Management's Discussion & Analysis of Financial Conditions and Results of Operations

This management discussion and analysis focuses on key statistics from the consolidated financial statements and pertains to known risks and uncertainties relating to the telecommunications and consulting industry. This discussion should not be considered all-inclusive, as it excludes changes that may occur in general economic, political and environmental conditions. This discussion and analysis of the financial condition and results of operations has been prepared as of April 23, 2019, for the year ended December 31, 2018 and should be read in conjunction with the audited consolidated financial statements and related notes and material contained in other parts of this annual report.

Additional information related to the Corporation is available on SEDAR at *www.sedar.com*.

Forward-Looking Statements

Certain statements in this MD&A and associated notes and financial statements may be considered "forward-looking" within the meaning of applicable securities laws. These statements reflect the Corporation's plans and expectations based on our experience, interpretation of past trends, key assumptions and other relevant information available at the date that such statements are made.

The statements involve business, economic and competitive risks, uncertainties and contingencies. There is significant risk that predictions, projections or conclusions will not prove to be accurate and actual results may differ materially from estimates, expectations, or intentions expressed.

The forward-looking statements in this MD&A and associated notes and financial statements are based on what we believe are reasonable assumptions, however we caution readers not to place undue reliance on our forward-looking statements. We assume no obligation to update or revise these forward-looking statements to reflect new events or circumstances, except as required by securities law.

Business Overview

NTG Clarity is a Canadian publicly traded company (TSXV:NCI) that provides telecommunications engineering, Information Technology, networking and related software solutions. We have been developing niche software products directed at telecom service providers and utilities markets since our inception in 1992. We also provide professional services and managed services to this same vertical.

We are headquartered in Toronto, Canada and have subsidiaries in Cairo, Egypt and the USA, and branch offices in Riyadh, Saudi Arabia; Oman and Kuwait. The Company is organized into two business segments: the Canadian segment, which is made up of activities in Canada and our branch offices in Saudi Arabia, Oman and Kuwait; and the Egypt segment, which is our software development group and now provides professional services to customers in Egypt.

2018 continues to be a challenge as we work to optimize costs and manage cash flow.

Egypt

Egypt continues to be a challenging place to do business with ongoing restrictions on using foreign currency for business operations, and on moving funds out of the country. The inflation rate has continued to drop from a high of 17% in July to 11.9%[1] at the end of 2018. Interest rates have remained steady for the last 8 months at 16.75%.[2] Export Development Canada (EDC) continues to give Egypt a medium to high risk rating, however, "there have been signs of recovery in recent years that took effect after the International Monetary Fund (IMF) loan agreement"[3].

As many international companies are reluctant to do business in the local currency and are leaving the marketplace, the service gap has provided significant growth opportunities for NTG. Despite the continuing economic challenges in the region, NTG Egypt's revenue contribution continues to be strong. In 2018, the subsidiary contributed 24% of the Corporation's revenue (2017: 18%).

We mitigate some of the risks of doing business in the country as our expenses and the majority of our contracts in Egypt are both in the local currency. We continue to insure the receivables and work in progress for three of NTG Egypt's tier 1 telecom customers, through EDC and our new insurer, Euler Hermes. These customers were responsible for approximately 79% of NTG Egypt's revenue and 85% of NTG Egypt's receivables at year end 2018 (2017: 78% and 54% respectively).

Additionally, we have Foreign Funds Insurance, supported by EDC, which insures against possible asset and bank deposit appropriation in Egypt.

Kingdom of Saudi Arabia (KSA)

NTG has been doing business in KSA for over 13 years, and ongoing initiatives continue to show returns with 44% of our professional service work and 36% of our revenue being from KSA (2017: 55% and 44% respectively). NTG has developed good brand recognition and a solid track record over the years, which is an asset to our work in the region.

New KSA government policies implemented in 2018 increased the cost of doing business in the country. They include the introduction of a 5% Value Added Tax (VAT) on the majority of goods and services, new fees for companies with non-Saudi employees, and significantly higher costs for non-Saudi residency, all introduced in an effort to increase non-oil government revenue. The spending in the government sector was low in 2018, however seems to be improving in 2019, and we look forward to winning new projects accordingly.

