ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains, in addition to historical information, forward-looking statements by us 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 Tucows Domains 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 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 Affiliate"); 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 further accelerate the expansion of the Ting Internet footprint, by obtaining additional financing;
- Our ability to service our debt commitments and preferred share 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;
- Our ability to meet the operational and financial drawdown milestones under the Unit Purchase Agreement with Generate TF Holdings, LLC, a Delaware limited liability company (“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, which provides the Company with financing to invest in the expansion of fiber networks;
- 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;
- The application of judgment in determining our global provision for income taxes, deferred tax assets or liabilities or other tax liabilities given the ultimate tax determination is uncertain;
- Our ability to effectively integrate acquisitions;
- 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 "DISH" (the "DISH Purchase Agreement");
- Pending or new litigation;
- 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; and
- Factors set forth under the caption “Item 1A Risk Factors” in our Annual Report on Form 10-K/A for the fiscal year ended December 31, 2022 filed with the SEC on June 6, 2023 (the “2022 Annual Report”) and in "Item 1A Risk Factors" in Part II of this report.

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 Quarterly Report on Form 10-Q by the foregoing cautionary statements.

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, reviewed 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 Mobile Retail Services, the 10-year payment stream on transferred legacy Mobile subscribers, eliminations of intercompany transactions, portions of Finance and Human Resources, Legal and Corporate IT.

For the three months ended September 30, 2023 and September 30, 2022, we reported net revenue of $87.0 million and $78.1 million, respectively.

For the nine months ended September 30, 2023 and September 30, 2022, we reported net revenue of $252.4 million and $242.2 million, respectively.

Ting

Ting and its wholly owned subsidiaries - Cedar, and Simply Bits includes the provision of fixed 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 Internet services to consumer and business customers. Revenues are all generated in the U.S. and are provided on a monthly basis and have no fixed contract terms.

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 since 2021. More recently, Ting Internet has also integrated 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. Wavelo revenues from 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, Platypus revenues 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. We earn revenues primarily from the registration fees charged to resellers in connection with new, renewed and transferred domain name registrations. In addition, we earn revenues from the sale of retail domain name registration and email services to individuals and small businesses. 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. Ascio domain services contracts and EPAG agreements primarily originate in Europe.

Our primary distribution channel is a global network of over 35,000 resellers that operate in over 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 generic top-level domain ("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 and positive operating cash flow.

Wholesale, primarily branded as OpenSRS, eNom, EPAG and Ascio, derives revenue from its domain service and from providing value-added services. The OpenSRS, eNom, EPAG and Ascio domain services manage 24.5 million domain names under the Tucows, eNom, EPAG and Ascio ICANN registrar accreditations and for other registrars under their own accreditations.

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 over 35,000 web hosts, ISPs, and other resellers around the world. In addition, we also derive revenue by monetizing domain names which are near the end of their lifecycle through advertising or 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, email services to individuals and small businesses. Retail also includes our Personal Names Service – based on 36,000 surname domains – that allows roughly two-thirds of Americans to purchase an email address based on their last name. The retail segment includes the sale of the rights to its portfolio of surname domains used in connection with our Realnames email service as well as our Exact Hosting Service, that provides Linux hosting services for websites of individuals and small businesses.

KEY BUSINESS METRICS AND NON-GAAP MEASURES

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

Adjusted EBITDA

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

Ting Internet	**September 30,**	
	2023	**2022**
	(in '000's)	
Ting Internet accounts under management	41	33
Ting Internet owned infrastructure serviceable addresses	114	90
Ting Internet partner infrastructure serviceable addresses	25	19

Domain Services	**For the Three Months Ended September 30,**	
	2023	**2022**
	(in 000's)	
Total new, renewed and transferred-in domain name transactions 2	5,391	5,234
Domains under management1	24,543	24,504

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

(2) Includes all transactions processed under our accreditations for our resellers and our retail brands, as well as transactions processed on behalf of other registrars using our platform.

Domain Services	For the Nine Months Ended September 30,	
	2023	2022
	(in 000's)	
Total new, renewed and transferred-in domain name transactions 2	16,778	16,617
Domains under management1	24,543	24,504

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

(2) Includes all transactions processed under our accreditations for our resellers and our retail brands, as well as transactions processed on behalf of other registrars using our platform.

Domain Services	September 30,	
	2023	2022
	(in 000's)	
Registered using Registrar Accreditation belonging to the Tucows Group	17,613	18,066
Registered using Registrar Accreditation belonging to Resellers	6,930	6,438
Total domain names under management	24,543	24,504

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 networks 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 since 2021. 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.

Tucows Domains

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 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, we also generate revenue through pay-per-click advertising and through the OpenSRS Domain Expiry Stream. The revenue associated with name sales and advertising has recently experienced flat to declining trends due to the uncertainty around the implementation of ICANN's New gTLD Program, lower traffic and advertising yields in the marketplace, which we expect to continue.

From time-to-time certain 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

As described above, 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 three months and nine months ended September 30, 2023, the Company has accrued $0.1 million and $0.5 million of penalties, respectively associated with the minimum commitment shortfall and expects to continue to incur penalties through the end of Fiscal 2023 and thereafter should limited subscriber growth persist.

Critical Accounting Estimates

The preparation of our consolidated financial statements in conformity with GAAP requires us to make estimates and judgements that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. There have been no material changes to the critical accounting estimates as previously disclosed in Part II, Item 7 of our 2022 Annual Report.

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 THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2023 AS COMPARED TO THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2022

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 provided 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 since 2021. More recently, Ting 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 over this new revenue stream 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. 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 also 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 platform provider for CSPs globally via Wavelo. Retail telephony services and transition services revenues are excluded from segment EBITDA results as they are 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.

The 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, customer support, 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.

