

**TERAGO INC.**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL RESULTS FOR THE THREE MONTHS AND FISCAL YEARS ENDED DECEMBER 31, 2018 AND 2017**

*The following Management's Discussion and Analysis ("MD&A") is intended to help the reader understand the results of operations and financial condition of TeraGo Inc. All references in this MD&A to "TeraGo", the "Company", "we", "us", "our" and "our company" refer to TeraGo Inc. and its subsidiaries, unless the context requires otherwise. This MD&A is dated February 21, 2019 and should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2018 and the notes thereto. Additional information relating to TeraGo, including our most recently filed Annual Information Form ("AIF"), can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and our website at [www.terago.ca](http://www.terago.ca). For greater certainty, the information contained on our website is not incorporated by reference or otherwise into this MD&A. All dollar amounts included in this MD&A are in Canadian dollars unless otherwise indicated.*

*Certain information included herein is forward-looking and based upon assumptions and anticipated results that are subject to uncertainties. Should one or more of these uncertainties materialize or should the underlying assumptions prove incorrect, actual results may vary significantly from those expected. For a description of material factors that could cause our actual results to differ materially, see the "Forward-Looking Statements" section and the "Risk Factors" section in this MD&A. This MD&A also contains certain industry-related non-GAAP and additional GAAP measures that management uses to evaluate performance of the Company. These non-GAAP and additional GAAP measures are not standardized and the Company's calculation may differ from other issuers. See "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures".*

**FORWARD-LOOKING STATEMENTS**

This MD&A includes certain forward-looking statements that are made as of the date hereof only and based upon current expectations, which involve risks and uncertainties associated with our business and the economic environment in which the business operates. All such statements are made pursuant to the 'safe harbour' provisions of, and are intended to be forward-looking statements under, applicable Canadian securities laws. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. For example, the words *anticipate, believe, plan, estimate, expect, intend, should, may, could, objective* and similar expressions are intended to identify forward-looking statements. This MD&A includes, but is not limited to, forward looking statements regarding TeraGo's growth strategy, strategic plan, the growth in TeraGo's cloud and data centre businesses, retention campaign and initiatives to improve customer service, additional capital expenditures, investments in data centres, products and other IT services, and the Company's 5G technical trials and strategy. By their nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties. We caution readers of this document not to place undue reliance on our forward-looking statements as a number of factors could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed with the forward-looking statements. When relying on forward-looking statements to make decisions with respect to the Company, you should carefully consider the risks, uncertainties and assumptions, including the risk that TeraGo's growth strategy and strategic plan will not generate the result intended by management, cross-selling of TeraGo's cloud services may not succeed, retention efforts decreasing profit margins, opportunities for expansion and acquisition not being available or at unfavourable terms, TeraGo's "go-to-market" strategy may not materialize, trends in the global cloud and data centre sectors may not be accurately projected, the outcome of the ISED 5G Consultation may not be favourable to the Company, the partnership with AWS not resulting in a favourable outcome, ISED decisions in the various Consultations that the Company has participated in being unfavourable to the Company, the technical 5G trial the Company is currently conducting may not generate the results intended, new market opportunities for 5G may not exist or require additional capital that may not be available to the Company, and those risks set forth in the "Risk Factors" section of this MD&A and other uncertainties and potential events. In particular, if any of the risks materialize, the expectations, and the predictions based on them, of the Company may need to be re-evaluated. Consequently, all of the forward-looking statements in this MD&A are expressly qualified by these cautionary statements and other cautionary statements or factors contained herein, and there can be no assurance that the actual results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences for the Company.

Except as may be required by applicable Canadian securities laws, we do not intend, and disclaim any obligation, to update or revise any forward-looking statements whether in words, oral or written as a result of new information, future events or otherwise.

## OVERVIEW

### Financial Highlights

- Total revenue decreased 5.0% to \$12.9 million for the three months ended December 31, 2018 compared to \$13.5 million for the same period in 2017. The decrease in revenue is primarily driven by lower connectivity revenue which decreased 4.8% to \$8.4 million compared to \$8.8 million for the same period in 2017. In addition, cloud and colocation revenue decreased 5.3% to \$4.5 million compared to \$4.7 million for the same period in 2017. The decreases were attributable to churn exceeding provisioning as a result of lower sales volume. Total revenue decreased 2.0% to \$54.3 million for the year ended December 31, 2018, compared to \$55.4 million for the same period in 2017. The decrease was driven by the factors described above.
- Net loss was \$2.0 million for the three months ended December 31, 2018 compared to a net loss of \$4.1 million for the same period in 2017. The decrease in net loss was primarily driven by a reduction in impairment charge on certain network assets, property and equipment and intangible assets recorded compared to 2017. The lower book value of assets contributed to lower depreciation & amortization in the year which further contributed to the decrease in net loss. In addition, the Company saw a decrease in cost of sales as a result of lower revenue and a decrease in operating costs as a result of cost reduction efforts during the year. For the year ended December 31, 2018, net loss was \$4.8 million compared to a net loss of \$7.3 million for the same period in 2017. The decrease in net loss was driven by the factors described above.
- Adjusted EBITDA<sup>(1)(2)</sup> increased 6.2% to \$3.1 million for the three months ended December 31, 2018 compared to \$2.9 million for the same period in 2017. The increase was primarily driven by the lower cost of sales and selling, general, and administrative costs as a result of the cost reduction efforts discussed above. These efforts include a reduction in headcount in the fourth quarter to improve operational efficiencies to address the reduction in revenue and loss in customers. For the year ended December 31, 2018, Adjusted EBITDA<sup>(1)</sup> increased to \$13.0 million compared to \$12.9 million for the same period in 2017. The increase in Adjusted EBITDA was driven by the factors discussed above.

### Key Developments

- On June 18, 2018, the Company closed its bought deal offering (the "Offering"), including the exercise in full of the underwriters' over-allotment option. The Company issued and sold an aggregate of 1,302,950 Common Shares at a price of \$5.30 per Common Share for gross proceeds of \$6,905,635.
- On September 18, 2018, TeraGo entered into a share purchase agreement to acquire all of the issued and outstanding shares of Mobilexchange Spectrum Inc. and its parent holding company Mobilexchange Spectrum Holdings Inc. (collectively, "MSI") for aggregate cash consideration of \$5.6 million. The acquisition was funded through the net proceeds of TeraGo's bought deal equity offering which previously closed on June 18, 2018. On November 9, 2018, TeraGo completed its acquisition of MSI which is a holder of six 24 GHz spectrum licenses in Calgary, Edmonton, Montreal, Ottawa, Toronto, and Vancouver covering approximately 3.1 billion MHz-Pop. Prior to the acquisition, TeraGo was a lessee to such spectrum of MSI and held subordinate licenses.
- On October 10, 2018, the Company announced that it will be initiating a technical trial in the Greater Toronto Area utilizing fixed wireless 5G millimeter wave equipment from PHAZR Inc.

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<sup>(1)</sup> Adjusted EBITDA is a Non-GAAP measure. See "Definitions – Key Performance Indicator, IFRS, Additional GAAP and Non-GAAP Measures.

<sup>(2)</sup> See "Adjusted EBITDA" for a reconciliation of net loss to Adjusted EBITDA

## TERAGO OVERVIEW

TeraGo provides businesses across Canada with cloud, colocation and connectivity services. The Company provides cloud Infrastructure as a Service (“IaaS”) computing and storage solutions, data centre colocation solutions, and operates five (5) data centres across Canada. With respect to the Company’s connectivity services, it owns and operates a carrier-grade, Multi-Protocol Label Switching (“MPLS”) enabled fixed wireless, IP communications network in Canada targeting businesses that require Internet access, private interconnection, and data connectivity services.

The Company provides enterprise-class cloud services to multiple high value, mid-market and enterprise customers across a variety of industry verticals, federal, provincial and municipal governments and agencies, as well as non-profit organizations. The Company is focussed on providing customers with tailored hybrid IT solutions, running their IT workloads with the appropriate mix of on-premise, data centre colocation, private and public cloud environments. It currently has strategic relationships with several technology partners that give it access to certain products and solutions to provide enterprise cloud services. The Company has aligned with Amazon Web Services (“AWS”) in preparation to provide managed public cloud services and is an AWS Consulting Partner, part of the AWS APN partner network. TeraGo has since attained the Standard Partner tier in the AWS Partner Program.

The Company’s subscription-based business model generally generates stable and predictable recurring revenue from cloud, colocation and connectivity services. Once a customer is obtained, TeraGo’s strategy is to generate incremental recurring revenue from that customer by cross-selling to bundle customers with multiple services and up-selling within services provided.

Cloud Services	Colocation Services	Connectivity Services
<ul style="list-style-type: none"> <li>Private and hybrid cloud</li> <li>IaaS utility computing on virtual and dedicated compute platforms</li> <li>High performance and secure data storage and archiving</li> <li>Business Continuity services for critical situations</li> <li>Managed Services for public and hybrid cloud offerings</li> </ul>	<ul style="list-style-type: none"> <li>Colocation services in partial, full, or customized cabinets</li> <li>Managed, Private Dedicated, and Co-location hosting services</li> <li>Private Vaults protected with biometrics for maximum security</li> <li>Other value added services such as hybrid cloud</li> </ul>	<ul style="list-style-type: none"> <li>National high performance, scalable Internet access principally via wireless and fibre optics</li> <li>Active redundancy capability with bundled connectivity solution</li> <li>Managed network service</li> </ul>

## TERAGO’S BUSINESS MODEL

TeraGo’s business strategy is to provide enterprise-class hybrid IT solutions tailored to the mid-market. The Company leverages its existing nationwide data centre footprint, VMware private/multi-tenant cloud and AWS, all underpinned by a resilient national carrier grade network infrastructure, to align with customers’ current IT landscape. This allows customers to operate on platforms best suited for their workloads – on-premise, data centre colocation, TeraGo private and multi-tenant cloud, and AWS public cloud – all securely interconnected.

TeraGo’s customers typically sign one, two or three-year contracts. Services are billed monthly over the term of the contract.

## CONNECTIVITY SERVICES

TeraGo owns and operates a carrier-grade Multi-Protocol Label Switching (“MPLS”) enabled wireline and fixed wireless, Internet Protocol (“IP”) communications network in Canada, providing businesses with high performance, scalable, and secure access and data connectivity services.

TeraGo’s carrier grade IP communication network serves an important and growing demand among Canadian businesses for network access diversity by offering wireless services that are redundant to their existing wireline broadband connections.

TeraGo's IP network has been designed to eliminate single points of failure and the Company backs its services with customer service level commitments, including 99.9% service availability, industry leading mean time to repair, and 24 x 7 telephone and e-mail access to technical support specialists.

TeraGo offers Canadian businesses high performance unlimited and usage-based dedicated Internet access with upload and download speeds from 5 megabits per second ("Mbps") up to 1 gigabit per second ("Gbps"). Unlike asymmetrical DSL services offered by many of our competitors, TeraGo provides services that are symmetrical, hence customers can have the same high speed broadband performance whether uploading or downloading. TeraGo enhances service performance by minimizing the number of networks between our customers and their audiences, using peering arrangements with multiple tier-one carriers to connect to the Internet.

To deliver its services, the Company has built and operates a carrier-grade, IP network, using licensed and license-exempt spectrum and fibre-optic wireline infrastructure that supports commercially available equipment.

The Company owns and controls a national MPLS distribution network from Vancouver to Montreal that aggregates customer voice and data traffic and interconnects where necessary with carrier diverse leased fiber optic facilities. Major Internet peering and core locations are centralized in Vancouver, Toronto and Seattle, although Internet access is also available in all regional markets for further redundancy.

TeraGo offers a range of diverse Ethernet-based services over a secured wireless connection to customer locations up to 20 kilometres from a hub (provided line of sight or wireline networks exist) or through a fibre optic connection.

### **Quality of Service Capabilities**

TeraGo's MPLS network, including key high traffic hub sites, is equipped with Quality of Service ("QoS") capabilities to improve performance and traffic management. All of TeraGo's major national markets are end-to-end QoS enabled providing the foundation to support voice traffic and other potential future applications.

### **Radio Spectrum**

#### 24-GHz and 38-GHz Wide-area Licences

The Company owns national spectrum portfolio of exclusive 24 GHz and 38 GHz wide-area spectrum licences which covers major regions throughout Canada including 2,120 MHz of spectrum across Canada's 6 largest cities. This spectrum is used to deploy point-to-point and point-to-multipoint microwave radio systems, interconnecting core hubs in ring architectures (where possible) to backhaul metro area network traffic and in the access network or "last mile" to deliver high capacity (speeds of 20Mbps to 1Gbps) IP-based services for business, government and mobile backhaul.