Our KSA revenue has decreased by 32% over last year and as obtaining new business and customers becomes more challenging, however there are signs that the economy is getting stronger. The "..oil prices recovered to an average USD56/bb … however the fiscal deficit will remain large[4]." Saudi has a medium risk rating for enterprises from new insurance company, Euler Hermes.

In September 2018, EDC withdrew insurance support for all insured customers in KSA, going forward. In November 2018, we found an alternate insurance company that would cover AR and pre-shipping costs for all our customers, including those in KSA. We continue to do business with existing customers and are in the process of acquiring new customers. See Note 25 for more information.

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[1] http://www.tradingeconomics.com/egypt/inflation-cpi
[2] http://www.tradingeconomics.com/egypt/interest-rate
[3] https://www.edc.ca/en/country-info/country/egypt.html
[4] https://www.eulerhermes.com/en_global/economic-research/country-reports/Saudi-Arabia.html

Kuwait

In Kuwait, we continue to pursue opportunities with existing and potential customers, however our contract with our major customer will be completed at the end of Q1 2019.

- The new customer we began working with in Q4 2017 accounted for 12% of NTG's revenue in Q4 2018 (Q3 2017: $Nil). This contract will be completed at the end of Q1 2019.
- In May 2018, we signed a Professional Services Frame Agreement with another new customer and started billing in Q3 2018.

Kuwait has contributed 28% to NTG's revenue in 2018 (2017: 31%). We continue to work on a list of opportunities for services and products in the telecom, smart building and government sectors.

Oman

In 2018, we continued work for our customer in Oman, who is using our NTS Network Inventory and Project Management modules. We anticipate additional work into 2019 with change requests, ongoing support and additional product licenses, and request for new systems.

Oman contributed 11% to NTG's revenue in 2018 (2017: 7%). The product sales in the region have assisted with recurring revenues from maintenance and support, and extra licenses.

Outlook

In 2018, management has worked to optimize costs for the incoming revenue. Focused collection activities have resulted in a more balanced cash flow, though legacy debt remains a challenge. These activities, along with new customers in Canada and KSA, and expanded projects in Egypt, have resulted in improved results.

Looking towards the future, we are on the road to returning to profitability in 2019. We are focusing on capitalizing on the goodwill we have with our existing customers to expand our business and increase our margins. We will concentrate on marketing our products NTS, StageEM, which are currently in demand and have higher margins.

As in the past, our ability to generate positive operating cash flows, and report strong revenues and earnings are all critical to our success. We are confident that we have the management team with the experience and resources to fulfill our vision of growth and profitability.

Summary of Quarterly Results

Historically, NTG's operating results have fluctuated due to the timing of new contracts and their corresponding billing, as well as billing for software licenses which can result in larger sales orders in any one quarter. 2018 has followed this trend and we expect it to continue.

Quarter over quarter revenues remained reasonably consistent with last year (3% reduction), for the first three quarters of 2018. Q4 2018 had a significant decrease in revenue, resulting in a 18% reduction over the previous year. Lower sales in KSA (32%) and Kuwait (27%) were partially offset by an increase in Egypt revenue, however there is a longer lead time to close projects with new customers. We continue to work to optimize G&A and marketing and selling costs, as contracts allow.

The following table shows a summary of our eight most recent quarters (in Canadian dollars).