The following table presents our net revenues, by revenue source (*Dollar amounts in thousands of U.S. dollars*):

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Ting:				
Fiber Internet Services	$ 12,855	$ 10,946	$ 37,116	$ 30,955
Wavelo:				
Platform Services	10,697	4,048	27,537	18,115
Other Professional Services	377	-	1,588	1,750
Total Wavelo	11,074	4,048	29,125	19,865
Tucows Domains:				
Wholesale				
Domain Services	47,657	46,985	140,734	140,800
Value Added Services	4,252	4,883	13,441	16,129
Total Wholesale	51,909	51,868	154,175	156,929
Retail	9,179	8,413	26,111	25,961
Total Tucows Domains	61,088	60,281	180,286	182,890
Tucows Corporate:				
Mobile services and eliminations	1,954	2,775	5,852	8,523
	$ 86,971	$ 78,050	$ 252,379	$ 242,233
Increase over prior period	$ 8,921		$ 10,146	
Increase - percentage	11%		4%	

The following table presents our net revenues, by revenue source, as a percentage of total net revenues (*Dollar amounts in thousands of U.S. dollars*):

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Ting:				
Fiber Internet Services	15%	14%	15%	13%
Wavelo:				
Platform Services	12%	5%	11%	7%
Other Professional Services	0%	0%	1%	1%
Total Wavelo	12%	5%	12%	8%
Tucows Domains:				
Wholesale				
Domain Services	55%	60%	56%	59%
Value Added Services	5%	6%	5%	7%
Total Wholesale	60%	66%	61%	66%
Retail	11%	11%	10%	11%
Total Tucows Domains	71%	77%	71%	77%
Tucows Corporate:				
Mobile services and eliminations	2%	4%	2%	2%
	100%	100%	100%	100%

Total net revenues for the three months ended September 30, 2023 increased by $8.9 million, to $87.0 million from $78.1 million when compared to the three months ended September 30, 2022. The three-month increase in net revenue was driven by our Wavelo, Ting, and Tucows Domains segments. The Wavelo segment increased $7.1 million in the current period primarily from the migration of DISH Boost Mobile subscribers onto our platform. The Ting segment increased $2.0 million in the current period as a result of subscriber growth from the continued buildout of our Fiber network across the United States. The Tucows Domains segment increased $0.9 million primarily driven by outsized portfolio sales in the current period. These increases were partially offset by decreased revenues from Mobile Services and eliminations which decreased $0.8 million attributable to increased intercompany revenues, decreased telephony services, and decreased transitional services revenues.

Total net revenues for the nine months ended September 30, 2023 increased by $10.2 million, to $252.4 million from $242.2 million when compared to the nine months ended September 30, 2022. The nine-month increase in net revenue was driven by our Wavelo and Ting segments. The Wavelo segment increased $9.2 million in the current period primarily from the migration of DISH Boost Mobile subscribers onto our platform. The Ting segment increased $6.1 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 $2.7 million attributable to increased intercompany revenues, decreased transitional services, and decreased telephony services revenues. Tucows Domains decreased $2.6 million in the current period from the continued normalization of domain name registration growth from those observed as a result of the COVID-19 pandemic in prior years.

Deferred revenue at September 30, 2023 increased by $4.7 million to $149.8 million from $145.1 million at December 31, 2022. This was primarily driven by Tucows Domains, accounting for $4.6 million of the increase which is due to the increase in current period billings for domain name registrations and service renewals, characteristic of the seasonal renewal pattern we see during the beginning of a Fiscal Year. 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 $0.3 million, reflective of the continued growth in customer base and billings of that segment relative to December 31, 2022. These increases were partially offset by a decrease from Wavelo of $1.0 million, specifically related to Other Professional Services revenues for standalone technology services development work with DISH, which we defer until such time as that work is complete and we've satisfied our obligations to provide the professional services. These other professional services were completed in the current period and thus recognized out of previously deferred revenues.

As a result of significant subscriber migration onto our platform in the current period, DISH, a customer within our Wavelo segment now accounts for 12% of total net revenues during the three months ended September 30, 2023 and 11% of total revenues during the nine months ended September 30, 2023. No customer accounted for more than 10% of total net revenue during the three and nine months ended September 30, 2022. DISH accounted for 44% of total accounts receivable at September 30, 2023 and 46% of total accounts receivable at December 31, 2022. Though a significant portion of the Company's Tucows Domains revenues are prepaid by our customers, where the Company does collect receivables, significant 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. 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 $12.9 million in net revenue during the three months ended September 30, 2023, up $2.0 million or 18% compared to the three months ended September 30, 2022. This growth is driven by subscriber growth across our Fiber network relative to the three months ended September 30, 2022, as well as the continued expansion of our Ting Internet footprint to new Ting towns throughout the United States.

Ting generated $37.1 million in net revenue during the nine months ended September 30, 2023, up $6.1 million or 20% compared to the nine months ended September 30, 2022. Consistent with the above discussion, this growth is driven by subscriber growth across our Fiber network relative to the nine months ended September 30, 2022, as well as the continued expansion of our Ting Internet footprint to new Ting towns throughout the United States.

As of September 30, 2023, Ting Internet had access to 114,000 owned infrastructure serviceable addresses, 25,000 partner infrastructure serviceable addresses and 41,000 active subscribers under its management; compared to having access to 90,000 owned infrastructure serviceable addresses, 19,000 partner infrastructure serviceable addresses and 33,000 active subscribers under its management as of September 30, 2022. These figures exclude any changes in serviceable addresses and accounts attributable to Simply Bits.

Wavelo

Platform Services

Net revenues from Wavelo Platform Services for the three months ended September 30, 2023 increased by $6.7 million or 168% , to $10.7 million as compared to the three months ended September 30, 2022. This is driven from increased MONOS platform revenues earned from the migration of additional DISH subscribers, from their Boost Mobile brand onto our new platform. Migration of the full Boost Mobile subscriber base onto the MONOS platform was complete by the end of June 30, 2023. The increased platform fees in the current period 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 Fiscal 2023 and thereafter as we continue to fulfill the performance obligations of the contract. Our full-service platforms support CSPs with 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 since 2021. More recently, Ting Internet has also integrated Wavelo's ISOS and SM software to enable faster subscriber growth and footprint expansion. Any intercompany ISOS or SM revenues earned from Ting Internet are eliminated upon consolidation.

Net revenues from Wavelo Platform Services for the nine months ended September 30, 2023 increased by $9.4 million or 52%, to $27.5 million as compared to the nine months ended September 30, 2022. Consistent with the above discussion, this is driven from increased MONOS platform revenues earned from the migration of additional DISH subscribers, from their Boost Mobile brand onto our new platform. The increased platform fees in the current period 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 Fiscal 2023 and thereafter as we continue to fulfill the performance obligations of the contract. Any intercompany ISOS or SM revenues earned from Ting Internet are eliminated upon consolidation.

Other Professional Services

Net revenues from Other Professional Services for the three months ended September 30, 2023 increased by $0.4 million or 100%, to $0.4 million as compared to the three months ended September 30, 2022. These revenues related to the provision of standalone technology services development work for our CSP customers and are non-recurring and often one-time 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 more standalone professional services for our customers.