In June 2017, Innovation, Science and Economic Development Canada (ISED) issued the Consultation on Releasing Millimetre Wave Spectrum to Support 5G. This Consultation contemplates the future use of certain millimetre wave spectrum to support the deployment of 5th generation (5G) wireless networks and systems. The spectrum bands identified by ISED includes (amongst others) the 38 GHz band which TeraGo currently holds licences in. As of the date, hereof, the Company has submitted a comment letter and a subsequent reply comment letter in response to the Consultation and final decisions from ISED on this Consultation are yet to be released.

In June 2018, ISED published its overall approach and planned activities for spectrum over the next five years in a document titled *Spectrum Outlook 2018 to 2022*. In such document, ISED has confirmed that the 24 GHz band, among several others has been designated as Priority 2 for future release for commercial mobile use. A definitive timeline for the release of spectrum bands designated as Priority 2 and Priority 3 has not yet been confirmed by ISED. A timeline for the release of the 38 GHz band, which has been designated as a Priority 1 band has been set for the end of 2021.

For additional information on these Consultations and to review the response letter of the Company or other stakeholders, please refer to ISED's Consultation webpage: [https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h\\_sf11245.html](https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf11245.html).

On November 9, 2018, TeraGo completed its acquisition of MSI which is a holder of six 24 GHz spectrum licenses in Calgary, Edmonton, Montreal, Ottawa, Toronto, and Vancouver. Prior to the acquisition, TeraGo was a lessee to such spectrum of MSI and held subordinate licenses. The transaction has been recorded directly in intangible assets as the assets acquired did not meet the definition of a business under IFRS 3, Business Combinations.

For further details on our licensed spectrums, please refer to the Company's 2018 AIF.

## **CLOUD SERVICES**

TeraGo provides cloud services that seek to meet the complex and evolving IT needs of our customers. TeraGo provides IaaS for compute, storage, disaster recovery cloud solutions and other offerings. These solutions allow the Company to compete in the cloud services market.

TeraGo offers customized cloud storage and compute offerings to customers across Canada. TeraGo cloud can offer a virtualized computing environment whereby customers can access on-demand computing without the need to acquire and maintain expensive server equipment. TeraGo can also provide offsite cloud storage for key backup and disaster recovery situations, including utilizing partnerships with software and hardware vendors such as Veeam and Solidfire. The Company has strategic relationships and partnerships with technology leaders such as Amazon Web Services, IBM, Cisco, VMware, Microsoft, Mitel and others that gives it early access to intelligence, products and solutions to provide enterprise cloud services.

## **COLOCATION SERVICES**

TeraGo provides data centre colocation services that protect and connect our customers' valuable information assets. Customers can provision their computing equipment within shared partial cabinets or full, private cabinets, as well as customized caged space designed for their specific needs. TeraGo provides connectivity on redundant routes in and out of the facilities.

Hosting and colocation revenue is derived from set-up fees for new installations and monthly recurring charges based on the number of cabinets and/or the quantity of cage space, power requirements, managed services provided and Internet/data bandwidth requirements. Other services, such as disaster recovery services, are provided under custom contractual arrangements.

TeraGo also offers a variety of managed hosting solutions, which may require us to manage various aspects of a customer's hardware, software or operating systems in public or privately accessible environment. TeraGo offers disaster recovery services on a custom basis. These facilities can be provisioned at the data centre location and provide customers with the capability to restore office functionality with direct access to their information located in the data centre.

Our network can provide these customers Internet and/or secure private interconnections between the data centre facility and the customer's office location(s).

Data centre services customers typically include national government agencies, financial services companies, IT service providers, content and network service providers, and small and medium businesses which rely on TeraGo to store and manage their critical IT equipment and provide the ability to directly connect to the networks that enable our information-driven economy.

### **Data Centre Facilities**

TeraGo's data centres provide IT solutions, including colocation and disaster recovery, to a roster of small and medium-sized businesses, enterprises, public sector and technology service providers. TeraGo has approximately 60,000 square feet of data centre capacity in the five (5) facilities it operates across Canada:

#### ***Mississauga, Ontario***

TeraGo operates a 10,000 square foot AT 101 SOC2 Type 2 certified data centre facility in Mississauga, Ontario that was previously managed by BlackBerry Limited and built to a tier 3 standard. This facility predominantly serves the Greater Toronto Area.

#### ***Vaughan, Ontario***

TeraGo operates a 16,000 square foot AT 101 SOC2 Type 2 certified data centre facility in Vaughan, Ontario, serving the Greater Toronto Area.

#### ***Kelowna, British Columbia***

TeraGo operates its 18,000 square feet AT 101 SOC2 Type 2 certified data centre in Kelowna named the GigaCenter. The GigaCenter is built to a tier 3 standard and the location in Kelowna is considered ideal for a data centre as the region is considered a seismically stable geographic location, has a temperate climate and has a lower probability of both natural and man-made events that may be a risk.

#### ***Vancouver, British Columbia***

TeraGo operates two AT 101 SOC2 Type 2 certified data centre facilities in downtown Vancouver. Its first facility is approximately 7,000 square feet. The facility has redundant fibre facilities between the data centre and the 'telco hotel',

555 West Hastings, in downtown Vancouver. The second facility is 7,000 square feet and is served by TeraGo's fiber optic lines. Both facilities are used to service the Greater Vancouver Area.

**TERAGO INC.**  
**Management's Discussion and Analysis**  
Quarter and Year Ended December 31, 2018

**SELECTED ANNUAL INFORMATION**

The following table displays a summary of our Consolidated Statements of Comprehensive Earnings (Loss) for the three months ended December 31, 2018 and 2017 and the years ended December 31, 2018, 2017 and 2016 and a summary of select Balance Sheet data as at December 31, 2018, 2017 and 2016.

<i>(in thousands of dollars, except with respect to earnings (loss) per share)</i>	Three months ended December 31		Years ended December 31		
	2018	2017 <sup>(1)</sup>	2018	2017 <sup>(1)</sup>	2016 <sup>(1)</sup>
<b>Revenue</b>					
Cloud and colocation revenue	\$ 4,475	4,727	\$ 19,290	18,961	18,296
Connectivity revenue	8,393	8,816	35,005	36,431	40,790
<b>Total Revenue</b>	<u>12,868</u>	<u>13,543</u>	<u>54,295</u>	<u>55,392</u>	<u>59,086</u>
<b>Expenses</b>					
Cost of services	3,473	3,544	13,982	14,103	13,477
Salaries and related costs	4,641	4,495	19,132	19,088	21,195
Other operating expenses	3,265	5,583	12,010	13,573	10,845
Amortization of intangible assets	479	745	2,354	3,052	3,529
Depreciation of network assets, property and equipment	2,249	2,746	9,401	11,272	11,796
	<u>14,107</u>	<u>17,113</u>	<u>56,879</u>	<u>61,088</u>	<u>60,842</u>
<b>Earnings (loss) from operations</b>	<u>(1,239)</u>	<u>(3,570)</u>	<u>(2,584)</u>	<u>(5,696)</u>	<u>(1,756)</u>
Foreign exchange gain (loss)	(20)	15	(2)	50	16
Finance costs	(766)	(523)	(2,315)	(1,698)	(1,882)
Finance income	53	17	81	50	8
<b>Earnings (loss) before income taxes</b>	<u>(1,972)</u>	<u>(4,061)</u>	<u>(4,820)</u>	<u>(7,294)</u>	<u>(3,614)</u>
<b>Income taxes</b>					
Income tax recovery (expense)	-	-	-	-	(700)
<b>Net earnings (loss) and comprehensive earnings (loss)</b>	<u>\$ (1,972)</u>	<u>(4,061)</u>	<u>\$ (4,820)</u>	<u>(7,294)</u>	<u>(4,314)</u>
<b>Deficit, beginning of year <sup>(1)</sup></b>	<u>(72,323)</u>	<u>(66,376)</u>	<u>(69,475)</u>	<u>(63,143)</u>	<u>(58,829)</u>
<b>Deficit, end of year</b>	<u>\$ (74,295)</u>	<u>(70,437)</u>	<u>\$ (74,295)</u>	<u>(70,437)</u>	<u>(63,143)</u>
<b>Basic earnings (loss) per share</b>	<u>\$ (0.13)</u>	<u>(0.28)</u>	<u>\$ (0.32)</u>	<u>(0.51)</u>	<u>(0.30)</u>
<b>Diluted earnings (loss) per share</b>	<u>\$ (0.13)</u>	<u>(0.28)</u>	<u>\$ (0.32)</u>	<u>(0.51)</u>	<u>(0.30)</u>
<b>Basic weighted average number of shares outstanding</b>	15,756	14,335	15,123	14,307	14,177
<b>Diluted weighted average number of shares outstanding</b>	15,756	14,335	15,123	14,307	14,177
<b>Selected Balance Sheet Data</b>			<b>As at December 31</b>		
	<b>2018</b>	<b>2017<sup>(1)</sup></b>	<b>2018</b>	<b>2017<sup>(1)</sup></b>	<b>2016<sup>(1)</sup></b>
Cash and cash equivalents	\$ 3,918	\$ 6,986	\$ 13,034	\$ 13,034	\$ 13,034
Accounts receivable	\$ 3,604	\$ 3,389	\$ 3,673	\$ 3,673	\$ 3,673
Prepaid expenses and other assets	\$ 996	\$ 2,516	\$ 3,150	\$ 3,150	\$ 3,150
Network assets, property and equipment	\$ 35,346	\$ 38,822	\$ 44,161	\$ 44,161	\$ 44,161
Total Assets	\$ 84,349	\$ 87,858	\$ 102,837	\$ 102,837	\$ 102,837
Accounts payable and accrued liabilities	\$ 5,781	\$ 8,519	\$ 11,027	\$ 11,027	\$ 11,027
Long-term debt	\$ 32,294	\$ 36,183	\$ 40,778	\$ 40,778	\$ 40,778
Other long-term liabilities	\$ 1,092	\$ 475	\$ 1,567	\$ 1,567	\$ 1,567
Shareholders' equity	\$ 44,643	\$ 41,917	\$ 48,648	\$ 48,648	\$ 48,648

(1) The Company has applied IFRS 15 on January 1, 2018 using the cumulative effect method. Under this method, the comparative information is not restated. See "Accounting Pronouncements Adopted in 2018" for further information.

**TERAGO INC.**  
**Management's Discussion and Analysis**  
Quarter and Year Ended December 31, 2018

**RESULTS OF OPERATIONS**

**Comparison of the three months and year ended December 31, 2018 and 2017**  
*(in thousands of dollars, except with respect to gross profit margin, earnings per share, Backlog MRR, and ARPU)*

	Three months ended December 31		Year ended December 31	
	2018	2017 <sup>(3)</sup>	2018	2017 <sup>(3)</sup>
<b>Financial</b>				
Cloud and Colocation Revenue	\$ 4,475	4,727	\$ 19,290	18,961
Connectivity Revenue	\$ <u>8,393</u>	<u>8,816</u>	\$ <u>35,005</u>	<u>36,431</u>
Total Revenue	\$ 12,868	13,543	\$ 54,295	55,392
Cost of Services <sup>(1)</sup>	\$ 3,473	3,543	\$ 13,982	14,103
Selling, General, & Administrative Costs	\$ 7,906	10,078	31,142	32,661
Gross profit margin <sup>(1)</sup>	73.0%	73.8%	74.2%	74.5%
Adjusted EBITDA <sup>(1)(2)</sup>	\$ 3,119	2,937	\$ 12,964	12,864
Net loss	\$ (1,972)	(4,061)	\$ (4,820)	(7,294)
Basic loss per share	\$ (0.13)	(0.28)	\$ (0.32)	(0.51)
Diluted loss per share	\$ (0.13)	(0.28)	\$ (0.32)	(0.51)
<b>Operating</b>				
<u>Backlog MRR<sup>(1)</sup></u>				
Connectivity	\$ 64,659	84,191	\$ 64,659	84,191
Cloud & Colocation	\$ 31,742	291,698	\$ 31,742	291,698
<u>Churn Rate<sup>(1)</sup></u>				
Connectivity	1.4%	1.6%	1.5%	1.6%
Cloud & Colocation	1.3%	1.4%	1.9%	1.6%
<u>ARPU<sup>(1)</sup></u>				
Connectivity	\$ 1,054	996	\$ 1,053	980
Cloud & Colocation	\$ 3,138	3,027	\$ 3,147	3,106

(1) See "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures"

(2) See "Adjusted EBITDA" for a reconciliation of net loss to Adjusted EBITDA

(3) The Company has applied IFRS 15 on January 1, 2018 using the cumulative effect method. Under this method, the comparative information is not restated. See "Accounting Pronouncements Adopted in 2018" for further information.