2018	Revenue	Net Income (Loss)	Profit (Loss) per Share	Diluted Profit per Share	Total Assets
Quarter One	$4,049,061	$ 160,482	$ 0.00	$ 0.00	$ 8,587,262
Quarter Two	2,607,838	16,368	0.00	0.00	8,994,081
Quarter Three	3,501,906	6,555	0.00	0.00	9,096,015
Quarter Four	1,547,662	(549,449)	(0.01)	(0.01)	7,900,467
TOTAL	$ 11,706,467	$ (366,044)	$ (0.01)	$ (0.01)	$ 7,900,467

2017	Revenue	Net Income (Loss)	Profit (Loss) per Share	Diluted Profit per Share	Total Assets
Quarter One	$ 3,007,929	$ (752,579)	$ (0.017)	$ (0.017)	$ 8,310,716
Quarter Two	4,148,957	(85,539)	(0.002)	(0.002)	8,511,716
Quarter Three	3,309,135	131,308	0.003	0.003	8,954,443
Quarter Four	3,893,502	(409,372)	(0.008)	(0.008)	8,463,198
TOTAL	$ 14,359,523	$ (1,116,183)	$ (0.02)	$ (0.02)	$ 8,463,198

Quarterly and Annual Results of Operations

Financial Highlights for the three months and year ended December 31, 2018:

Revenue

Consolidated revenues for the three months ended December 31, 2018 was $1,547,662compared to $3,893,502 for the same period in 2017. Revenue for the year decreased 18% to $11,706,467 compared to $14,359,523 reported in the prior year, primarily due to the reduction in revenue from KSA and Kuwait.

Professional service revenue continues to be an important strategic source of revenue for us, given its generally recurring nature (80% as compared to 77% in 2017). The contribution of product-related revenue was higher in 2018, and we anticipate this to continue going forward as we work to make product sales a more balanced part of NTG’s revenue stream. Hardware sales in Egypt and Kuwait made up 1% of overall revenue. As we view this revenue stream as low margin, we are focusing more on the higher margin product sales.

Consolidated revenues for Q4 2018 for the Egypt operating segment were $593,881 compared to 955,354 in 2017. For the year ended December 31, 2018 revenues were up 7% to $2,759,429 (2017: $2,583,468). Unconsolidated, revenues for Egypt increased by 9% over the previous year, primarily due to product related work.

For the Canadian operating segment, revenues for the three months ended and year ended December 31, 2018 were $953,781 and $8,947,038 (2017: $2,938,148 and $11,776,056). This 24% year to date decrease was due to the reduction in revenue from KSA and Kuwait.

The Middle East continues to be where the majority of NTG’s revenue comes from and as of December 31, 2018, represents 98% all total revenue. Though sales and marketing efforts in Kuwait and KSA have been reduced due to cash flow restrictions, we are hopeful 2019 will continue to see results from our past efforts with both existing and new customers.

Despite the challenges in Egypt, business development efforts have resulted in a consistently strong contribution to NTG's consolidated revenue. With an increase in professional services provided to tier 1 telecom and utility customers in the country, and increasing sales of product licenses, implementation and support, Egypt contributed 24% of the Corporation's revenue in 2018 (2017: 18%).

Unbilled Revenue

Unbilled revenue is revenue which had been earned and therefore recognized in compliance with IFRS, but which has not been billed to the client(s) due to contract terms and/or billing cycle. The Corporation derives revenue from fees charged to customers for licenses for software products and professional services: support, consulting, development, training, and other services.

Revenue can be recognized for projects based on time and materials, for professional services or on a percentage of completion basis for product implementation and support. Both can result in unbilled revenue until the customer is invoiced. Based on NTG's contracts, the customer is invoiced upon the completion of defined milestones, and/or required customer acceptance.

Unbilled revenue was $3,288,400 at December 31, 2018 compared to $3,458,652 at December 31, 2017. This is due to the timing of billing for contracts. For many contracts, revenue is recognized each month, but billed on a quarterly basis and we anticipate this to continue.

Cost of Sales and Gross Margin

Cost of sales consists of the expense of personnel providing professional services, and services to implement and provide technical support for our solutions. In addition, it includes an allocation of certain direct and indirect costs attributable to these activities.

Cost of sales for the three months and year ended December 31, 2018 were $1,361,608 and $6,571,900 respectively.

Cost of sales	December 31, 2018	December 31, 2017
Salaries and wages	$ 5,634,201	$ 8,008,277
Travel	74,939	187,721
Hardware	268,274	776,349
Other expenses	594,486	345,671
Total	**$ 6,571,900**	**$ 9,318,018**

The 29% YTD reduction in cost of sales was due to the reduction in revenue (18%), and also to the decrease in salaries in KSA and as we work to optimize our offerings.

