chief Executive Officer and President

**Certification Pursuant to
Rules 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as Amended**

I, Davinder Singh, certify that:

1. I have reviewed this annual report on Form 10-K of Tucows Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13-a15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent function):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 1, 2024

/s/ DAVINDER SINGH

Davinder Singh
Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C SECTION 1350

In connection with the Annual Report of Tucows Inc. (the "Company") on Form 10-K for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Elliot Noss, Chief Executive Officer and President of the Company, hereby certify to my knowledge, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 1, 2024

/s/ ELLIOT NOSS
Elliot Noss
Chief Executive Officer and President

CERTIFICATION PURSUANT TO 18 U.S.C SECTION 1350

In connection with the Annual Report of Tucows Inc. (the "Company") on Form 10-K for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Davinder Singh, Chief Financial Officer of the Company, hereby certify to my knowledge, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 1, 2024

/s/ DAVINDER SINGH

Davinder Singh
Chief Financial Officer

**COMPENSATION RECOUPMENT POLICY OF
TUCOWS INC.**

Dated November 17, 2023

Section 1. Purpose.

Tucows Inc. (the “**Company**”) has adopted this Compensation Recoupment Policy (this “**Policy**”) to implement a mandatory clawback policy in the event of a Restatement in compliance with the applicable Nasdaq rules.

Any capitalized terms used, but not immediately defined, in this Policy have the meanings set forth in Section 13.

Section 2. Administration.

This Policy shall be administered in the sole discretion of the Board Governance Committee (“Committee”). The Committee shall have the discretion to interpret the Policy and make all determinations with respect to this Policy, consistent with applicable law and this Policy. Without limiting the foregoing this Policy shall be interpreted in a manner that is consistent with the requirements of the Applicable Rules, and compliance with this Policy shall not be waived by the Committee, the Board or the Company in any respect.

Any interpretations and determinations made by the Committee shall be final and binding on all affected individuals.

Section 3. Effective Date; Term.

This Policy applies to all compensation awarded on or after October 1, 2023 (the “**Effective Date**”).

Section 4. Amendment.

The Committee may amend this Policy from time to time in its discretion, subject to any limitations under applicable law or listing standards, including the Applicable Rules. Without limiting the foregoing, the Board or the Committee may amend this Policy as it deems necessary to reflect any amendment of the Applicable Rules or regulations or guidance issued under the Applicable Rules.

Section 5. No Substitution of Rights; Non-Exhaustive Rights.

Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights that may be available to the Company pursuant to (a) the Company’s equity compensation plan or any successor plan thereto, the Company’s annual bonus plan or any other incentive plan of the Company or any of its subsidiaries, (b) the terms of any recoupment policy or provision in any employment agreement, compensation agreement or arrangement, or other agreement, or (c) any other legal remedies available to the Company under applicable law.

In addition to recovery of compensation as provided for in this Policy, the Company may take any and all other actions as it deems necessary, appropriate and in the Company’s best interest in connection with the Committee determining this Policy should apply, including termination of the employment of, or initiating legal action against, an Executive Officer, and nothing in this Policy limits the Company’s rights to take any such appropriate actions.

Section 6. Recovery on a Restatement.

In the event the Company is required to prepare a Restatement, the Company shall reasonably promptly recover from an Executive Officer the amount of any erroneously awarded Incentive-Based Compensation that is Received by such Executive Officer during the Recovery Period. The amount of erroneously Received Incentive-Based Compensation will be the excess of the Incentive-Based Compensation Received by the Executive Officer (whether in cash or shares) based on the erroneous data in the original financial statements over the Incentive-Based Compensation (whether in cash or in shares) that would have been Received by the Executive Officer had such Incentive-Based Compensation been based on the restated results, without respect to any tax liabilities incurred or paid by the Executive Officer.

Without limiting the foregoing, for Incentive-Based Compensation based on the Company's stock price or total shareholder return, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in the Restatement, (a) the amount shall be based on the Company's reasonable estimate of the effect of the Restatement on the stock price or total shareholder return upon which the Incentive-Based Compensation was Received and (b) the Company shall maintain documentation of the determination of that reasonable estimate and provide such estimate to the Regulators.