**Refer to "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures" for a description of the components of relevant line items below.**

**Revenue**

Total revenue decreased 5.0% to \$12.9 million for the three months ended December 31, 2018 compared to \$13.5 million for the same period in 2017. Total revenue decreased 2.0% to \$54.3 million for the year ended December 31, 2018, compared to \$55.4 million for the same period in 2017. The decrease was attributable to churn exceeding provisioning.

Connectivity Revenue

For the three months ended December 31, 2018, connectivity revenue decreased 4.8% to \$8.4 million compared to \$8.8 million for the same period in 2017. Connectivity revenues were impacted by a variety of factors, including churn and certain customers renewing long term contracts at lower current market rates partially offset by the positive impact of reclassifications as a result of first time adoption of IFRS 15. Excluding the impact of IFRS 15 classification of revenue from cloud and colocation to connectivity, connectivity revenue for the three months ended December 31, 2018 would have been \$8.0 million or 9.3% decrease compared to \$8.8 million for the same period in 2017.

For the year ended December 31, 2018, connectivity revenue decreased 3.9% to \$35.0 million compared to \$36.4 million for the same period in 2017. The decrease was driven by factors described above. Excluding the impact of IFRS 15 classification of revenue from cloud and colocation to connectivity, connectivity revenue for the year ended

December 31, 2018 would have been \$33.5 million or 8.1% decrease compared to \$36.4 million for the same period in 2017.

***Cloud and Colocation Revenue***

For the three months ended December 31, 2018, cloud and colocation revenue decreased 5.3% to \$4.5 million compared to \$4.7 million for the same period in 2017. The decrease was attributable to churn, partially offset by provisioning. Excluding the impact of IFRS 15 classification of revenue from cloud and colocation to connectivity, cloud and colocation revenue for the three months ended December 31, 2018 would have been \$4.9 million or 3.3% increase compared to \$4.7 million for the same period in 2017.

For the year ended December 31, 2018, cloud and colocation revenue increased 1.7% to \$19.3 million compared to \$19.0 million for the same period in 2017. The increase was driven by the beneficial impact of non-recurring customer termination fees. Excluding the impact of IFRS 15 classification of revenue from cloud and colocation to connectivity, cloud and colocation revenue for the year ended December 31, 2018 would have been \$20.8 million or 9.7% increase compared to \$19.0 million for the same period in 2017.

***Salaries and related costs and other operating expenses ("SG&A")***

For the three months ended December 31, 2018, SG&A decreased 21.6% to \$7.9 million compared to \$10.1 million for the same period in 2017. The increase was primarily driven by lower impairment charges recognized to adjust the carrying value of assets to their recoverable amount. In addition, the Company had lower cost of sales due to lower revenues as well as lower personnel costs, marketing costs, data centre costs, and maintenance costs due cost reduction efforts. In addition, there was an increase in proportion of capital labour activities.

For the year ended December 31, 2018, SG&A decreased 4.6% to \$31.2 million compared to \$32.7 million for the same period in 2017. The decrease was a result of lower marketing spend, recruiting fees, employee travel/meals costs, telephone costs, and lower personnel costs due to cost reduction efforts. Similarly, there was an increase in proportion of capital labour activities compared to the same period in 2017. These reductions were partially offset by restructuring related charges for headcount reductions that occurred in the quarter.

***Net loss***

Net loss was \$2.0 million for the three months ended December 31, 2018 compared to a net loss of \$4.1 million for the same period in 2017. The decrease in net loss was primarily driven by a reduction in the impairment charge on certain network assets, property and equipment and intangible assets recorded compared to 2017. The lower book value of assets contributed to lower depreciation & amortization in the year which further contributed to the decrease in net loss. In addition, the Company saw a decrease in cost of sales as a result of lower revenue and a decrease in operating costs as a result of cost reduction efforts during the year. For the year ended December 31, 2018, net loss was \$4.8 million compared to a net loss of \$7.3 million for the same period in 2017. The decrease in net loss was driven by the factors described above.

***Adjusted EBITDA<sup>(1)</sup>***

Adjusted EBITDA increased to \$3.1 million for the three months ended December 31, 2018 compared to \$2.9 million for the same period in 2017. The increase was primarily driven by lower cost of sales and SG&A as a result of cost reduction efforts discussed in detail above. These efforts include a reduction in headcount to improve operational efficiencies to address the reduction in revenue and loss in customers.. Adjusted EBITDA increased to \$13.0 million for the year ended December 31, 2018 compared to \$12.9 million for the same period in 2017. The increase was primarily driven by the factors described above.

The table below reconciles net loss to Adjusted EBITDA<sup>(1)</sup> for the three months and year ended December 31, 2018 and 2017.

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<i>(in thousands of dollars)</i>	Three months ended December 31		Year ended December 31	
	2018	2017 <sup>(2)</sup>	2018	2017 <sup>(2)</sup>
<b>Net earnings (loss) for the period</b>	\$ (1,972)	(4,061)	\$ (4,820)	(7,294)
Foreign exchange loss (gain)	20	(15)	2	(50)
Finance costs	766	523	2,315	1,698
Finance income	(53)	(17)	(81)	(50)
<b>Earnings (loss) from operations</b>	(1,239)	(3,570)	(2,584)	(5,696)
Add:				
Depreciation of network assets, property and equipment and amortization of intangible assets	2,728	3,492	11,755	14,324
Loss on disposal of network assets	397	15	757	109
Impairment of Assets and Related Charges	333	2,851	764	2,851
Stock-based Compensation Expense (Recovery)	279	156	963	201
Restructuring, acquisition-related, integration costs and other	621	(7)	1,309	1,075
<b>Adjusted EBITDA<sup>(1)</sup></b>	\$ 3,119	2,937	\$ 12,964	12,864

(1) See "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures"

(2) The Company has initially applied IFRS 15 using the cumulative effect method. Under this method, the comparative information is not restated.

**Backlog MRR**

Cloud and colocation backlog MRR was \$31,742 as at December 31, 2018 compared to \$291,698 as at December 31, 2017. The decrease is driven by the provisioning of large colocation customers acquired in the prior year, partially offset by new customer backlog.

Connectivity backlog MRR was \$64,659 as at December 31, 2018, compared to \$84,191 as at December 31, 2017. The change in backlog MRR is driven primarily by bookings and the timing of customer provisioning.

**ARPU**

For the three months ended December 31, 2018 cloud and colocation ARPU was \$3,138 compared to \$3,027 for the same period in 2017. Excluding the impact of IFRS 15 classification of revenue from cloud and colocation to connectivity, ARPU for the three months ended December 31, 2018 would have been \$3,413, representing growth of 12.8% compared to the prior period. The increase was driven by the provisioning of large customers in the first half of 2018, as well as planned churn of low value cloud customers. For the year ended December 31, 2018 cloud and colocation ARPU was \$3,147 compared to \$3,106 for the same period in 2017. The increase was driven by factors described above.

For the three months ended December 31, 2018 Connectivity ARPU was \$1,054 compared to \$996 for the same period in 2017. The ARPU is consistent with prior year period as the Company continues to churn low value ARPU customers. Excluding the impact of IFRS 15 on the classification of revenue from cloud and colocation to connectivity, connectivity ARPU for the three months ended December 31, 2018 would have been \$1,004, which represents an increase of 0.8% compared to the prior year period. For the year ended December 31, 2018 connectivity ARPU was \$1,053 compared to \$980 for the same period in 2017. The increase was driven by factors described above.

**Churn**

For the three months ended December 31, 2018, cloud and colocation churn was 1.3% compared to 1.4% for the same period in 2017. The decrease was a result of churn management efforts. For the year ended December 31, 2018, cloud and colocation churn was 1.9% compared to 1.6% for the same period in 2017. The increase was driven by low value customer churn on legacy and end of life services that the Company ceased early in 2018.

For the three months ended December 31, 2018, connectivity churn was 1.4% compared to 1.6% for the same period in 2017. For the year ended December 31, 2018, connectivity churn was 1.5% compared to 1.6% for the same period in 2017. The decrease was driven by favourable impacts of the Company's investment in developing a robust customer experience framework.

**Finance costs**

For the three months ended December 31, 2018, finance costs increased 46.5% to \$0.8 million compared to \$0.5 million for the same period in 2017. The increase was a result of an unfavourable valuation of the Company's interest rate swaps. For the year ended December 31, 2018, finance costs increased 36.3% to \$2.3 million compared to \$1.7

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million for the same period in 2017. The increase was a result of the factors mentioned above.

**Depreciation and amortization**

For the three months ended December 31, 2018, depreciation of network assets, property and equipment and amortization of intangibles decreased 21.9% to \$2.7 million compared to \$3.5 million for the same period in 2017. The decrease is mainly attributed to impairment charges, disposals, and assets reaching zero net book value earlier in the year. For the year ended December 31, 2018, depreciation of network assets, property and equipment and amortization of intangibles decreased 17.9% to \$11.8 million compared to \$14.3 million for the same period in 2017. The decrease was a result of the factors described above.

**Summary of Quarterly Results**

*All financial results are in thousands, with the exception of earnings per share, Backlog MRR, and ARPU*

		Q4-18	Q3-18	Q2-18	Q1-18	Q4-17 <sup>(2)</sup>	Q3-17 <sup>(2)</sup>	Q2-17 <sup>(2)</sup>	Q1-17 <sup>(2)</sup>
<b>Financial</b>									
Revenue	\$	12,868	14,004	13,683	13,740	13,543	13,680	13,892	14,277
Gross Profit Margin % <sup>(1)</sup>		73.0%	75.1%	74.7%	74.1%	73.8%	74.3%	74.3%	75.6%
Adjusted EBITDA <sup>(1)</sup>	\$	3,119	3,593	3,123	3,129	2,937	3,213	3,003	3,711
Net income/(loss)	\$	(1,972)	(47)	(1,489)	(1,312)	(4,061)	(1,047)	(1,131)	(1,055)
Basic income/(loss) per share	\$	(0.13)	(0.00)	(0.10)	(0.09)	(0.28)	(0.07)	(0.08)	(0.07)
Diluted income/(loss) per share	\$	(0.13)	(0.00)	(0.10)	(0.09)	(0.28)	(0.07)	(0.08)	(0.07)
Basic weighted average number of shares outstanding		15,756	15,736	14,588	14,391	14,335	14,334	14,283	14,258
Diluted weighted average number of shares outstanding		15,756	15,736	14,588	14,391	14,335	14,334	14,283	14,258
<b>Operating</b>									
<u>Backlog MRR<sup>(1)</sup></u>									
Connectivity	\$	64,659	71,659	60,750	58,336	84,191	98,345	76,254	69,518
Cloud & Colocation	\$	31,742	30,172	67,747	133,687	291,698	134,283	39,977	33,962
<u>Churn Rate<sup>(1)</sup></u>									
Connectivity		1.4%	1.4%	1.4%	1.6%	1.6%	1.5%	1.7%	1.7%
Cloud & Colocation		1.3%	1.0%	1.5%	3.1%	1.4%	1.5%	2.2%	1.2%
<u>ARPU<sup>(1)</sup></u>									
Connectivity	\$	1,054	1,071	1,062	1,041	996	984	972	968
Cloud & Colocation	\$	3,138	3,049	3,336	3,084	3,027	3,112	3,124	3,160

(1) See "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures"

(2) The Company has initially applied IFRS 15 using the cumulative effect method. Under this method, the comparative information is not restated.

**Seasonality**

The Company's net customer growth, with respect to its connectivity business, is typically impacted adversely by weather conditions as the majority of new customer locations require the installation of rooftop equipment. Typically, harsher weather in the first quarter of the year results in a reduction of productive installation days. In addition, certain customers using our cloud services may have higher usage during certain times of the year based on the seasonality of their respective businesses.

The Company's cash flow and earnings are typically impacted in the first quarter of the year due to several annual agreements requiring payments in the first quarter including annual rate increases in long-term contracts and the restart on January 1<sup>st</sup> of payroll taxes and other levies related to employee compensation.

## LIQUIDITY AND CAPITAL RESOURCES

TeraGo has historically financed its growth and operations through cash generated by operations, the issuance of equity securities and long-term debt.

The table below is a summary of cash inflows and outflows by activity.

<i>(in thousands of dollars)</i>	Three months ended December 31		Year ended December 31	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Statement of Cash Flows Summary</b>				
Cash inflows and (outflows) by activity:				
Operating activities	\$ 2,503	4,459	10,756	10,362
Investing activities	(6,651)	(3,201)	(14,195)	(10,294)
Financing activities	(1,422)	(1,398)	371	(6,116)
Net cash inflows (outflows)	(5,570)	(140)	(3,068)	(6,048)
Cash and cash equivalents, beginning of year	9,488	7,126	6,986	13,034
Cash and cash equivalents, end of year	\$ 3,918	6,986	3,918	6,986

### **Operating Activities**

For the three months ended December 31, 2018, cash generated from operating activities was \$2.5 million compared to cash from operations of \$4.5 million for the same period in 2017. The decrease in cash from operating activities is mainly due to favourable timing of payments in the prior year period. For the year ended December 31, 2018, cash generated from operating activities was \$10.8 million compared to \$10.4 million for the same period in 2017. The increase is primarily due to significant restructuring and severance related payments paid in 2017.