Cost of sales for the Egypt operating segment for the three months and year ended December 31, 2018 were $424,391 and $1,762,456 compared to $510,932 and $1,628,040 in 2017. The YTD increase was primarily due to the higher cost of professional service employees' salaries and product implementation costs.

For the Canadian operating segment, cost of sales for the three months and year ended December 31, 2018 were $503,856 and $4,809,444 (2017: $2,062,143 and $7,689,978). Canada's YTD 37% cost of sales decrease was mainly due to a reduction of staff in Kuwait and KSA due to contract completion.

The gross margin for the year ending December 31, 2018 was 46% compared to 35% in 2017. Margins are stronger based on our continuing efforts to optimize costs to our revenue. Realistic margins are anticipated to be between 35-40%, based on the product mix.

Operating Expenses

The Corporation's operating expenses were down 19% to $4,211,666 in 2018 compared to $5,364,665 in the prior fiscal year and included:

- lower marketing salary costs and a 32% decrease in selling and marketing activities that included fewer trade shows and significantly less travel for sales personnel.
- a 17% decrease in G&A costs as we reduced:

- a 15% reduction in salaries and a 69% reduction in consulting costs , primarily in Canada Kuwait and KSA
- reduced penalties and fees and a reduction in performance bond fees as we provide the majority of new bonds in cash

- a significant gain on foreign exchange.

Selling and Marketing

Selling and marketing expenses consist primarily of sales staff remuneration, commissions, travel, advertising, consulting, and trade show costs.

Sales and marketing expenses for the three months and year ended December 31, 2018 were $456,858 and $1,836,770 respectively (2017: $573,916 and $2,152,153).

Year to date selling expenses decreased by 15%. We continue working to optimize our marketing efforts and compensation.

	For the twelve months ended	
Selling	**December 31, 2018**	**December 31, 2017**
Salary and wages	$ 1,249,778	$ 1,462,414
Marketing and advertising	342,992	509,325
Mailing and courier	7,721	5,859
Professional services	4,839	15,759
Meals and entertainment	203,123	134,751
Miscellaneous	28,317	24,045
Total	**$ 1,836,770**	**$ 2,152,153**

General and Administrative

General and administration expenses (G&A) consist primarily of salary and benefits, rent and office expenses, insurance, professional fees, accounting and legal fees, director's fees, etc.

G&A expenses for the three months and year ended December 31, 2018 were $755,570 and $2,635,000 respectively compared to $819,940 and $3,170,997 in 2017. Year to date G&A costs were 17% lower than in 2017 as we continue to optimize staff, salaries and consultants in Canada and KSA.

General and Administrative	**December 31, 2018**	**December 31, 2017**
Salary and wages	$ 1,546,201	$ 1,813,222
Occupancy	312,040	335,596
Consulting	34,705	109,577
Professional fees	111,020	128,538
Insurance	427,247	443,006
Performance bond fees	8,827	23,594
Dues and subscriptions	23,339	31,916
Penalties and fees	16,165	130,722
Telecommunication	49,318	63,249
Office equipment	16,791	20,353
Miscellaneous	89,347	71,224
Total	**$ 2,635,000**	**$ 3,170,997**

We reduced the occupancy costs in Kuwait and Oman, however Egypt's costs increased due to new office space/costs.

Foreign Exchange Gain/Loss

NTG's unaudited interim consolidated financial statements are presented in Canadian dollars. Each entity in the Corporation determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. The functional currency and the presentation currency of the parent entity is the Canadian dollar. Transactions in foreign currencies are initially recorded in respective functional currency rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate at the reporting date. Differences are taken to the statement of profit or loss and comprehensive income. Non monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. The functional currency of the subsidiary NTG Egypt Advanced is the Egyptian pound, and the functional currency of the subsidiary NTG Clarity Networks US Inc. is the US Dollar.