Section 7. Covered Executive Officers and Covered Incentive-Based Compensation.

This Policy covers all persons who are Executive Officers at any time during the performance period for which Incentive-Based Compensation is Received. Incentive-Based Compensation shall not be recovered under this Policy to the extent Received by any person before the date the person served as an Executive Officer or by any person who is not an Executive Officer at any time during the performance period for that Incentive Based Compensation. Subsequent changes in an Executive Officer's employment status, including retirement or termination of employment, do not affect the Company's right to recover Incentive-Based Compensation pursuant to this Policy.

This Policy shall apply to Incentive-Based Compensation that is Received by any Executive Officer on or after the Effective Date [and that results from attainment of a Financial Reporting Measure based on or derived from financial information for any fiscal period ending on or after the Effective Date.

Section 8. Methods of Recovery; Limited Exceptions.

The Committee shall determine, in its sole discretion, the method of recovering any Incentive-Based Compensation subject to this Policy, including those methods set forth in Section 10.

No recovery shall be required if any of the following conditions are met and the Committee determines that, on such basis, recovery would be impracticable:

- (a) the direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered; *provided* that prior to making a determination that it would be impracticable to recover any Incentive-Based Compensation based on the expense of enforcement, the Company shall (i) have made a reasonable attempt to recover the Incentive-Based Compensation, (ii) have documented such reasonable attempts to recover, and (iii) provide the documentation to Nasdaq;

- (b) recovery would violate home country law where that law was adopted prior to November 28, 2022; *provided* that, prior to making a determination that it would be impracticable to recover any Incentive-Based Compensation based on a violation of home country law, the Company shall (i) have obtained an opinion of home country counsel, acceptable to Nasdaq, that recovery would result in such violation, and (ii) provide a copy of such opinion to Nasdaq; or
- (c) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees, to fail to meet the requirements of Section 401(a)(13) or Section 411(a) of the Internal Revenue Code of 1986, as amended (the “*Code*”), and U.S. Treasury regulations promulgated thereunder.

Section 9. Reporting; Disclosure; Monitoring.

The Company shall make all required disclosures and filings with the Regulators with respect to this Policy in accordance with the requirements of the Applicable Rules, and any other requirements applicable to the Company, including the disclosures required in connection with SEC filings.

Section 10. Methods of Recovery.

Subject to Section 8, in the event that the Committee determines that this Policy should apply, to the extent permitted by applicable law, the Company shall, as determined by the Committee in its sole discretion, take any such actions as it deems necessary or appropriate to recover Incentive-Based Compensation. The actions may include, without limitation (and as applicable):

- (a) forfeit, reduce or cancel any Incentive-Based Compensation (whether vested or unvested) that has not been distributed or otherwise settled;
- (b) seek recovery of any Incentive-Based Compensation that was previously paid to the Executive Officer;
- (c) seek recovery of any amounts realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based Incentive-Based Compensation;
- (d) recoup any amount in respect of Incentive-Based Compensation that was contributed or deferred to a plan that takes into account Incentive-Based Compensation (excluding certain tax-qualified plans, but including deferred compensation plans, and supplemental executive retirement plans, and insurance plans to the extent otherwise permitted by applicable law, including Section 409A of the Code) and any earnings accrued on such Incentive-Based Compensation;
- (e) offset, withhold or eliminate any compensation that could be paid or awarded to the Executive Officer after the date of determination; and

- (f) take any other remedial and recovery action permitted by law, as determined by the Committee.

In addition, the Committee may authorize legal action for breach of fiduciary duty or other violation of law and take such other actions to enforce the obligations of the Executive Officer to the Company as the Committee deems appropriate.

Section 11. No Indemnification.

The Company shall not indemnify any current or former Executive Officer against the loss of erroneously awarded compensation, and shall not pay or reimburse any such person for premiums incurred or paid for any insurance policy to fund such person's potential recovery obligations.

Section 12. Defined Terms.