### **Investing Activities**

For the three months ended December 31, 2018, cash used in investing activities was \$6.7 million compared to cash used of \$3.2 million for the same period in 2017. The increase in cash used in investing activities was due to the acquisition of MSI and its spectrum licenses during the year, partially offset by more favourable changes in the timing of payments for purchases of capital expenditures in 2017 compared to 2018. For the year ended December 31, 2018, cash used in investing activities was \$14.2 million compared to \$10.3 million for the same period in 2017. The increase was due to the spectrum acquisition mentioned above, partially offset by lower operational capital expenditures during the year.

### **Financing Activities**

For the three months ended December 31, 2018 cash used in financing activities was \$1.4 million compared to cash used in financing activities of \$1.4 million for the same period in 2017. For the year ended December 31, 2018, cash generated from finance activities was \$0.4 million compared to cash used in financing activities of \$6.1 million for the same period in 2017. The increase was due to the successful completion of the equity offering in the second quarter of 2018, which raised \$6.1 million, net of expenditures.

### **Capital Resources**

As at December 31, 2018, the Company had cash and cash equivalents of \$3.9 million and access to an undrawn revolving facility and acquisition funding capital as described in the subsequent section below, subject to the terms and conditions of the credit facilities.

The Company anticipates incurring additional capital expenditures for the purchase and installation of network, colocation and cloud assets and customer premise equipment. As economic conditions warrant, the Company may expand its network coverage into new Canadian markets and making additional investments in colocation, cloud and other IT services through acquisitions or expansion.

Management believes the Company's current cash, anticipated cash from operations, access to the undrawn portion of debt facilities and its access to additional financing in the form of debt or equity will be sufficient to meet its working capital and capital expenditure requirements for the foreseeable future.

***Term Debt Facility***

In June 2014, the Company entered into an agreement with a syndicate led by the National Bank of Canada ("NBC") to provide a \$50.0 million credit facility that is principally secured by a general security agreement over the Company's assets.

In March 2015, the Company entered into an amended agreement with the syndicate led by NBC that increased the credit facility by \$35.0 million (\$30.0 million increase to the term debt facility and \$5.0 million increase to the revolving facility) and extended the term from June 6, 2017 to June 30, 2018. Other terms were substantially consistent with the existing credit facilities.

In June 2017, the Company entered into a second amended agreement with the syndicate led by NBC that reduced the term debt facility from \$50.0 million to \$40.0 million (as a result of principal previously repaid), reduced the quarterly principal installment from \$1.25 million to \$1.0 million and extended the term from June 30, 2018 to June 14, 2021. Other terms were substantially consistent with the existing credit facilities.

The total \$75,000 facility that matures June 14, 2021 is made up of the following:

- \$10.0 million revolving facility which bears interest at prime plus a margin percent. As of December 31, 2018, \$nil amount is outstanding (2017 - \$nil). Letters of credit issued under the facility totaled \$0.7 million as of December 31, 2018 (2017 - \$0.7 million).
- \$40.0 million term facility which bears interest at prime or Banker's Acceptance (at the Company's option) plus a margin percent and is repayable in quarterly principal installments of \$1.0 million. This facility was fully drawn upon signing the second amended agreement.

On December 31, 2018, \$32.9 million of the term facility principal balance outstanding was in a Banker's Acceptance and the remaining \$0.2 million was at a floating rate. During 2018, the Company entered into two amended interest rate swap contracts that mature June 29, 2021. The interest rate swap contracts have not been designated as a hedge and will be marked-to-market each quarter. The fair value of the interest rate swap contracts at December 31, 2018 was a liability of \$0.1 million (December 31, 2017 – asset of \$0.03 million) and is recorded in other long-term assets/liabilities, with a corresponding charge (recovery) for the change in fair value recorded in finance costs. The effective interest rate on the Company's long-term debt at December 31, 2018 was 5.34% which represents the Company's interest on its Banker's Acceptance net of its interest swap contracts.

As at December 31, 2018, the Company prepaid interest in the amount of \$0.4 million which represents the net settlement of the Banker's Acceptance and is recorded as a reduction in the carrying value of the debt.

- \$25.0 million available for funding acquisitions and will bear interest at prime plus a margin percent and is repayable in quarterly principal installments of 2.5% of the aggregate amount outstanding. As of December 31, 2018, this facility remains undrawn.

Financing fees incurred as part of the Company's debt origination and modifications have been recorded as a reduction in the carrying amount of the debt and deferred and amortized using the effective interest method over the remaining term of the facility.

The NBC facility is subject to certain financial and non-financial covenants which the Company is in compliance with at December 31, 2018. Under this facility, the Company is subject to a cash flow sweep that could accelerate a certain amount of principal repayment based on a calculation outlined by the credit agreement not later than 120 days after the end of each fiscal year.

***Equity Offering***

On June 18, 2018, the Company completed the Offering to issue and sell 1,303 common shares for gross proceeds of \$6.9 million. Proceeds net of actual and expected additional commissions, legal, accounting and listing fees was \$6.1 million. The Offering was carried out pursuant to an underwriting agreement dated June 4, 2018 with a syndicate of underwriters led by TD Securities Inc., and included Cormark Securities Inc. and Desjardins Securities Inc.

The Company used the net proceeds of the Offering to fund its acquisition of MSI as further described in Overview – Key Developments.

**Contractual Obligations**

The Company is committed to leases for premises, office equipment, network real estate access, automobiles, telecommunication facilities and radio spectrum licenses. Annual minimum payments over the next five years and thereafter are as follows (in thousands):

	<u>Amount</u>
2019	\$ 9,892
2020	6,534
2021	5,072
2022	3,594
2023	2,505
Thereafter	<u>8,952</u>
	<u>\$ 36,549</u>

**Off-balance Sheet Arrangements**

As of December 31, 2018, the Company had no off-balance sheet arrangements apart from operating leases noted above.

**Share Capital**

TeraGo's authorized share capital consists of an unlimited number of Common Shares, an unlimited number of Class A Non-Voting Shares and two Class B Shares. A detailed description of the rights, privileges, restrictions and conditions attached to the authorized shares is included in the Company's 2018 Annual Information Form, a copy of which can be found on SEDAR at [www.sedar.com](http://www.sedar.com).

As of February 21, 2019, there were 15,775 Common Shares issued and outstanding and two Class B Shares issued and outstanding. In addition, as of February 21, 2019, there were 47 Common Shares issuable upon exercise of TeraGo stock options.

**Financial Instruments**

The Company initially measures financial instruments at fair value. Transaction costs that are directly attributable to the issuance of financial assets or liabilities are accounted for as part of the carrying value at inception (except for transaction costs related to financial instruments recorded as FVTPL financial assets which are expensed as incurred), and are recognized over the term of the assets or liabilities using the effective interest method.

Subsequent measurement and treatment of any gain or loss is recorded as follows:

- (i) Financial assets and financial liabilities at FVTPL are measured at fair value at the balance sheet date with any gain or loss recognized immediately in net loss. Interest and dividends earned from financial assets are also included in net loss for the period.
- (ii) Loans and receivables are measured at amortized cost using the effective interest method. Any gains or losses are recognized in net loss for the period.
- (iii) Other financial liabilities are measured at amortized cost using the effective interest method. Any gains or losses are recognized in net loss for the period.

**Impairment of Financial Assets**

The Company's financial assets measured at amortized cost consist of assets discussed in Note 19 of the financial statements.

Under IFRS 9, loss allowances are measured on either of the following bases:

- *12-month ECLs*: these are expected credit losses ("ECLs") that result from possible default events within the 12 months after the reporting date; and
- *lifetime ECLs*: these are ECLs that result from all possible default events over the expected life of a financial instrument.

The Company measures loss allowances for trade receivables and any contract assets at an amount equal to lifetime ECLs. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Company considers reasonable and supportable information that is relevant and

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available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information.

Loss allowances on financial assets measured at amortized cost are deducted from the gross carrying amount of the asset and the related impairment loss is recorded separately on the statement of comprehensive income.

The following is a summary of the Company's significant categories of financial instruments as at December 31, 2018:

<b>Financial Instrument</b>	<b>Classification and measurement method</b>
Financial Assets	
Cash and cash equivalents	Amortized cost
Accounts Receivable	Amortized cost
Financial liabilities	
Accounts payable	Amortized cost
Accrued Liabilities	Amortized cost
Long-term debt	Amortized cost
Derivatives <sup>1</sup>	
Interest rate swap	FVTPL

<sup>1</sup>Derivatives can be in an asset or liability position at a point in time historically or in the future

***Other financial liabilities***

The Company recognizes debt securities issues and subordinated liabilities on the date that they originated. All other financial liabilities are recognized initially on the date that the Company becomes a party to the contractual provisions. The Company has the following non-derivative financial liabilities: current and long-term debt, accounts payable and accrued liabilities, and current portion and long-term portion of other long term liabilities.

Such liabilities are recognized initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

Interest on loans and borrowings is expensed as incurred unless capitalized for qualifying assets in accordance with IAS 23, Borrowing Costs. Loans and borrowings are classified as a current liability unless the Company has an unconditional right to defer settlement for at least 12 months after the end of the year.

***Derivative instruments***

The Company uses an interest rate swap contract to manage the risk associated with the fluctuations of interest rates on its long-term debt. Management does not apply hedge accounting on the interest rate swap contract. As a result, the interest rate swap contract is marked to market each period, resulting in a gain or loss in net loss for the year.

**Financial Instrument Risks**

***Fair value of financial instruments***

The Company has determined the estimated fair values of its financial instruments based on appropriate valuation methodologies. Where quoted market values are not readily available, the Company may use considerable judgment to develop estimates of fair value. Accordingly, any estimated values are not necessarily indicative of the amounts the Company could realize in a current market exchange and could be materially affected by the use of different assumptions or methodologies. The Company classifies its fair value measurements within a fair value hierarchy,

which reflects the significance of the inputs used in making the measurements as defined in IFRS 9 – Financial Instruments – Disclosures.

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2 - Inputs other than quoted prices included in Level 1, that are observable for the asset or liability, either directly or indirectly; and

Level 3 - Unobservable inputs for the asset or liability which are supported by little or no market activity

The fair values of cash and cash equivalents, short-term investments and restricted cash, which are primarily money market and fixed income securities, are based on quoted market values. The fair values of short-term financial assets and liabilities, including accounts receivable, accounts payable and accrued liabilities, as presented in the consolidated statements of financial position, approximate their carrying amounts due to their short-term maturities. The fair value of long-term debt approximates its carrying value because management believes the interest rates approximate the market interest rate for similar debt with similar security. The fair value of our interest rate swap contract is based on broker quotes and therefore, these contracts are measured using Level 2 inputs. Similar contracts are traded in an active market and the quotes reflect the actual transactions in similar instruments.

***Credit risk***

The Company's cash and cash equivalents and restricted cash subject the Company to credit risk. The Company maintains cash and investment balances at large Canadian financial institutions. The Company's maximum exposure to credit risk is limited to the amount of cash and cash equivalents.

Credit risk related to our interest rate swap contract arises from the possibility that the counter party to the agreement may default on their obligation. The Company assesses the creditworthiness of the counterparty to minimize the risk of counterparty default. The interest rate swap is held by National Bank Financial.

The Company, in the normal course of business, is exposed to credit risk from its customers and the accounts receivable are subject to normal industry risks. The Company attempts to manage these risks by dealing with credit worthy customers. If available, the Company reviews credit bureau ratings, bank accounts and industry references for all new customers. Customers that do not have this information available are typically placed on a pre-authorized payment plan for service or provide deposits to the Company. This risk is minimized as the Company has a diverse customer base located across various provinces in Canada.

As at December 31, 2018 and 2017, the Company had no material past due trade accounts receivable.

***Interest rate risk***

The Company is subject to interest rate risk on its cash and cash equivalents and long-term debt. The Company is exposed to interest rate risk on its operating line of credit since the interest rates applicable are variable and is, therefore, exposed to cash flow risks resulting from interest rate fluctuations. As at December 31, 2018, the operating line of credit balance was \$nil. The drawn term facility as at December 31, 2018 was \$33.0 million, \$32.9 million of which was held in a Bankers Acceptance. In 2018, the Company entered into amended interest rate swap contracts to manage interest rate risk on its term facility. The interest rate on the Banker's Acceptance at December 31, 2018 was 5.24%. The remaining \$0.1 million drawn under this facility bears interest for the period at prime rate plus a margin.