Net revenues from Other Professional Services for the nine months ended September 30, 2023 decreased by $0.2 million or 11%, to $1.6 million as compared to the nine months ended September 30, 2022. Consistent with the above discussion, this is driven by less standalone professional services performed in the current period for our customers as their focus turned to completing subscriber migrations to our platform.

Tucows Domains

Wholesale - Domain Services

During the three months ended September 30, 2023, Wholesale domain services net revenue increased by $0.7 million to $47.7 million, when compared to the three months ended September 30, 2022. Increases from Wholesale domain registrations were driven from domain name registration growth and price increases through the current period.

During the nine months ended September 30, 2023, Wholesale domain services net revenue decreased by $0.1 million to $140.7 million, when compared to the nine months ended September 30, 2022. Consistent with the above discussions, the flat revenue impact from Wholesale domain registrations was driven from the continued normalization of domain name registration growth and slowed renewal rates from those observed as a result of the COVID-19 pandemic in prior years.

As of September 30, 2023 together, the OpenSRS, eNom, EPAG, and Ascio Domain Services manage 24.5 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 minimally when compared to September 30, 2022. The change in domains under management came largely from an increase in OpenSRS, offset by decreases across our other brands including eNom, Ascio and EPAG.

Wholesale - Value Added Services

During the three months ended September 30, 2023, value-added services net revenue decreased by $0.6 million to $4.3 million, when compared to the three months ended September 30, 2022. The decrease in value-added service revenue was driven in part by lower digital certifications and expiry revenues. Expiry revenue decreases across our Domain Services brands as a result of the normalization of renewal rates and domains under management discussed above in connection to COVID-19. The prior period continued to benefit from a significant volume of expired domain names being available for our expiry streams, which returned favorable proceeds at auction and drove revenue generation for value added services. That continues to hold true, albeit at a slower rate as the value of domain names sold at auction has declined relative to the prior period.

During the nine months ended September 30, 2023, value-added services net revenue decreased by $2.7 million to $13.4 million, when compared to the nine months ended September 30, 2022. Consistent with the discussion above, the decrease in value-added service revenue was primarily driven by lower expiry revenues across our Domain Services brands as a result of the normalization of renewal rates and domains under management discussed above in connection to COVID-19; and a smaller decrease in revenues from digital certificates.

Retail

During the three months ended September 30, 2023, retail domain services net revenue increased by $0.8 million to $9.2 million compared to the three months ended September 30, 2022. This was driven by increased revenues related to numerous outsized domain name portfolio sales in the current period as well as small increases across domain name registrations and Exact Hosting.

During the nine months ended September 30, 2023, retail domain services net revenue increased by $0.1 million to $26.1 million compared to the nine months ended September 30, 2022. This was driven by increased revenues related to outsized domain name portfolio sales in the current period as well as Exact Hosting revenues. These increasing impacts are partially offset by a decrease in domain name registration.

Tucows Corporate - Mobile Services and Eliminations

Net revenues from Mobile Services and eliminations for the three months ended September 30, 2023 decreased by $0.8 million to $2.0 million as compared to the three months ended September 30, 2022. This was driven by incremental intercompany corporate eliminations of $0.5 million, primarily a result of increased revenues associated with ISOS and SM platforms billing between Wavelo and Ting, which increased in the current period consistent with the subscriber growth experienced by the Ting segment as discussed above. The decrease was furthered by decreased revenues of $0.2 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 organic subscriber churn we experienced relative to the three months ended September 30, 2022. This was also furthered by decreased transitional services of $0.1 million, notably from a decreased level of customer support and marketing services provided to DISH in connection with the legacy Ting Mobile customer base.

Net revenues from Mobile Services and eliminations for the nine months ended September 30, 2023 decreased by $2.6 million to $5.9 million as compared to the nine months ended September 30, 2022. This was driven by incremental intercompany corporate eliminations of $1.7 million, a result of increased revenues associated with ISOS and SM platforms billing between Wavelo and Ting, which increased in the current period consistent with the subscriber growth experienced by the Ting segment as discussed above. This was furthered by decreased transitional services of $0.6 million, notably from a decreased level of customer support and marketing services provided to DISH in connection with the legacy Ting Mobile customer base. This decrease was also furthered by decreased revenues of $0.4 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 organic subscriber churn we experienced relative to the nine months ended September 30, 2022.

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 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 set and 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.

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

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Ting:				
Fiber Internet Services	$ 4,869	$ 4,290	$ 14,211	$ 12,746
Wavelo:				
Platform Services	342	235	1,006	622
Other Professional Services	228	-	1,289	1,632
Total Wavelo	570	235	2,295	2,254
Tucows Domains:				
Wholesale				
Domain Services	38,060	37,393	112,352	110,728
Value Added Services	537	613	1,726	1,912
Total Wholesale	38,597	38,006	114,078	112,640
Retail	4,116	4,105	12,383	12,383
Total Tucows Domains	42,713	42,111	126,461	125,023
Tucows Corporate:				
Mobile services and eliminations	2,565	1,666	7,783	7,000
Network Expenses:				
Network, other costs	7,322	4,244	20,638	13,188
Network, depreciation of property and equipment	9,138	7,136	26,331	19,620
Network, amortization of intangible assets	378	378	1,135	1,134
Network, impairment of property and equipment	2,663	3	4,679	30
	19,501	11,761	52,783	33,972
	$ 70,218	$ 60,063	$ 203,533	$ 180,995
Increase over prior period	$ 10,155		$ 22,538	
Increase - percentage	17%		12%	

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

	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Ting:				
Fiber Internet Services	7%	7%	7%	7%
Wavelo:				
Platform Services	0%	0%	0%	0%
Other Professional Services	0%	0%	1%	1%
Total Wavelo	0%	0%	1%	1%
Tucows Domains:				
Wholesale				
Domain Services	54%	62%	55%	61%
Value Added Services	1%	1%	1%	1%
Total Wholesale	55%	63%	56%	62%
Retail	6%	7%	6%	7%
Total Tucows Domains	61%	70%	62%	69%
Tucows Corporate:				
Mobile services and eliminations	4%	3%	4%	4%
Network Expenses:				
Network, other costs	10%	7%	10%	7%
Network, depreciation of property and equipment	13%	12%	13%	11%
Network, amortization of intangible assets	1%	1%	1%	1%
Network, impairment of property and equipment	4%	0%	2%	0%
	28%	20%	26%	19%
	100%	100%	100%	100%