The following capitalized terms used in this Policy have the following meanings:

- (a) **"Applicable Rules"** means Section 10D of the Exchange Act and Rule 10D-1 promulgated thereunder and Listing Rule 5608 of the Listing Rules of The Nasdaq Stock Market.
- (b) **"Board"** means the Board of Directors of the Company.
- (c) **"Committee"** means Corporate Governance, Nominating and Compensation Committee of the Company, or, in the absence of such committee, a majority of independent directors serving on the Board.
- (d) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.
- (e) **"Executive Officer"** means each individual who is currently or was previously designated as an "officer" of the Company as defined in Rule 16a-1(f) under the Exchange Act, including, at a minimum, the Company's president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice president of the Company in charge of a principal business unit, division or function (such as sales, administration, or finance), any other officer who performs a policy-making function, or any other person who performs similar significant policy-making functions for the Company or any subsidiary.
- (f) **"Financial Reporting Measures"** means (i) measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures, (ii) the Company's stock price, and (iii) total shareholder return in respect of the Company. A "Financial Reporting Measure" need not be presented within the financial statements or included in a filing with the SEC.
- (g) **"Incentive-Based Compensation"** means any compensation that is granted, earned, or vested, based wholly or in part upon the attainment of a Financial Reporting Measure. Incentive-Based Compensation does not include, among other forms of compensation, equity awards at the Company or any subsidiary that vest exclusively upon completion of a specified employment period, without any performance condition, and bonus awards that are discretionary or based on subjective goals or goals unrelated to Financial Reporting Measures.

- (h) **“Received”** – Incentive-Based Compensation is deemed “Received” for the purposes of this Policy in the Company’s fiscal period during which the Financial Reporting Measure applicable to the Incentive-Based Compensation award is attained, even if the payment or grant of the Incentive-Based Compensation occurs after the end of that period.
- (i) **“Recovery Period”** means the three completed fiscal years immediately preceding the date on which the Company is required to prepare a Restatement, which date is the earlier of (i) the date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare a Restatement or (ii) a date that a court, regulator or other legally authorized body directs the Company to prepare a Restatement.
- (j) **“Regulators”** means, as applicable, the SEC and the Nasdaq Stock Market (**“Nasdaq”**).
- (k) **“Restatement”** means that the Company is required to prepare an accounting restatement due to a material noncompliance with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements (i) that is material to the previously issued financial statements, or (ii) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.
- (l) **“SEC”** means the U.S. Securities and Exchange Commission.

BOARD OF DIRECTORS

Robin Chase
Chair of the Board: Tucows Inc.
Co-founder: Zipcar and Veniam

Allen Karp, Q.C.
Chair Emeritus of the Board: Tucows Inc.
Corporate Director

Erez Gissin
Managing Partner:
Helios Energy Investments

Elliot Noss
President and Chief Executive Officer:
Tucows Inc.

Jeffrey Schwartz
Executive Vice President and
Chief Financial Officer: Dorel Industries

Marlene Carl
Chief Financial Officer: CHAPTERS group AG

Lee Matheson
Partner, Edgepoint Wealth Management

Gigi Sohn
Executive Director, American Association for
Public Broadband

NAMED EXECUTIVE OFFICERS

Elliot Noss
President and Chief Executive Officer:
Tucows Inc.
Chief Executive Officer: Ting

Davinder Singh
Chief Financial Officer, Secretary and
Treasurer: Tucows Inc.

David Woroch
Chief Executive Officer, Tucows Domains
Services

Justin Reilly
Chief Executive Officer, Wavelo

Bret Fausett
Chief Legal Officer & General Counsel:
Tucows Inc.

CORPORATE OFFICE

96 Mowat Avenue Toronto, ON Canada
M6K 3M1
Telephone: (416) 535-0123

ANNUAL MEETING
June 20, 2024 at 1:00 PM (ET)

Register for Virtual AGM at
<https://register.proxypush.com/TCX>

COMMON STOCK

NASDAQ:(TCX)
Toronto Stock Exchange (TSX:TC)

TRANSFER AGENT AND REGISTRAR

Odyssey Transfer and Trust Company
2155 Woodlane Drive, Suite 100
Woodbury, MN 55125

INDEPENDENT ACCOUNTANTS

Deloitte
Toronto, Canada

OTHER FINANCIAL INFORMATION

Requests for Company information and other
shareholder inquiries should be directed to:

Attention: Investor Relations
c/o Monica Webb
Telephone: (647) 898-9924
Email: mwebb@tucows.com