***Liquidity risk***

The Company believes that its current cash and cash equivalents and anticipated cash from operations will be sufficient to meet its working capital and capital expenditure requirements for the foreseeable future. As at December 31, 2018, the Company had cash and cash equivalents of \$3.9 million. The Company has access to the \$34.3 million undrawn portion of its \$75 million credit facilities after consideration of outstanding letters of credit, subject to certain financial and non-financial covenants.

**SIGNIFICANT ACCOUNTING ESTIMATES**

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and assumptions are reviewed on an ongoing

basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Key areas of estimation and information about critical judgments in applying accounting policies that have the most significant effect on amounts recognized in the consolidated financial statements are:

- (i) *Estimates of useful lives of network assets, property and equipment and intangible assets:*  
Management's judgment involves consideration of intended use, industry trends and other factors in determining the expected useful lives of depreciable assets, to determine depreciation methods, the asset's residual value and whether an asset is a qualifying asset for the purposes of capitalizing borrowing costs.
- (ii) *Capitalization of costs:*  
Judgments and estimates are used in assessing the direct labour and other costs capitalized to network assets, property and equipment.
- (iii) *Cash generating units:*  
Judgment is required to assess the Company's determination of cash generating units for the purpose of impairment testing.
- (iv) *Impairment of non-financial assets:*  
The process to calculate the recoverable amount of our cash generating unit requires use of valuation methods such as the discounted cash flow method which uses assumptions of key variables including future cash flows, discount rate and terminal growth rates.
- (v) *Valuation Allowance on Trade Receivables:*  
In developing the estimates for an allowance against existing receivables, the Company considers general and industry economic and market conditions as well as credit information available for the customer and the aging of the account. The Company applies the IFRS 9 model to record valuation allowances on Trade Receivables. See Note 3(c) in the Financial Statements for more detail.
- (vi) *Stock-based compensation:*  
Estimating fair value for stock-based payments requires determining the most appropriate valuation model for a grant, which is dependent on the terms and conditions of the grant. In valuing stock options, the Company uses the Black-Scholes option pricing model. Several assumptions are used in the underlying calculation of fair values of the Company's stock options using the Black-Scholes option pricing model including the expected life of the option, risk-free interest rate and volatility of the underlying stock.
- (vii) *Business combination:*  
The amount of goodwill initially recognized as a result of a business combination, the fair value estimate of any contingent consideration and the determination of the fair value of the identifiable assets acquired and the liabilities assumed is based, to a considerable extent, on management's estimate of future cash flows expected to be derived from the assets acquired.
- (viii) *Income taxes:*  
A deferred tax asset is recognized for unused losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable income will be available against which they can be utilized. Significant estimates are required in evaluating the recoverability of deferred tax assets. The Company's assessment is based on existing tax laws, estimates of future profitability and tax planning strategies.
- (ix) *Provisions:*  
Judgment is required to assess the likelihood of an outflow of the economic benefits to settle contingencies, such as litigations or decommissioning and restoration obligations, which may require a liability to be recognized. Significant judgments include assessing estimates of future cash flows, selection of discount rates and the probability of the occurrence of future events.
- (x) *Revenue from contracts with customers:*  
The enforceable term of contracts requires estimating average contract terms based on available historical data. Significant judgements are also made in determining whether the promises to deliver certain services are considered distinct and represent separate performance obligations. In

addition, evaluating whether costs incurred to obtain a contract are incremental and expected to be recoverable requires judgment based on conditions of each individual contract.

## **RISK FACTORS**

TeraGo is exposed to a number of risks and uncertainties that are common to other companies engaged in the same or similar businesses. The following is a summary of the material risks that could significantly affect the financial condition, operating results or business of TeraGo.

### ***Revenues and Operating Results Can Fluctuate***

Our revenue in past periods may not be indicative of future performance from quarter to quarter or year to year. In addition, our operating results may not follow any past trends. The factors affecting our revenue and results, many of which are outside of our control, include:

- competitive conditions in the industry, including strategic initiatives by us or our competitors, new services, service announcements and changes in pricing policy by us or our competitors;
- market acceptance of our services;
- timing and contractual terms of orders for our services, which may delay the recognition of revenue;
- the discretionary nature of purchase and budget cycles of our customers and changes in their budgets for, and timing of, services orders;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- general weakening of the economy resulting in a decrease in the overall demand for telecommunications, data centre, cloud or IT services or otherwise affecting the capital investment levels of medium-sized and enterprise businesses;
- timing of the development of new service offerings;
- no assurance that the Company's current and future competitors will not be able to develop data centre or cloud services or other infrastructure expertise comparable or superior to those developed by the Company or to adapt more quickly than the Company to new technologies, evolving industry standards or customer requirements; and
- seasonal factors which may cause certain cloud service customers to increase or decrease their usage based services.

### ***Transition of the Company to a Multi-Product IT Services Company***

In the past, the core business of the Company was to provide internet access services. The Company has in recent years transitioned to a multi-product IT services company focused on the management of its customer's data flow. In doing so, TeraGo is offering colocation services through its data centres and is offering cloud storage and cloud related managed/professional services. If TeraGo is unable to execute on its business strategy and to grow the business, either as a result of the risks identified in this section or for any other reason, the business, prospects, financial condition and results of operations will be materially and adversely affected.

### ***Reliance on Certain Third Parties***

We rely on third-party suppliers, in some cases sole suppliers or limited groups of suppliers, to provide us with components necessary for the operation and upgrading of our network and infrastructure. If we are unable to obtain sufficient allocations of components, our network expansion will be delayed, we may lose customers and our profitability will be affected. Reliance on suppliers also reduces our control over costs, delivery schedules, reliability and quality of components. Any inability to obtain timely deliveries of quality components, or any other circumstances that would require us to seek alternative suppliers, could adversely affect our ability to expand and maintain our network or infrastructure.

In addition, the Company relies on third party partners, agents and resellers to carry out its business. If these third parties do not honour their contractual commitments or cease to do business, it may have a significant impact on our business. Replacements for such third parties may require a lengthy period of time in order to establish a commercially comparable relationship.

The Company has recently aligned with AWS in preparation to provide managed public cloud services. The benefits of such partnership has not yet been proven and an early termination of the partnership or any unanticipated setbacks may have a material impact on the Company's business and strategic plan.

### ***Regulatory Environment***

We are subject to the laws of Canada and to regulations set by regulatory authorities of the Canadian government, primarily the CRTC and Innovation, Science, Economic Development Canada ("ISED", formerly Industry Canada). Regulatory authorities may adopt new laws, policies or regulations, or change their interpretation of existing laws, policies or regulations, that could cause our existing authorizations to be changed or cancelled, require us to incur additional costs, or otherwise adversely affect our operations, revenue or cost of capital.

Any currently held regulatory approvals or licences may be subject to rescission and non-renewal. Additional approvals or licences may be necessary that we may not be able to obtain on a timely basis or on terms that are not unduly burdensome. Further, if we fail to obtain or maintain particular approvals on acceptable terms, such failure could delay or prevent us from continuing to offer some or all of our current or new services, or offer new services, and adversely affect our results of operations, business prospects and financial condition. Even if we were able to obtain the necessary approvals, the licences or other approvals we obtain may impose significant operational restrictions. The acquisition, lease, maintenance and use of spectrum are extensively regulated in Canada.

These regulations and their application are subject to continual change as new legislation, regulations or amendments to existing regulations are adopted from time to time by governmental or regulatory authorities, including as a result of judicial interpretations of such laws and regulations. Current regulations directly affect the breadth of services we are able to offer and may impact the rates, terms and conditions of our services.

The breach of the conditions of a licence or applicable law, even if inadvertent, can result in the revocation, suspension, cancellation or reduction in the term of a licence or the imposition of fines. In addition, regulatory authorities may grant new licences to third parties, resulting in greater competition in markets where we already have rights to licenced spectrum. In order to promote competition, licences may also require that third parties be granted access to our bandwidth, frequency capacity, facilities or services. We may not be able to obtain or retain any required licence, and we may not be able to renew our licences on favourable terms, or at all.

Our internet access services may become subject to greater regulation in the future. If we become subject to proceedings before the CRTC or ISED with respect to our compliance with the relevant legislation and regulations relating to restrictions on foreign ownership and control, we could be materially adversely affected, even if it were ultimately successful in such a proceeding. There can be no assurance that a future CRTC or ISED determination or events beyond our control will not result in our ceasing to comply with the relevant legislation or regulations. If this occurs, our ability to operate as a Canadian carrier under the *Telecommunications Act* or to hold, renew or secure licences under the *Radio communication Act* could be jeopardized and our business, operating results and financial condition could be materially adversely affected.

### ***Obtaining and Maintaining Licenced Spectrum in Certain Markets***

To offer our internet services using licenced spectrum in Canada, we depend on our ability to acquire and maintain sufficient rights to use spectrum through ownership or long-term leases in each of the markets in which we operate or intend to operate. Obtaining the necessary amount of licenced spectrum can be a long and difficult process that can be costly and require a disproportionate amount of our resources. We may not be able to acquire, lease or maintain the spectrum necessary to execute our business strategy. In addition, we may spend significant resources to acquire spectrum licences, even if the amount of spectrum actually acquired in certain markets is not adequate to deploy our network on a commercial basis in all such markets.

Using licenced spectrum, whether owned or leased, poses additional risks to us, including:

- inability to satisfy build-out or service deployment or research and development requirements upon which our spectrum licences or leases are, or may be, conditioned;
- adverse changes to regulations or licence conditions governing our spectrum rights;
- inability to use the spectrum we have acquired or leased due to interference from licenced or licence-exempt operators in our band or in adjacent bands;
- refusal by ISED to recognize our acquisition or lease of spectrum licences from others or our investments in other licence holders;
- inability to offer new services (including 5G) or to expand existing services to take advantage of new capabilities of our network resulting from advancements in technology due to regulations governing our spectrum rights;
- inability to control leased spectrum due to contractual disputes with, or the bankruptcy or other reorganization of, the licence holders;
- failure of ISED to renew our spectrum licences as they expire and our failure to obtain extensions or renewals of spectrum leases before they expire;

- imposition by ISED of new or amended conditions of licence, or licence fees, upon the renewal of our spectrum licences or in other circumstances;
- potentially significant increases in spectrum prices, because of increased competition for the limited supply of licenced spectrum in Canada; and
- invalidation of our authorization to use all or a significant portion of our spectrum, resulting in, among other things, impairment charges related to assets recorded for such spectrum.

In particular, in June 2017, ISED issued the Consultation on *Releasing Millimetre Wave Spectrum to Support 5G*. This Consultation contemplates the future use of certain millimetre wave spectrum to support the deployment 5G wireless networks and systems. The spectrum bands identified by ISED includes (amongst others) the 38 GHz band which the Company currently holds licences in. As of the date hereof, the Company has submitted a comment letter and a reply comment letter in response to the Consultation and final decisions from ISED on this Consultation are yet to be released. The final decisions made by ISED may have a negative and material impact on the Company if there is a decision to not renew the Company's spectrum licences in the 38 GHz band, or a renewal is only permitted for a portion of such licences, all such outcomes currently contemplated via the abovementioned Consultation. If the 38 GHz licences are not permitted to be renewed beyond their current licencing term ending in 2025, the value of such licences may decrease and the Company will be forced to seek alternative spectrum and bands, and may incur significant costs to continue to provide certain of its connectivity services.

For additional information on the Consultation and to review the response letter of the Company or other stakeholders, please refer to ISED's Consultation webpage: [https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h\\_sf11245.html](https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf11245.html).

While the 38 GHz spectrum band has been identified by ISED as one of the bands contemplated for future use to support the deployment of 5G through a Consultation, a similar Consultation has not been issued for the 24 GHz band. The Company's 24 GHz licences have a set expiry date in 2025. There are no guarantees that such licences will be renewed beyond 2025 or won't be subject to any potential claw back by ISED. If the licences are not renewed or a material portion of the licences are required to be return to ISED, the Company may be forced to seek alternative spectrum and bands, discontinue existing services, and/or may incur significant costs to continue to provide certain of its connectivity services.

As of the date hereof, decisions from ISED on the Consultation on Releasing Millimetre Wave Spectrum to Support 5G have yet to be released and there can be no assurances that the particular 38 GHz and 24 GHz band licences that the Company holds or leases will be identified in the future for potential 5G use. If either of the 38 GHz and 24 GHz licences that the Company holds are determined by ISED to not qualify for 5G use, or does qualify but with stringent conditions and terms of use, it may have a negative effect on the value of these licences and therefore impact negatively on the value of the Company and its common shares.