Total cost of revenues for the three months ended September 30, 2023, increased by $10.1 million, or 17%, to $70.2 million from $60.1 million in the three months ended September 30, 2022. The three-month increase in cost of revenues was driven by increases across Network Expenses, Mobile Service and eliminations, Tucows Domains, Ting, and Wavelo by $7.7 million, $0.9 million, $0.6 million, $0.6 million, and $0.3 million respectively. Network Expenses increase of $7.7 million is primarily a result of the expansion 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 tool costs across our operating segments, and impairment of assets within the Ting segment. The increase in Mobile Services and eliminations of $0.9 million was a primarily a result of penalties associated with the MNO minimum commitment shortfall in comparison to the three months ended September 30, 2022 The increase in Tucows Domains of $0.6 million was a result of increased registry related costs from the registration of domain names. The increase in Ting of $0.6 million was primarily driven by the costs of revenues associated with growth in active subscribers. Lastly, the increase in Wavelo of $0.3 million was primarily driven by Other Professional Services as consistent with the standalone technology development work in the current period.

Total cost of revenues for the nine months ended September 30, 2023, increased by $22.5 million, or 12%, to $203.5 million from $181.0 million in the nine months ended September 30, 2022. The nine-month increase in cost of revenues was driven by increases across Network Expenses, Ting, Tucows Domains, and Mobile Service and eliminations by $18.8 million, $1.5 million, $1.4 million, and $0.8 million respectively. Network Expenses increase of $18.8 million is primarily a result of the expansion 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 tool costs across our operating segments, and impairment of assets within the Ting segment. The increase in Ting of $1.4 million was primarily driven the costs of revenues associated with growth in active subscribers. The increase in Tucows Domains of $0.6 million was a result of increased registry related costs from the registration of domain names. Lastly, increase in Mobile Services and eliminations of $0.8 million as a primarily a result of penalties associated with the MNO minimum commitment shortfall in comparison to the nine months ended September 30, 2022

Deferred costs of fulfillment as of September 30, 2023 increased by $1.9 million, or 2%, to $112.6 million from $110.7 million at December 31, 2022. This was primarily driven by Tucows Domains with an increase of $3.1 million, consistent with the increase in deferred revenues discussed above from the increase in current period deferred costs for domain name registrations and service renewals that typically occur at the beginning of each Fiscal Year. This increase was partially offset by Wavelo, with a decrease of $1.5 million related to the completion of Other Professional Services discussed above for standalone technology services development work with DISH. As these professional services were completed in the current period, the deferred costs to fulfill those services were amortized into costs of revenues.

Ting

During the three months ended September 30, 2023, costs related to provisioning high speed Internet access for Ting and its subsidiaries - Cedar, and Simply Bits increased by $0.6 million, to $4.9 million as compared to three months ended September 30, 2022. Consistent with the discussion above in the Net Revenue section, the subscriber growth across our Fiber network drove an increase in costs of revenues which includes network connectivity, dark fiber, bandwidth and colocation costs.

During the nine months ended September 30, 2023, costs related to provisioning high speed Internet access for Ting and its subsidiaries - Cedar, and Simply Bits increased by $1.4 million, to $14.2 million as compared to nine months ended September 30, 2022. Consistent with the discussion above, the subscriber growth across our Fiber network drove an increase in costs of revenues which includes network connectivity, dark fiber, bandwidth and colocation costs. The increase was furthered by higher construction and customer operations teams costs in support of the continued expansion of the Ting Internet network footprint.

Wavelo

Platform Services

Cost of revenues from Wavelo Platform Services for the three months ended September 30, 2023 increased by $0.1 million or 46%, to $0.3 million as compared to $0.2 million for the three months ended September 30, 2022. Costs 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. The continued incurrence of additional costs to fulfill the contract have resulted in increased amortization in the current period relative to the fixed term of the agreement.

Cost of revenues from Wavelo Platform Services for the nine months ended September 30, 2023 increased by $0.4 million or 100%, to $1.0 million as compared to $0.6 million for the nine months ended September 30, 2022. Consistent with the above discussion, this is driven by the continued incurrence of additional costs to fulfill the contract and increased amortization in the current period relative to the fixed term of the agreement.

Other Professional Services

Cost of revenues from Other Professional Services for the three months ended September 30, 2023 increased by $0.2 million or 100% to $0.2 million as compared to nil for the three months ended September 30, 2022. Costs of revenues to provide other professional services change depending on the nature and scope of work we are engaged to perform for our customers for select statements of work. The increase in cost of revenues is aligned to the increase in Net Revenues discussed above; a result of more standalone technology development work with our CSP customers in the current period.

Cost of revenues from Other Professional Services for the nine months ended September 30, 2023 decreased by $0.3 million or 21% to $1.3 million as compared $1.6 million for the nine months ended September 30, 2022. Costs of revenues to provide other professional services change depending on the nature and scope of work we are engaged to perform for our customers for select statements of work. The decrease in cost of revenues is aligned to the decrease in Net Revenues discussed above; a result of less standalone technology development work with our CSP customers in the current period.

Tucows Domain

Wholesale - Domain Services

Costs for Wholesale domain services for the three months ended September 30, 2023 increased by $0.7 million or 2%, to $38.1 million, as compared to $37.4 million to the three months ended September 30, 2022. The increase is driven by escalating registry costs for gTLDs, and partially offset by savings from increased rebates earned from registries.

Costs for Wholesale domain services for the nine months ended September 30, 2023 increased by $1.7 million or 2%, to $112.4 million, as compared to $110.7 million to the nine months ended September 30, 2022. Consistent with the discussion above, the increase is driven by escalating registry costs for gTLDs, and partially offset by savings from increased rebates earned from registries.

Wholesale - Value-Added Services

Costs for wholesale value-added services for the three months ended September 30, 2023 decreased by $0.1 million or 17%, to $0.5 million, as compared to $0.6 million for the three months ended September 30, 2022. This decrease was driven by decreased costs related to the Digital Certificate stream of revenue, consistent with the decline in Net Revenue discussed above.

Costs for wholesale value-added services for the nine months ended September 30, 2023 decreased by $0.2 million or 11%, to $1.7 million, as compared to $1.9 million for the nine months ended September 30, 2022. This decrease was driven by decreased costs related to Digital Certificates and Expiry stream revenues, consistent with the decline in Net Revenues discussed above.

Retail

Costs for retail domain services for the three months ended September 30, 2023 remained flat at $4.1 million, as compared to the three months ended September 30, 2022.

Costs for retail domain services for the nine months ended September 30, 2023 remained flat at $12.4 million, as compared to the nine months ended September 30, 2022.

Tucows Corporate - Mobile Services and Eliminations

Cost of revenues from Mobile Services and Eliminations for the three months ended September 30, 2023 increased by $0.9 or 53%, to $2.6 million, as compared to $1.7 million for the three months ended September 30, 2022. The Company accrued $0.1 million in penalties associated with the MNO minimum commitment shortfall in the current period, whereas in the three months ended September 30, 2022 included a reversal of $0.8 million in penalties following a successful amendment to the agreement with the MNO partner. The company expects to continue to incur penalties through the end of Fiscal 2023 and thereafter should limited subscriber growth persist.

Cost of revenues from Mobile Services and Eliminations for the nine months ended September 30, 2023 increased by $0.8 million or 11% to $7.8 million, as compared to the nine months ended September 30, 2022. Consistent with the above discussion around net revenues, cost of revenues were impacted by decreased transitional services costs provided to DISH in connection with the legacy Ting Mobile customer base, offset by increased costs of revenues associated with mobile telephony services and device cost of revenues from the small group of customers retained by the Company as part of the DISH Purchase Agreement. During the nine months ended September 30, 2023, the Company has accrued $0.5 million in penalties associated with the MNO minimum commitment shortfall and expects to continue to incur penalties through the end of Fiscal 2023 and thereafter should limited subscriber growth persist.

Network Expenses

Network expenses for the three months ended September 30, 2023 increased by $7.7 million or 65%, to $19.5 million, as compared to $11.8 million for the three months ended September 30, 2022. The current period increase was driven by increased network costs, network impairment, and network depreciation by $3.0 million, $2.7 million, and $2.0 million respectively. The current period increase in network costs relates to the investment in hiring additional personnel for both Ting Internet and Wavelo network operations focused teams as well as 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 impairment of $2.7 million was driven by an impairment charge for Ting cable plant and assets under construction in the current period. The current period increase in network depreciation relates to $1.6 million in incremental depreciation from Ting's continued capital expansion of the Fiber network with increased footprint across the United States, incremental depreciation of Wavelo's newly developed platform assets of $0.5 million, partially offset by decreased amortization related to Tucows Domains of $0.1 million.

Network expenses for the nine months ended September 30, 2023 increased by $18.8 million or 55%, to $52.8 million, as compared to $34.0 million for the nine months ended September 30, 2022. The current period increase was driven by increased network costs, network depreciation, and network impairment by $7.5 million, $6.7 million, and $4.6 million respectively. Consistent with the discussion above, the current period increase in network costs relates to the investment in hiring additional personnel for both Ting Internet and Wavelo network operations focused teams as well as 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 $5.5 million in incremental depreciation from Ting's continued capital expansion of the Fiber network with increased footprint across the United States, incremental depreciation of Wavelo's newly developed platform assets of $1.5 million, partially offset by decreased amortization of $0.3 million related to Tucows Domains. In addition to network costs and network depreciation, the current period increase in network impairment of $4.6 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)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Sales and marketing	$ 17,295	$ 13,894	$ 49,052	$ 39,384
Increase over prior period	$ 3,401		$ 9,668	
Increase - percentage	24%		25%	
Percentage of net revenues	20%	18%	19%	16%

Sales and marketing expenses for the three months ended September 30, 2023 increased by $3.4 million, or 24%, to $17.3 million as compared to the three months ended September 30, 2022. This current period increase was primarily related to the investment in hiring additional personnel for Ting's 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 expenses in order to attract, retain sales and marketing personnel, primarily for Wavelo. These increases were furthered by increases in marketing, facility, and travel related costs increased 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.

Sales and marketing expenses for the nine months ended September 30, 2023 increased by $9.7 million, or 25%, to $49.1 million as compared to the nine months ended September 30, 2022. Consistent with the discussion above, this current period increase was primarily related to the investment in hiring additional personnel for Ting's 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 expenses in order to attract, retain sales and marketing personnel, primarily for Wavelo. These increases were furthered by increases in 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.

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, provide Wavelo's platform services, provide Ting's Internet Services, email, retail, domain portfolio and other Internet services. All technical operations and development costs are expensed as incurred.

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Technical operations and development	$ 4,818	$ 2,983	$ 14,214	$ 10,212
Increase (decrease) over prior period	$ 1,835		$ 4,002	
Increase (decrease) - percentage	62%		39%	
Percentage of net revenues	6%	4%	6%	4%

Technical operations and development expenses for the three months ended September 30, 2023 increased by $1.8 million, or 62%, to $4.8 million when compared to the three months ended September 30, 2022. The current period increase was primarily related to the investment in hiring additional personnel for Wavelo as well as Ting. Outside of additional hiring, personnel costs were further impacted by wage inflation sustained from prior years due to broader economic conditions. 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 the three months ended September 30, 2022.

Technical operations and development expenses for the nine months ended September 30, 2023 increased by $4.0 million, or 39% to $14.2 million when compared to the nine months ended September 30, 2022. Consistent with the discussion above, the current period increase was primarily related to the investment in hiring additional personnel for Wavelo as well as Ting. Outside of additional hiring, personnel costs were further impacted by wage inflation sustained from prior years due to broader economic conditions as well as increased stock-based compensation expenses 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 the nine months ended September 30, 2022.

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)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
General and administrative	$ 9,399	$ 7,897	$ 25,674	$ 22,006
Increase over prior period	$ 1,502		$ 3,668	
Increase - percentage	19%		17%	
Percentage of net revenues	11%	10%	10%	9%

General and administrative expenses for the three months ended September 30, 2023 increased by $1.5 million, or 19% to $9.4 million as compared to the three months ended September 30, 2022. The increase was driven in part by increases in professional fees incurred in the current period, higher property tax and other expenses within the Ting segment consistent with the continued expansion of our Ting Internet footprint to new Ting towns throughout the United States, and higher stock-based compensation expenses in order to attract, retain and scale core administrative teams to meet projected Company growth.

General and administrative expenses for the nine months ended September 30, 2023 increased by $3.7 million, or 17% to $25.7 million as compared to the nine months ended September 30, 2022. The increase was primarily driven by an increase in personnel costs driven by continued investment in administrative teams to better support our segments as part of our new corporate reorganization, wage inflation sustained from prior years due to broader economic conditions across our three segments, and higher stock-based compensation expenses in order to attract, retain and scale core administrative teams to meet projected Company growth.