We expect ISED to make additional spectrum available from time to time. Additionally, other companies hold spectrum rights that could be made available for lease or sale. The availability of additional spectrum in the marketplace could change the market value of spectrum rights generally and, as a result, may adversely affect the value of our spectrum assets.

We also use radio equipment under individual radio licences issued by ISED, and subject to annual renewal. We may not be able to obtain the licences we require thereby jeopardizing our ability to reliably deliver our internet services. ISED may decline to renew our licences, or may impose higher fees upon renewal, or impose other conditions that adversely affect us. ISED may decide to reassign the spectrum in the bands we use to other purposes, and may require that we discontinue our use of radio equipment in such bands.

#### ***Licence-exempt Spectrum***

We presently utilize licence-exempt spectrum in connection with a majority of our internet customers. Licence-exempt or "free" spectrum is available to multiple simultaneous users and may suffer bandwidth limitations, interference and slowdowns if the number of users exceeds traffic capacity. The availability of licence-exempt spectrum is not unlimited and others do not need to obtain permits or licences to utilize the same licence-exempt spectrum that we currently or may in the future utilize, threatening our ability to reliably deliver or expand our services. Moreover, the prevalence of licence-exempt spectrum creates low barriers to entry in our business, creating the potential for heightened competition.

#### ***Potential Use of 5G Equipment and Business Case***

In 2018, the Company began a technical trial in the Greater Toronto Area involving fixed wireless 5G millimetre wave equipment from PHAZR Inc. This is preliminary testing of new technology and equipment by the Company and the results of these technical trials for 5G equipment may not be satisfactory. In addition, the opportunities and business case for a 5G-related business has not yet been developed nor fully explored, and therefore no assumptions or assurances can be made that TeraGo will develop or provide 5G-services on a commercial basis. Moreover, the

Company has not yet determined the capital needs, and whether such capital is available to provide 5G-related services, or whether equipment suppliers like PHAZR and its competitors could be relied on to supply such equipment in a manner that would support a 5G-related opportunity.

***Integration and Anticipated Benefits Pursuant to Past Acquisitions***

On March 27, 2015, the Company completed the acquisition of RackForce and on November 9, 2018 the Company completed its acquisition of MSI (collectively the "Acquisitions"). The Company may not be able to fully realize the anticipated future benefits and synergies of the Acquisitions on a timely basis or at all. The Acquisitions involve challenges and risks, including risks that the transactions do not advance TeraGo's business strategy or that the Company will not realize a satisfactory return. The potential failure of the due diligence processes to identify significant problems, liabilities or other shortcomings or challenges with respect to assets of RackForce, BoxFabric and the Hosting Business including customer contracts, condition of the equipment acquired, intellectual property, revenue recognition or other accounting practices, taxes, corporate governance and internal controls, regulatory compliance, employee, supplier or partner disputes or issues and other legal and financial contingencies could decrease or eliminate the anticipated benefits and synergies of the Acquisitions and could negatively affect the Company's future business and financial results.

The overall success of the Acquisitions will depend, in part, on the Company's ability to realize the anticipated benefits and synergies from combining and integrating the acquired businesses into TeraGo's existing business. Integration of acquisitions require significant management attention and expansion of TeraGo's staff in operations, marketing, sales and general and administrative functions. The Company may have difficulties in the integration of the acquired company's departments, systems, including accounting, human resource and other administrative systems, technologies, books and records, and procedures, as well as in maintaining uniform standards, controls, including internal control over financial reporting required by Canadian securities laws and related procedures and policies. If we cannot integrate the acquisitions successfully, it could have a material adverse impact on our business, financial condition and results of operations.

As part of the Company's business strategy, TeraGo may also continue to acquire additional companies, assets or technologies principally related to, or complementary to, our current operations. Any such acquisitions will be accompanied by certain risks including but not limited to exposure to unknown liabilities of acquired companies, higher than anticipated acquisition costs and expenses, the difficulty and expense of integrating operations, systems, and personnel of acquired companies, disruption of the Company's ongoing business, inability to retain key customers, distributors, vendors and other business partners of the acquired company, diversion of management's time and attention; and possible dilution to shareholders.

***Price Sensitive Market***

The competitive market in which the Company conducts its business could require the Company to reduce its prices. If competitors offer discounts on certain products or services in an effort to recapture or gain market share or to sell other products, the Company may be required to lower prices or offer other favourable terms to compete successfully. Any such changes would likely reduce the Company's margins and could adversely affect operating results. Some of the Company's competitors may bundle services that compete with the Company for promotional purposes or as a long-term pricing strategy or provide guarantees of prices and product implementations. These practices could, over time, limit the prices that the Company can charge for its products. If the Company cannot offset price reductions with a corresponding increase in volume, bundling of services or with lower spending, then the reduced revenues resulting from lower prices would adversely affect the Company's margins and operating results.

***Market Demand for Available Capacity***

The Company currently has available capacity in its data centres and intends to expand its footprint in the cloud and data centre market. There can be no assurance that the existing or future market demand will be sufficient to fill this capacity. Should the demand for the Company's cloud and data centre services decline or fail to increase, this may negatively affect the Company's ability to capitalize on its high operating leverage and may adversely affect the Company's future financial performance.

Reductions in the amount or cancellations of customers' orders would adversely affect our business, results of operations and financial condition.

***Cyber Security Risk***

Our network security, data centre security and the authentication of our customer credentials are designed to protect unauthorized access to data on our network and to our data centre premises. Because techniques used to obtain unauthorized access to or sabotage networks (including DDoS attacks) change frequently and may not be recognized until launched against a target, we may be unable to anticipate or implement adequate preventive measures against unauthorized access or sabotage. Consequently, unauthorized parties may overcome our network security and obtain access to confidential, customer or employee data on our network, including on a device connected to our network. In

addition, because we own and operate our network, unauthorized access or sabotage of our network could result in damage to our network and to the computers or other devices used by our customer. An actual or perceived breach of network security or data centre security could harm public perception of the effectiveness of our security measures, adversely affect our ability to attract and retain customers, expose us to significant liability and adversely affect our business and revenue prospects.

The Company aims to mitigate and manage certain cyber security risks by employing specific policies and procedures, carrying out IT security-related audits, establishing internal controls relevant to mitigating security risks, performing certain "penetration" tests either internally or with help of third party consultants, obtaining IT security-related compliance certificates, designating a security officer that oversees the IT security of the Company, designating a privacy officer that is accountable for the Company's compliance with applicable privacy laws, using DDoS mitigation, tools and services, utilizing back-up and disaster recovery services and maintaining specific cyber liability insurance coverage to insure against cyber security incidents. The Audit Committee of Company has been tasked to periodically review the various measures management and the Company has undertaken to manage its cyber security risks.

#### ***Excessive Customer Churn***

The successful implementation of our business strategy depends upon controlling customer churn. Customer churn is a measure of customers who stop using our services. Customer churn could increase as a result of:

- billing errors and/or reduction in the quality of our customer service;
- interruptions to the delivery of services to customers;
- the availability of competing technology and other emerging technologies, some of which may, from time to time, be less expensive or technologically superior to those offered by us; and
- competitive conditions in the industry, including strategic initiatives by us or our competitors, new services, service announcements and changes in pricing policy by us or our competitors.

An increase in customer churn can lead to slower customer growth, increased costs and a reduction in revenue. Given the current economic environment, there is risk that churn levels could increase in the future.

#### ***Insufficient Capital***

The continued growth and operation of our business may require additional funding for working capital, debt service, the enhancement and upgrade of our network, the build-out of infrastructure to expand the coverage area of our services, possible acquisitions and possible bids to acquire spectrum licences. We may be unable to secure such funding when needed in adequate amounts or on acceptable terms, if at all.

To execute our business strategy, we may issue additional equity securities in public or private offerings, potentially at a price lower than the market price at the time of such issuance. Similarly, we may seek debt financing and we may be forced to incur significant interest expense. If we cannot secure sufficient funding, we may be forced to forego strategic opportunities or delay, scale back or eliminate network deployments, operations, acquisitions, spectrum acquisitions and other investments.

#### ***Reliance on Credit Facilities and Restrictive Debt Covenants***

The Company relies on its Credit Facilities to operate its business, including for the maintenance of a certain level of liquidity and to carry out its strategy. There can be no assurance that the Company will continue to have access to appropriate Credit Facilities on reasonable terms and conditions, if at all beyond the maturity date of June 14, 2021 for the existing Credit Facilities. An inability to draw down upon the Credit Facilities could have a material adverse effect on the Company's business, liquidity, financial condition and results of operations.

Covenants in our Credit Facilities with our lenders impose operating and financial restrictions on us. A breach of any of these covenants could result in a default under our Credit Facilities. These restrictions may limit our ability to obtain additional financing, withstand downturns in our business and take advantage of business opportunities. Moreover, we may be required to seek additional debt financing on terms that include more restrictive covenants, may require repayment on an accelerated schedule or may impose other obligations that limit our ability to grow our business, acquire needed assets, or take other actions we might otherwise consider appropriate or desirable.

#### ***Key Competitors are More Established and Have More Resources***

The market for internet access, data connectivity, cloud and data centre services is highly competitive and we compete with several other companies within each of our markets. Many of our competitors are better established or have greater financial resources than we have. Our competitors include:

- ILECs and CLECs providing DSL and fibre-optic enabled services over their existing wide, metropolitan and local area networks and who have started to provide cloud and colocation services;

- Utelcos offering or planning to offer internet and data connectivity over fibre optic networks;
- Large cloud service providers and IT companies;
- Colocation and disaster recovery service providers;
- cable operators offering high-speed Internet connectivity services and voice communications;
- wireless Internet service providers using licenced or licence-exempt spectrum;
- satellite and fixed wireless service providers offering or developing broadband Internet connectivity and VoIP; and
- resellers providing wireless Internet or other wireless services using infrastructure developed and operated by others.

Many of our competitors are well established with larger and better developed networks and support systems, longer standing relationships with customers and suppliers, greater name recognition and greater financial, technical and marketing resources than we have. Our competitors may subsidize competing services with revenue from other sources and, thus, may offer their products and services at prices lower than ours. We may not be able to reduce our prices which may make it more difficult to attract and retain customers.

We expect other existing and prospective competitors to adopt technologies and/or business plans similar to ours, or seek other means to develop services competitive with ours, particularly if our services prove to be attractive in our target markets.

***Acquisitions and Other Strategic Transactions***

We may from time to time make strategic acquisitions of other assets and businesses. Any such transactions can be risky, may require a disproportionate amount of our management and financial resources and may create unforeseen operating difficulties or expenditures, including:

- difficulties in integrating acquired businesses and assets into our business while maintaining uniform standards, controls, policies and procedures;
- obligations imposed on us by counterparties in such transactions that limit our ability to obtain additional financing, our ability to compete in geographic areas or specific lines of business or other aspects of our operational flexibility;
- increasing cost and complexity of assuring the implementation and maintenance of adequate internal control and disclosure controls and procedures;
- difficulties in consolidating and preparing our financial statements due to poor accounting records, weak financial controls and, in some cases, procedures at acquired entities not based on IFRS, particularly those entities in which we lack control; and
- inability to predict or anticipate market developments and capital commitments relating to the acquired company, business or assets.

If we do not successfully address these risks or any other problems encountered in connection with an acquisition, the acquisition could have a material adverse effect on our business, results of operations and financial condition. In addition, if we proceed with an acquisition, our available cash may be used to complete the transaction, diminishing our liquidity and capital resources, or additional equity may be issued which could cause significant dilution to existing shareholders.

***Changes to Technologies and Standards***

The industries TeraGo operates is characterized by rapidly changing technology, evolving industry standards and increasingly sophisticated customer requirements. The introduction of new or alternative technology and the emergence of new industry standards may render our existing network, equipment and/or infrastructure obsolete and our services unmarketable and may exert price pressures on existing services. It is critical to our success that we be able to anticipate changes in technology or in industry standards and ensure that we can leverage such new technologies and standards in a timely and cost-effective manner to remain competitive from a service and cost perspective. Rapid changes in business demands may also affect the Company's internal processes where certain software tools, processes, and standards may become inefficient or obsolete. The Company may fail to keep pace with changes in these technologies and practices which may result in operational breakdowns and/or financial losses.

***Investments in Development of New Technologies, Products and Services***

The Company has and will continue to make significant investments in the development and introduction of new products and services that make use of the Company's network, infrastructure and equipment. There is no assurance that the Company will be successful in implementing and marketing these new products and services (including 5G) in a reasonable time, or that they will gain market acceptance. Development could be delayed for reasons beyond our control. Alternatively, we may fail to anticipate or satisfy the demand for certain products or services, or may not be able to offer or market these new products or services successfully to customers. The failure to attract customers to new products or services, cross-sell service to our existing customer base or failure to keep pace with changing consumer preferences for products or services would slow revenue growth and could have a materially adverse effect on our business, results of operations and financial condition.

***Expanding, Upgrading and Maintaining Network and Infrastructure***

We expect to allocate significant resources in expanding, maintaining and improving our network. Additionally, as the number of our customer locations increases, as the usage habits of our customers change and as we increase our service offerings, we may need to upgrade our network to maintain or improve the quality of our services. If we do not successfully implement upgrades to our network, the quality of our services may decline and our churn rate may increase.

We may experience quality deficiencies, cost overruns and delays with the expansion, maintenance and upgrade of our network and existing infrastructure including the portions of those projects not within our control. Expansion of our network or infrastructure may require permits and approvals from governmental bodies and third parties. Failure to receive approvals in a timely fashion can delay expansion of our network. In addition, we are typically required to obtain rights from land, building and tower owners to install the antennas and other equipment that provide our internet access service to our customers. We may not be able to obtain, on terms acceptable to us or at all, the rights necessary to expand our network or existing infrastructure.

We also may face challenges in managing and operating our network and existing infrastructure. These challenges include ensuring the availability of customer equipment that is compatible with our network and managing sales, advertising, customer support, and billing and collection functions of our business while providing reliable network service that meets our customers' expectations. Our failure in any of these areas could adversely affect customer satisfaction, increase churn, increase our costs, decrease our revenue and otherwise have a material adverse effect on our business, prospects, financial condition and results of operations.

***Foreign Exchange***

While the majority of the Company's revenues are earned in Canadian dollars, a portion of its costs, including for certain capital expenditures are paid in U.S. dollars. As a result, the Company is exposed to currency exchange rate risks. A change in the currency exchange rate may increase or decrease the amount of Canadian dollars required to be paid by the Company for its U.S. expenditures. The Company does not currently have any foreign exchange contracts to manage the foreign exchange risk. As a result, there can be no assurance that currency fluctuations will not have a material adverse effect on the Company.

***Physical Inventory***

The nature of our business requires the Company to procure, deploy, track, and maintain large volumes of specialized network and datacentre equipment purchased in Canada and abroad. Equipment is frequently moved between provinces in Canada as part of provisioning. As a result, the Company is subject to inventory risk due to delays in inventory movement as well as process breakdowns in provisioning and deploying inventory to a customer site, network site, or datacenter facility. These delays may result in unintended backlog and inventory losses. The Company relies heavily on the ability of our vendors to supply us in a timely manner as well as the diligence of the Company's internal process owners to ensure provisioning and inventory management is effective.

***Interest Rates***

As the Company currently borrows funds through its credit facility, certain portions of the facility are based on a variable interest rate. A significant rise in interest rates may materially increase the cost of either its revolving or non-revolving credit facilities. The Company mitigates a portion of the underlying interest rate risk with respect to the non-revolving term credit facility by entering into an interest rate swap contract to effectively fix the underlying interest rate on a variable rate debt. Similar interest rate swap contracts have not been entered into for the other portions of the credit facility. To the extent funds have been drawn down from such facilities, the Company will be exposed to interest rate fluctuations.

***Interruption or Failure of Information Technology and Communications Systems***

We have experienced service interruptions in some markets in the past and may experience service interruptions or system failures in the future. Our services depend on the continuing operation of our cloud and data centre, information technology and communications systems. Any service interruption adversely affects our ability to operate our business and could result in an immediate loss of revenue. If we experience frequent or persistent system, power or network failures, our reputation and brand could be permanently harmed. We may make significant capital expenditures to increase the reliability and security of our systems, but these capital expenditures may not achieve the results we expect.

Our systems and data centres are vulnerable to damage or interruption from earthquakes, terrorist attacks, floods, fires, power loss, telecommunications failures, computer viruses, computer denial of service attacks or other attempts to harm our systems, and similar events. Some of our systems are not fully redundant and our disaster recovery planning may not be adequate. The occurrence of a natural disaster or unanticipated problems at our network centres or data centres could result in lengthy interruptions in our service and adversely affect our operating results. The Company could also be required to make significant expenditures if the Company's systems were damaged or destroyed, or pay damages if the delivery of the Company's services to its customers were delayed or stopped by any of these occurrences.

***Retention and Motivation of Personnel***

We depend on the services of key technical, sales, marketing and management personnel. The loss of any of these key persons could have a material adverse effect on our business, results of operations and financial condition. Our success is also highly dependent on our continuing ability to identify, hire, train, motivate and retain highly qualified technical, sales, marketing and management personnel.

Competition for such personnel can be intense and we cannot provide assurance that we will be able to attract or retain highly qualified technical, sales, marketing and management personnel in the future. Our inability to attract and retain the necessary technical, sales, marketing and management personnel may adversely affect our future growth and profitability. It may be necessary for us to increase the level of compensation paid to existing or new employees to a degree that our operating expenses could be materially increased.

If we cannot hire, train and retain motivated and well-qualified individuals, we may face difficulties in attracting, recruiting and retaining various sales and support personnel in the markets we serve, which may lead to difficulties in growing our subscriber base.

***Leased Data Centre Facilities***

The Company's data centres are located in leased premises and there can be no assurance that the Company will remain in compliance with the Company's leases, that the landlord will continue to support the operation of the Company's data centre and that the leases will not be terminated despite negotiation for long term lease periods and renewal provisions. Termination of a lease could have a material adverse effect on the Company's business, results of operations and financial condition.

***Electrical Power and Outages***

The Company's data centres are susceptible to regional variations in the cost of power, electrical power outages, planned or unplanned power outages and limitations on availability of adequate power resources. Power outages can harm, and in the past, have harmed the Company's customers and its business, including the loss of customers' data and extended service interruptions. While the Company attempts to limit exposure to system downtime by using backup generators and power supplies, the Company cannot limit the Company's exposure entirely even with these protections in place. With respect to any increase in energy costs, the Company may not always be able to pass these increased costs on to the Company's customers which could have a material adverse effect on the Company's business, results of operations and financial condition.

***Litigation Risk and Intellectual Property Claims***

Competitors or other persons may independently develop, patent technologies or copyright software that are substantially equivalent or superior to those we currently use or plan to use or that are necessary to permit us to deploy and operate our network, data centres or provide cloud services. Some of these patents, copyrights or rights may grant very broad protection to the owners. We cannot determine with certainty whether any existing third party intellectual property or the issuance of any third party intellectual property would require us to alter technology or software we use, obtain licences or cease certain activities. Defending against infringement claims, even meritless ones, would be time consuming, distracting and costly.

If we are found to be infringing the proprietary rights of a third party, we could be enjoined from using such third party's rights, may be required to pay substantial royalties and damages, and may no longer be able to use the intellectual

property subject to such rights on acceptable terms or at all. Failure to obtain licences to intellectual property held by third parties on reasonable terms, or at all, could delay or prevent us from providing services to customers and could cause us to expend significant resources to acquire technology which includes non-infringing intellectual property.

If we have to negotiate with third parties to establish licence arrangements, or to renew existing licences, it may not be successful and we may not be able to obtain or renew a licence on satisfactory terms or at all. If required licences cannot be obtained, or if existing licences are not renewed, litigation could result.

#### ***Operating Losses***

We have incurred a net loss in the past several fiscal years. We cannot anticipate with certainty what our earnings, if any, will be in any future period. However, we could incur further net losses as we continue to expand our network into new and existing markets and pursue our business strategy in providing cloud and data centre services. Accordingly, our results of operations may fluctuate significantly, which may adversely affect the value of an investment in our Common Shares. We may also invest significantly in our business before we expect cash flow from operations to be adequate to cover our anticipated expenses.

#### ***Economic and Geopolitical Risk***

The market for our services depends on economic and geopolitical conditions affecting the broader market. Economic conditions globally are beyond our control. In addition, acts of terrorism and the outbreak of hostilities and armed conflicts between countries can create geopolitical uncertainties that may affect the global economy. Downturns in the economy or geopolitical uncertainties may cause customers to delay or cancel projects, reduce their overall capital or operating budgets or reduce or cancel orders for our services, which could have a material adverse effect on our business, results of operations and financial condition.

#### ***Regulation of Internet***

Regulation of the Internet and the content transmitted through that medium is a topic that receives considerable political discussion from time to time, from both a "pro-regulation" and an "anti-regulation" perspective, including discussions on whether all internet traffic should be delivered equally. It is unclear as to what impact decisions made on either side of this issue by various political and governing bodies could have on us and our business or on the ability of our customers to utilize our internet services.

### **ACCOUNTING PRONOUNCEMENTS ADOPTED IN 2018**

#### **a) IFRS 15 Revenue from Contracts with Customers**

Effective January 1, 2018, the Company adopted IFRS 15 Revenue from Contracts with Customers. IFRS 15 supersedes the existing standards and interpretations including IAS 18, Revenue and IFRIC 13, Customer Loyalty Programmes. IFRS 15 introduces a single model for recognizing revenue from contracts with customers with the exception of certain contracts under other IFRSs. The standard requires revenue to be recognized in a manner that depicts the transfer of promised goods or services to a customer and at an amount that reflects the expected consideration receivable in exchange for transferring those goods or services. This is achieved by applying the following five steps:

1. Identify the contract with a customer;
2. Identify the performance obligations in the contract;
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations in the contract; and
5. Recognize revenue when (or as) the entity satisfies a performance obligation.

IFRS 15 also provides guidance relating to the treatment of contract acquisition and contract fulfillment costs.

The Company adopted IFRS 15 using the cumulative effect method, i.e. by recognizing the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of retained earnings at January 1, 2018. Therefore, comparative information has not been restated and continues to be reported under IAS 18.

The Company has implemented several processes and policies to ensure the consistent, timely, and appropriate allocation of revenue between performance obligations in contracts with customers.

The adoption of IFRS 15 did not affect the Company's cash flows from operating, investing, or financing activities. Furthermore, the impact on timing of revenue recognition was not material as the treatment of revenue for services rendered over time, which is the method under which Company satisfies the majority of its performance obligations, is consistent under IFRS 15 and IAS 18. The details of the significant changes and quantitative impact of the changes are outlined in Note 4 of the Consolidated Financial Statements for the year ended December 31, 2018.

**i) Sale of Bundled Services**

The Company offers customers bundled connectivity, colocation, and cloud services. Revenue from these arrangements were previously classified on the nature of the contract. Under IFRS 15, total consideration in contracts with customers are allocated to distinct performance obligations based on their stand-alone selling prices. The Company determined the stand-alone selling price to be the list price at which the Company sells connectivity, and colocation & cloud services. As a result of the allocation of performance obligations under IFRS 15, certain amounts that would have been classified as cloud & colocation revenue are now presented as connectivity revenue.

**ii) Service Credits**

The Company has obligations for credits under its contracts with customers when certain criteria are met. Credits are recognized net of revenue recognized and presented in total revenue on the statement of comprehensive income.

**iii) Contract Costs**

IFRS 15 requires certain contract acquisition costs to be recognized as an asset on the statement of financial position and amortized into income over time. The Company typically incurs internal or external sales commissions fees to obtain contracts with customers. Prior to the adoption of IFRS 15, the Company had expensed all commission costs as incurred. The Company now capitalizes these commission fees as costs of obtaining a contract when they are incremental and expected to be recovered. These costs are amortized consistently with the pattern of revenue for the related contracts and are recorded in salaries and related costs on the statement of comprehensive loss.

Contract costs are presented separately as an asset on the consolidated statement of financial position. The Company has opted not to use practical expedients under the cumulative effect method and as a result, the current portion of contract costs are presented in current assets. The current portion represent amounts expected to be amortized in the next 12 months. The Company had to make significant judgments and estimates when estimating certain contract costs incurred in prior years that continue to be incremental and recoverable in the current period.

**iv) Contract Assets**

Contract assets arise primarily as a result of services offered and provided in advance of payments received from a customer. From time to time, the Company will offer promotions which will give rise to contract assets. These arrangements are recorded in other long-term assets on the balance sheet with current and long-term amounts presented separately on the statement of financial position. The current portion represents the performance obligation to be satisfied and recognized as revenue in the next twelve months.

**v) Contract Liabilities**

Contract liabilities arise primarily as a result of payment made in advance of providing services to a customer. The Company had previously presented these arrangements as deferred revenue. These payments are now presented as contract liabilities with current and long-term amounts presented separately on the statement of financial position. The current portion represents the performance obligation to be satisfied and recognized in revenue in the next 12 months.