DEPRECIATION OF PROPERTY AND EQUIPMENT

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Depreciation of property and equipment	$ 137	$ 149	$ 439	$ 443
Decrease over prior period	$ (12)		$ (4)	
Decrease - percentage	(8)%		(1)%	
Percentage of net revenues	0%	0%	0%	0%

Depreciation costs remained flat at $0.1 million for the three months ended September 30, 2023 and the three months ended September 30, 2022.

Depreciation costs remained flat at $0.4 million for the nine months ended September 30, 2023 and the nine months ended September 30, 2022.

LOSS ON DISPOSITION OF PROPERTY AND EQUIPMENT

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Loss on disposition of property and equipment	$ -	$ (19)	$ -	$ 461
Increase over prior period	$ 19		$ (461)	
Increase - percentage	(100)%		(100)%	
Percentage of net revenues	-%	(0)%	-%	0%

Loss on disposition of property and equipment remained flat at nil for the three months ended September 30, 2023 and the three months ended September 30, 2022.

Loss on disposition of property and equipment for the nine months ended September 30, 2023 decreased by $0.5 million as compared to the nine months ended September 30, 2022. Consistent with the discussion above, the nine months ended September 30, 2022 included a disposal of minor internal use software related to Tucows Domains for which the Company no longer expects to realize the intended benefits that it initially did when those development costs were initially capitalized. No such disposal exists during the current period.

AMORTIZATION OF INTANGIBLE ASSETS

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Amortization of intangible assets	$ 2,242	$ 2,464	$ 6,966	$ 7,394
Decrease over prior period	$ (222)		$ (428)	
Decrease - percentage	(9)%		(6)%	
Percentage of net revenues	3%	3%	3%	3%

Amortization of intangible assets for the three months ended September 30, 2023 decreased by $0.2 million, or 9% to $2.2 million as compared to the three months ended September 30, 2022. The decrease was 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 customer relationships was completed during the three months ended March 31, 2023.

Amortization of intangible assets for the nine months ended September 30, 2023 decreased by $0.4 million, or 6% to $7.0 million as compared to the nine months ended September 30, 2022. Consistent with the discussion above, the decrease was 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 customer relationships was completed during the three months ended March 31, 2023.

LOSS (GAIN) ON CURRENCY FORWARD CONTRACTS

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

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Loss (gain) on currency forward contracts	$ 29	$ -	$ 52	$ -
Increase over prior period	$ 29		$ 52	
Increase - percentage	N/A%		N/A%	
Percentage of net revenues	0%	-%	0%	-%

The Company recorded a net loss of less than $0.1 million in the change in fair value of outstanding contracts as well as realized on matured contracts during the three months ended September 30, 2023, compared to a net gain of nil during the three months ended September 30, 2022.

The Company recorded a net loss of less than $0.1 million in the change in fair value of outstanding contracts as well as realized on matured contracts during the nine months ended September 30, 2023, compared to a net gain of nil during the nine months ended September 30, 2022.

At September 30, 2023, our balance sheet reflects a derivative instrument asset of $0.2 million and a liability of nil as a result of our existing foreign exchange contracts. Until their respective maturity dates, these contracts will fluctuate in value in line with movements in the Canadian dollar relative to the U.S. dollar.

OTHER INCOME (EXPENSES)

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Other income (expense), net	$ (6,427)	$ 373	$ (30,829)	$ 5,326
Increase (decrease) over prior period	$ (6,800)		$ (36,155)	
Increase (decrease) - percentage	(1,823)%		(679)%	
Percentage of net revenues	(7)%	0%	- 12%	2%

Other Income during the three months ended September 30, 2023 decreased by $6.8 million when compared to the three months ended September 30, 2022. Interest expense increased by $10.4 million to $14.8 million during the three months ended September 30, 2023 driven by a $6.8 increase in connection with Ting's Generate preferred share and asset backed securitization financing facilities and the residual $3.6 million relates primarily to the interest expense on the Credit Agreement Amendment for the non-Ting related businesses. In addition to higher interest expense, the Company experienced a $0.4 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 $3.0 million increase primarily from the inclusion of interest income following the execution of Ting's asset backed securitization financing facility as well as a $1.0 million increase from the capitalization for interest expense related to the Fiber network assets under construction as part of our Ting segment.

Other Income during the nine months ended September 30, 2023 decreased by $36.2 million when compared to the nine months ended September 30, 2022. Consistent with the discussion above, this was driven by a $41.4 million increase in expense during the nine months ended September 30, 2023 The increase in interest expense was driven by a $15.5 million increase in connection with Ting's Generate preferred share and asset backed securitization financing facilities, the $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 $11.2 million relates primarily to the interest expense on the Credit Facility for the non-Ting related businesses. In addition to higher interest expense, the Company experienced a $1.0 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 $3.1 million increase primarily from the inclusion of interest income following the execution of Ting's asset backed securitization financing facility as well as $3.0 million increase from the capitalization for interest expense related to the Fiber network assets under construction as part of our Ting segment.

INCOME TAXES

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Provision for income taxes	$ (822)	$ (1,027)	$ (5,557)	$ 790
Increase in provision over prior period	$ 205		$ (6,347)	
Increase - percentage	*		*	
Effective tax rate	3%	11%	7%	(6)%

* not meaningful

Income tax expense for the three and nine months ended September 30, 2023 increased by $0.2 million and decreased by $6.3 million respectively when compared to the three and nine months ended September 30, 2022. The change in effective tax rate is primarily due to the net loss before tax for the period, and it is partially offset by an increase in valuation allowance on net operating losses and interest limitation as a result of a change in the geographical mix of income.