**vi) Impacts on Financial results**

The following table highlights some of the key impacts on our financial metrics discussed in the MD&A:

	Three months ended December 31				Year ended December 31		
	<u>2018 (As reported)</u>	<u>2018 (Without adoption of IFRS 15)</u>	<u>% Change</u>		<u>2018 (As reported)</u>	<u>2018 (Without adoption of IFRS 15)</u>	<u>% Change</u>
<b>Financial</b>							
Cloud and Colocation Revenue	\$ 4,475	4,881	-8.3%	\$	19,290	20,802	-7.3%
Connectivity Revenue	\$ <u>8,393</u>	<u>8,000</u>	4.9%	\$	<u>35,005</u>	<u>33,495</u>	4.5%
Total Revenue	\$ 12,868	12,881	-	\$	54,295	54,297	-
Adjusted EBITDA <sup>(1) (2)</sup>	\$ 3,119	3,249	-4.0%	\$	12,964	12,912	0.4%
Net Income (Loss)	\$ (1,972)	(1,842)	7.1%	\$	(4,820)	(4,872)	-1.1%
<b>Operating</b>							
<u>Backlog MRR<sup>(1)</sup></u>							
Connectivity	\$ 64,659	63,624	1.6%	\$	64,659	63,624	1.6%
Cloud & Colocation	\$ 31,742	32,777	-3.2%	\$	31,742	32,777	-3.2%
<u>ARPU<sup>(1)</sup></u>							
Connectivity	\$ 1,054	1,004	5.0%	\$	1,053	1,010	4.3%
Cloud & Colocation	\$ 3,138	3,413	-8.1%	\$	3,147	3,411	-7.7%

(1) See "Definitions – Key Performance Indicators, IFRS, Additional GAAP and Non-GAAP Measures"

(2) See "Adjusted EBITDA" for a reconciliation of net loss to Adjusted EBITDA

**vii) Use of estimates**

The Company used estimates in the following areas:

- Determining the enforceable term of contracts required estimating average contract terms based on available historical data
- Significant judgments in determining whether the promises to deliver certain services are considered distinct and represent separate performance obligations
- Evaluating whether costs incurred to obtain a contract were incremental and expected to be recoverable

**b) IFRS 9 Financial Instruments**

Effective January 1, 2018, the Company adopted IFRS 9 Financial Instruments. IFRS 9 sets out requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 Financial Instruments: Recognition and Measurement.

The adoption of this standard did not have a material effect on our consolidated financial statements.

**i) Impairment of financial assets**

IFRS 9 replaces the 'incurred loss' model in IAS 39 with an 'expected credit loss' (ECL) model. The new impairment model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investments in equity instruments. Under IFRS 9, credit losses are recognized earlier than under IAS 39.

The Company's financial assets measured at amortized cost consist of trade receivables.

Under IFRS 9, loss allowances are measured on either of the following bases:

- *12-month ECLs*: these are expected credit losses ("ECLs") that result from possible default events within the 12 months after the reporting date; and
- *lifetime ECLs*: these are ECLs that result from all possible default events over the expected life of a financial instrument.

The Company measures loss allowances for trade receivables and any contract assets at an amount equal to lifetime ECLs. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

At each reporting date, the Company assesses whether financial assets carried at amortized cost are credit-impaired.

**ii) Measurement of loss allowances**

For trade receivables, the Company uses historic actual credit losses as the basis for estimating ECLs and uniformly applies this estimate to its gross balance net of balances already fully impaired at each reporting date. The Company believes this amount to best estimate the expected credit losses.

**iii) Presentation of loss allowances**

Loss allowances on financial assets measured at amortized cost are deducted from the gross carrying amount of the asset and the related impairment loss is recorded separately on the statement of comprehensive income.

**UPCOMING ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED**

Certain new standards, interpretations, amendments and improvements to existing standards have been issued by the IASB. The standards impacted that may be applicable to the Company are as follows:

**IFRS 16 Leases**

On January 13, 2016, the IASB issued the final publication of the IFRS 16 standard, which will supersede the current IAS 17, Leases standard. Under IFRS 16, a lease will exist when a customer controls the right to use an identified asset as demonstrated by the customer having exclusive use of the asset for a period of time. IFRS 16 introduces a single accounting model for lessees and all leases will require an asset and liability to be recognized on the statement of financial position at inception.

The standard is effective for annual periods beginning on or after January 1, 2019 with early adoption permitted, but only if the entity is also applying IFRS 15. The Company has a dedicated team to assess the impact of IFRS 16 and the team has gathered a significant portion of the information necessary to evaluate the impact of the standard. The team is expected to quantify the impact of the standard upon completion of their assessment. The Company expects the standard to have a significant impact on the Consolidated Statements of Financial Position as the Company will be required to recognize a right-of-use asset and corresponding lease liability for its network sites, datacenters, and office leases. Furthermore, the Company expects a decrease in other operating expenses, an increase in depreciation expense (as the right-of-use asset is depreciated), and an increase in finance costs (due to accretion of the lease liability). This impact will have a positive impact on Adjusted EBITDA as both depreciation and finance costs are added back in its calculation.

**INTERNAL CONTROL OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS AND PROCEDURES**

Our President and Chief Executive Officer and Chief Financial Officer, designed or caused to be designed under their supervision, TeraGo's disclosure controls and procedures and internal control over financial reporting.

TeraGo's disclosure controls and procedures are designed to provide reasonable assurance that material information relating to TeraGo is made known to management by others, particularly during the period in which the interim filings are being prepared and that information required to be disclosed by TeraGo in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation. TeraGo's disclosure controls and procedures includes controls and procedures designed to ensure that information required to be disclosed by TeraGo in its annual filings, interim filings or other reports filed or submitted under securities legislation is accumulated and communicated to management, as appropriate to allow timely decisions regarding required disclosure.

TeraGo's internal control over financial reporting are designed to provide reasonable assurance regarding reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. TeraGo's

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internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of TeraGo; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of TeraGo are being made only in accordance with authorizations of management and directors of TeraGo; and (iii) are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of TeraGo's assets that could have a material effect on TeraGo's financial statements.

The control framework used to design TeraGo's internal control over financial reporting is based on the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013).

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

There were no changes in the Company's internal controls over financial reporting for the year ended December 31, 2018 that have materially affected or are reasonably likely to materially affect internal controls over financial reporting. Management has concluded that there are no material weaknesses relating to the design of TeraGo's internal controls over financial reporting as of December 31, 2018. In accordance with Section 3.3 of National Instrument 52-109 – Certificate of Disclosure in Issuers' Annual and Interim Filings, the Company has limited the design of disclosure controls and procedures and internal controls over financial reporting to exclude controls, policies and procedures of MSI which was acquired not more than 365 days before the end of year ended December 31, 2018. The table below shows a summary of the financial information for MSI which is included in the year end consolidated financial statements of the Company as at December 31, 2018:

Non-current assets:           \$5.6 million

## **EXECUTIVE MANAGEMENT CHANGES**

Effective January 1, 2018, Mark Lau was appointed as Vice President, Legal & General Counsel, having previously served as General Counsel to the Company.

Effective May 15, 2018, Christine Gauthier, Vice President of Sales, is no longer with the Company.

Effective August 15, 2018, Christopher Taylor was appointed as Vice President, Product Management and Business Development, having previously served as Director, Product Management to the Company.

**DEFINITIONS – KEY PERFORMANCE INDICATORS, IFRS, ADDITIONAL GAAP AND NON-GAAP MEASURES**

**IFRS Measures**

***Cost of services***

Cost of services consists of expenses related to delivering service to customers and servicing the operations of our networks. These expenses include costs for the lease of intercity facilities to connect our cities, internet transit and peering costs paid to other carriers, network real estate lease expense, spectrum lease expenses and lease and utility expenses for the data centres and salaries and related costs of staff directly associated with the cost of services.

***Gross profit margin %***

Gross profit margin % consists of gross profit margin divided by revenue where gross profit margin is revenue less cost of services.

***Other operating expenses***

Other operating expenses includes sales commission expense, advertising and marketing expenses, travel expenses, administrative expenses including insurance and professional fees, communication expenses, maintenance expenses and rent expenses for office facilities.

***Foreign exchange gain (loss)***

Foreign exchange gain (loss) relates to the translation of monetary assets and liabilities into Canadian dollars using the exchange rate in effect at that date. The resulting foreign exchange gains and losses are included in net income in the period.

***Finance costs***

Finance costs consist of interest charged on our short- and long-term debt, amortization of deferred financing costs including expenses associated with closing our long-term debt facility and accretion expense on the Company's decommissioning and restoration obligations. The deferred financing costs are amortized using the effective interest method over the term of the loan.

***Finance income***

Finance income consists of interest earned on our cash and cash equivalent and short-term investment balances.

**Additional GAAP Measures**

***Earnings (loss) from operations***

Earnings (loss) from operations exclude foreign exchange gain (loss), income taxes, finance costs and finance income. We include earnings (loss) from operations as an additional GAAP measure in our consolidated statement of earnings. We consider earnings (loss) from operations to be representative of the activities that would normally be regarded as operating for the Company. We believe this measure provides relevant information that can be used to assess the consolidated performance of the Company and therefore, provides meaningful information to investors.

**Non-GAAP Measures**

***Adjusted EBITDA***

The term "EBITDA" refers to earnings before deducting interest, taxes, depreciation and amortization. The Company believes that Adjusted EBITDA is useful additional information to management, the Board and investors as it provides an indication of the operational results generated by its business activities prior to taking into consideration how those activities are financed and taxed and also prior to taking into consideration asset depreciation and amortization and it excludes items that could affect the comparability of our operational results and could potentially alter the trends analysis in business performance. Excluding these items does not necessarily imply they are non-recurring, infrequent or unusual. Adjusted EBITDA is also used by some investors and analysts for the purpose of valuing a company. The Company calculates Adjusted EBITDA as earnings before deducting interest, taxes, depreciation and amortization, foreign exchange gain or loss, finance costs, finance income, gain or loss on disposal of network assets, property and equipment, impairment of property, plant, & equipment and intangible assets, stock-based compensation and restructuring, acquisition-related and integration costs. Investors are cautioned that Adjusted EBITDA should not be construed as an alternative to operating earnings or net earnings determined in accordance with IFRS as an indicator of our financial performance or as a measure of our liquidity and cash flows. Adjusted EBITDA does not take into account the impact of working capital changes, capital expenditures, debt principal reductions and other sources and uses of cash, which are disclosed in the consolidated statements of cash flows.

Adjusted EBITDA does not have any standardized meaning under GAAP. TeraGo's method of calculating Adjusted EBITDA may differ from other issuers and, accordingly, Adjusted EBITDA may not be comparable to similar measures presented by other issuers. See "Results of Operations – Adjusted EBITDA" for reconciliation of net loss to Adjusted EBITDA.

### **Key Performance Indicators**

#### ***Backlog MRR***

The term "Backlog MRR" is a measure of contracted monthly recurring revenue (MRR) from customers that have not yet been provisioned. The Company believes backlog MRR is useful additional information as it provides an indication of future revenue. Backlog MRR is not a recognized measure under IFRS and may not translate into future revenue, and accordingly, investors are cautioned in using it. The Company calculates backlog MRR by summing the MRR of new customer contracts and upgrades that are signed but not yet provisioned, as at the end of the period. TeraGo's method of calculating backlog MRR may differ from other issuers and, accordingly, backlog MRR may not be comparable to similar measures presented by other issuers.

#### ***ARPU***

The term "ARPU" refers to the Company's average revenue per customer per month in the period. The Company believes that ARPU is useful supplemental information as it provides an indication of our revenue from an individual customer on a per month basis. ARPU is not a recognized measure under IFRS and, accordingly, investors are cautioned that ARPU should not be construed as an alternative to revenue determined in accordance with IFRS as an indicator of our financial performance. The Company calculates ARPU by dividing our total revenue before revenue from early terminations by the number of customers in service during the period and we express ARPU as a rate per month. TeraGo's method of calculating ARPU has changed from the Company's past disclosures to exclude revenue from early termination fees, where ARPU was previously calculated as revenue divided by the number of customers in service during the period. TeraGo's method may differ from other issuers, and accordingly, ARPU may not be comparable to similar measures presented by other issuers.

#### ***Churn***

The term "churn" or "churn rate" is a measure, expressed as a percentage, of customer cancellations in a particular month. The Company calculates churn by dividing the number of customer cancellations during a month by the total number of customers at the end of the month before cancellations. The information is presented as the average monthly churn rate during the period. The Company believes that the churn rate is useful supplemental information as it provides an indication of future revenue decline and is a measure of how well the business is able to renew and keep existing customers on their existing service offerings. Churn and churn rate are not recognized measures under IFRS and, accordingly, investors are cautioned in using it. TeraGo's method of calculating churn and churn rate may differ from other issuers and, accordingly, churn may not be comparable to similar measures presented by other issuers.