ADJUSTED EBITDA

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

Our adjusted EBITDA definition excludes depreciation, amortization of intangible assets, income tax provision, interest expense (net), loss on debt extinguishment, accretion of contingent consideration, stock-based compensation, asset impairment, 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 adjusted EBITDA to net income:

Reconciliation of Loss before Provision for Income Taxes to Adjusted EBITDA (In Thousands of US Dollars) (unaudited)	**Three Months Ended September 30, 2023 (unaudited)**	**Three Months Ended September 30, 2022 (unaudited)**	**Nine Months Ended September 30, 2023 (unaudited)**	**Nine Months Ended September 30, 2022 (unaudited)**
Net Loss for the period	$ (22,772)	$ (7,981)	$ (72,823)	$ (14,126)
Less:				
Provision (recovery) for income taxes	(822)	(1,027)	(5,557)	790
Depreciation of property and equipment	9,275	7,285	26,770	20,063
Impairment and loss on disposition of property and equipment	2,663	(16)	4,679	491
Amortization of intangible assets	2,620	2,842	8,101	8,528
Interest expense, net	10,739	4,337	29,120	8,555
Loss on debt extinguishment	-	-	14,680	-
Accretion of contingent liability	-	50	-	198
Stock-based compensation	2,308	1,569	6,606	4,396
Unrealized loss (gain) on foreign exchange revaluation of foreign denominated monetary assets and liabilities	340	348	254	446
Acquisition and other costs[1]	121	472	1,067	1,549
Adjusted EBITDA	$ 4,472	$ 7,879	$ 12,897	$ 30,890

[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 decreased by $3.4 million to $4.5 million for the three months ended September 30, 2023 when compared to the three months ended September 30, 2022. The decrease in adjusted EBITDA from period-to-period was primarily driven by decreased contribution from Ting and Mobile Services and elimination. The Ting contribution decreased $7.1 million, from the increased investment for the ramp of expenditures related to the Fiber Internet network build and expansion plan. Mobile Services and eliminations contribution decreased $1.9 million primarily from the impact of the penalties associated with the MNO minimum commitment. These decreases in Adjustment EBITDA were partially offset by increases in Wavelo and Tucows Domains. The Wavelo contribution increased $5.1 million primarily driven increased MONOS platform revenues earned from the increased subscribers on the platform, offset partially by investment in network and technical operations and development costs in the current period. Tucows Domains contribution increased by $0.5 million from improved pricing as well as lower marketing and other spend when compared to the three months ended September 30, 2022.

Adjusted EBITDA decreased by $18.0 million to $12.9 million for the nine months ended September 30, 2023 when compared to the nine months ended September 30, 2022. The decrease in adjusted EBITDA from period-to-period was primarily driven by decreased contribution from Ting, Tucows Domains and Mobile Services and elimination. The Ting contribution decreased $16.2 million, from the increased investment for the ramp of expenditures related to the Fiber Internet network build and expansion plan. Tucows Domains contribution decreased $2.4 million from the continued normalization of domain registrations and slowed renewal rates relative to patterns experienced over the last fiscal years from the COVID-19 pandemic. Mobile Services and eliminations contribution decreased $2.3 million from lower mobile telephony and transitional service revenues as well as increased penalties associated with the MNO minimum commitment. These decreases were partially offset by Wavelo contribution increasing $2.9 million primarily driven increased MONOS platform revenues earned from the increased subscribers on the platform, offset partially by investment in network and technical operations and development costs in the current period.

OTHER COMPREHENSIVE INCOME (LOSS)

To mitigate the impact of the change in fair value of our foreign exchange contracts on our financial results, in October 2012 we begun applying hedge accounting for the majority of the contracts we need to meet our Canadian dollar requirements on a prospective basis.

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

(Dollar amounts in thousands of U.S. dollars)	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Other comprehensive income (loss)	$ (664)	$ (1,774)	$ (644)	$ (619)
Increase over prior period	$ 1,110		$ (25)	
Increase - percentage	(63)%		4%	
Percentage of net revenues	(1)%	(2)%	(0)%	(0)%

The impact of the fair value adjustments on outstanding hedged contracts for the three months ended September 30, 2023 was a loss in OCI before reclassifications of $0.5 million as compared to a loss in OCI of $1.7 million before reclassifications for the three months ended September 30, 2022.

The impact of the fair value adjustments on outstanding hedged contracts for the nine months ended September 30, 2023 was a gain in OCI before reclassifications of $0.2 million as compared to a loss in OCI of $0.5 million before reclassifications for the nine months ended September 30, 2022.

The net amount reclassified to earnings during the three months ended September 30, 2023 was a loss of $0.2 million compared to a loss of $0.1 million during the three months ended September 30, 2022.

The net amount reclassified to earnings during the nine months ended September 30, 2023 was a loss of $0.8 million compared to a loss of less than $0.1 million during the nine months ended September 30, 2022.

LIQUIDITY AND CAPITAL RESOURCES

As of September 30, 2023, our cash and cash equivalents balance increased by $87.2 million, our secured notes reserve funds balance increased by $8.5 million, and our funds held by trustee balance increased by $3.1 million, respectively 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 shares. These increases were partially offset by $77.5 million for the continued investment in property and equipment primarily driven by Ting Internet expansion, $68.7 million related to the repayment of the syndicated revolver, $45.7 million for the cash payment for the redeemable preferred shares redemption, $13.8 million from cash used in operating activities, $6.7 million related to deferred notes payable financing costs, $1.6 million related to the payment of contingent consideration related to the acquisition of Cedar, $1.6 million related to the deferred issuance cost of the syndicate revolver, and $0.4 million related to the acquisition of intangible assets.

Third Amended 2019 Credit Facility

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

On August 8, 2022, the Company entered into a Third Amended and Restated Senior Secured Credit Agreement (the “Amended Credit Agreement”) with its existing lenders. The Amended Credit Agreement continued to provide the Company with access to an aggregate of $240 million in committed funds (the Credit Facility). Under the Amended Credit Agreement, and in connection with the Unit Purchase Agreement (as defined in Note 18 - "Redeemable preferred shares" of the Company's Consolidated Financial Statements), the Lenders agreed that Ting Fiber Inc. (converted to Ting LLC) and its wholly owned subsidiaries ceased to be Guarantors under the Credit Facility and were automatically released from the respective guarantee and security documents, including a release of the Lenders' security interests and liens upon the assets of such entities. The terms of the LLC agreement with Generate prohibited Tucows from funding the operations or capital investments in Ting, LLC with funds generated by its subsidiaries outside of Ting LLC or its wholly owned subsidiaries ("Excluding-Ting"). Additionally, the Amended Credit Agreement extended the maturity of the Credit Facility to June 14, 2024.

On March 14, 2023 Excluding-Ting entered into an Amending Agreement No.2 (the "Credit Agreement Amendment") to the Third Amended and Restated Senior Secured Credit Agreement with its existing syndicate of lenders (The "Amended Credit Agreement"). The Amended Credit Agreement continued to provide Excluding-Ting with access to an aggregate of $240 million in committed funds, however there was a suspension to the $60 million accordion during the relief period (the "Leverage Step Up Period"), which was defined as from Closing (March 14, 2023) to the date that Excluding-Ting delivered a compliance certificate for the period ending on December 31, 2023 demonstrating compliance with financial covenants. Additionally, the Credit Agreement Amendment had extended the maturity of the Credit Facility to September 30, 2024.

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 a Credit Agreement (the “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 Credit Facility through new commitments of up to $60M if the Total Funded Debt to Adjusted EBITDA Ratio (as defined in the 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 Credit Agreement.

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 Credit Agreement) of not less than 3.00:1.00. The required principal repayment of $223.4 million is due in 2026.

Prior to entering into the 2023 Credit Agreement, during the nine months ended September 30, 2023 the Company made repayments of $17.8 million on the 2019 Credit Facility.

Cash Flow from Operating Activities

Net cash inflows (outflows) from operating activities during the nine months ended September 30, 2023 totaled ($13.8) million, a decrease of 181% when compared to the nine months ended September 30, 2022.

Net income, after adjusting for items not involving cash, during the nine months ended September 30, 2023 was ($10.0) million, a decrease of 165% when compared to the prior year. Net income included non-cash charges and recoveries of $62.8 million such as depreciation, loss on debt extinguishment, accretion of redeemable preferred shares, 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 outflow of $3.7 million. Utilized cash of $16.4 million from the changes in accounts receivable, accounts payable, prepaid expenses and deposits, deferred costs of fulfillment, inventory, and accreditation fees payable, were offset by positive contributions of $12.6 million from movements in deferred revenue, contract asset, customer deposits, income taxes recoverable, and accrued liabilities.

Cash Flow from Financing Activities

Net cash inflows from financing activities during the nine months ended September 30, 2023 totaled $190.6 million, an increase of 82% when compared to the nine months ended September 30, 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, and $35.0 million of proceeds from redeemable preferred shares issued to Generate. These cash inflows were partially offset by $68.7 million related to the repayment of the syndicate revolver, $45.7 million related to the redemption of preferred shares held by Generate, $6.7 million from deferred notes payable financing costs, $1.6 million related to the payment of contingent consideration related to the acquisition of Cedar, and $1.6 million related to the syndicate revolver issued.

Cash Flow from Investing Activities

Investing activities during the nine months ended September 30, 2023 used net cash of $77.9 million, an increase of 22% when compared to the nine months ended September 30, 2022. Cash outflows of $77.5 million primarily related to the investment in property and equipment, primarily to support the continued expansion of our Ting Internet Fiber network footprints in California, Colorado, North Carolina and Virginia as we seek to extend both our current network and expand to new markets. We expect our capital expenditures on building and expanding our fiber network to continue to increase during Fiscal 2023. In addition to investment in property and equipment, the current period used $0.4 million for the acquisition of other intangible assets.

Material Cash Requirements

At September 30, 2023, the Company's Cash and cash equivalents, restricted cash and restricted cash equivalents totaled $122.4 million, of which $115.7 million belonged to Ting and $6.7 million belonged to Excluding-Ting.

In order to continue the Company's planned expansion of the Ting Internet footprint, the Company will need to access additional financing under the Unit Purchase Agreement by meeting certain predetermined operational and financial drawdown milestones. Under the Unit Purchase Agreement, from the Transaction Close until the earlier of (i) the End Date and (ii) the date upon which Generate has purchased $140 million of Series A Preferred units pursuant to Milestone Fundings, Ting LLC is required to pay Generate a standby fee at a rate of 0.50% of the unpaid $140 million capital commitment which will be paid quarterly. In addition, 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 we need that funding. We currently have no commitments or agreements regarding the acquisition of other businesses. Any additional financing may be dilutive to existing investors.

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 (the "Closing Date"), Tucows Inc. through certain of its indirect and wholly owned subsidiaries, including Ting Fiber, LLC entered into a definitive agreement relating to a securitized financing facility pursuant to a privately placed securitization transaction. 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. Subject to certain limitations, the 2023 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, that are owned by certain other limited-purpose, bankruptcy-remote, wholly owned indirect subsidiaries of the Company.

On May 4, 2023, Ting Fiber, LLC executed the Redemption Agreement and the Side Letter Agreement with Generate. Under the terms of terms of the Redemption Agreement, Ting Fiber, LLC redeemed 5,173,067 Series A Preferred Units held by Generate. The terms of the redemption were modified by the Side Letter Agreement, which granted a 30% discount on the make-whole premium 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.

In our 2022 Annual Report, we disclosed our material cash requirements of both the Ting segment as well as the other segments excluding Ting. As of September 30, 2023, other than the items mentioned above, there have been no other material changes to our material cash requirements outside the ordinary course of business.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We develop products in Canada and sell these services in North America and Europe. Our sales are primarily made in U.S. dollars, while a major portion of expenses are incurred in Canadian dollars. Our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. Our interest income is sensitive to changes in the general level of Canadian and U.S. interest rates, particularly since the majority of our investments are in short-term instruments. Based on the nature of our short-term investments, we have concluded that there is no material interest rate risk exposure as of September 30, 2023.

We are also subject to market risk exposure related to changes in interest rates under our Amended 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 September 30, 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 Asset
October - December 2023	$ 14,430	1.3721	$ 186
	$ 14,430	1.3721	$ 186

As of September 30, 2023, the Company had $14.4million of outstanding foreign exchange forward contracts which will convert to $19.8 million Canadian dollars. Of these contracts, $14.4 million met the requirements for hedge accounting. As of December 31, 2022, the Company held contracts in the amount of $49.7 million to trade U.S. dollars in exchange for $67.0 million Canadian dollars. Of these contracts, $49.7 million met the requirements for hedge accounting.

We have performed a sensitivity analysis model for foreign exchange exposure over the three months ended September 30, 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 three months ended September 30, 2023. The sensitivity analysis indicated that a hypothetical 10% adverse movement in foreign currency exchange rates would result in a decrease in net income for the three months ended September 30, 2023 of approximately $1.6 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 papers. 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 our Amended Credit Agreement.

As of September 30, 2023, we had an outstanding balance of $221.9 million on the Amended Credit Agreement. The Amended Credit Agreement added SOFR Loans as a form of advance available under the 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 September 30, 2023, an adverse change of one percent on the interest rate would have the effect of increasing our annual interest payment on Amended Credit Agreement by approximately $2.1 million, assuming that the loan balance as of September 30, 2023 is outstanding for the entire period.