An entity may present its financial statements in any currency (or currencies). If the presentation currency differs from the entity's functional currency, it translates its results and financial position into the presentation currency. For example, when a group contains individual entities with different functional currencies, the results and financial position of each entity are expressed in a common currency so that consolidated financial statements may be presented.

The results and financial position of an entity whose functional currency is not the currency of a hyperinflationary economy shall be translated into a different presentation currency using the following procedures:

1. Assets and liabilities for each statement of financial position presented (i.e. including comparatives) shall be translated at the closing rate at the date of that statement of financial position;
2. Income and expenses for each statement presenting profit or loss and other comprehensive income (i.e. including comparatives) shall be translated at exchange rates at the dates of the transactions; and
3. All resulting exchange differences shall be recognized in other comprehensive income.

For the quarter ended December 31, 2018, the Corporation recognized a foreign currency exchange gain of $308,040, compared to a loss of $59,021, in the same period in 2017. For the year ended December 31, 2018, the Corporation recognized a foreign currency exchange gain of $260,104, compared to a loss of $41,515 in the year ended 2017. For more information on foreign exchange, see Note 4(b): Foreign currency translation.

Other Expenses

Research and Development

Research and development is paid for by customer requests and is therefore, included in cost of sales.

Provision for Bad Debt

NTG made a claim through EDC insurance for an overdue receivable. The provision for bad debt of $160,614 was for the uninsured portion of the overdue receivable. See Note 25 for more information.

Amortization of Intangible Assets

Intangible assets relate to the upgrade of the internally developed Operations Support System/Business Support System (OSS/BSS) software product called NTS.

The amortization cost for 2018 was $364,417 (2017: $364,417). 2018 contained no amortization of StageEM, as the amount of $4,045,326 was recorded as a loss from impairment at year end 2016.

Indictors of impairment were present for the year ended December 31, 2018. An impairment test was performed and no impairment was found.

Interest Expense

As at December 31, 2018, the interest expense was $416,828 in 2018 as compared to $515,161 in 2017.

Foreign Fees

Foreign fees are primarily taxes paid by NTG as a foreign entity working in Saudi Arabia, and some taxes paid by NTG Egypt. Foreign fees expense for the three months and year ended December 31, 2018 were ($618) and $71,009 compared to $20,189 and $55,383 during the same period in 2017. This amount varies due to the timing of project execution.

Share-based Compensation

NTG has a formal stock option plan allowing the issuance of options to directors, officers, employees and consultants in order to attract and retain qualified and experienced individuals. All options granted are non-assignable, generally expire three years after the grant date and can have varying vesting periods.

There were no stock options granted in Q4 2018 (2017: 890,000). Stock options granted during the year ended December 31, 2018 totalled 2,082,000 (2017: 1,115,000). The large number of options issued in 2018 was mainly due to the expiry of employee and director options during the year.

The weighted average expected contractual lives of outstanding and exercisable options are shown in Note 18(b). 3,149,000 options have vested and there are 3,570,000 issued. The difference of 421,000 will vest in the foreseeable future (within the next 12 months) and the expense will be charged in the future quarters.

During the year, 100,000 share options were exercised for a cash in-flow of $10,000 and we reallocated $2,000 from Contributed Surplus to Share Capital.

Income Taxes

The Corporation has taxes payable of $Nil (2017: $ Nil) for the taxation year ending December 31, 2018.

Net Gain (Loss)

For Q4 2018, the Corporation recorded a net loss of $(549,449) compared to $(409,372) for the same period in 2017. For the year ending December 31, 2018, the Corporation recorded a net loss of $(366,044) compared to $(1,116,183) in 2017. Factors contributing to the improvement include the following:

- a 12% decrease in selling and marketing activities that included fewer trade shows and significantly less travel for sales personnel.
- a 17% decrease in G&A costs as we reduced:
  - a 15% reduction in salaries and a 69% reduction in consulting costs, primarily in Canada, Kuwait and KSA
  - reduced penalties and fees and a reduction in performance bond fees as we provide the majority of new bonds in cash
- a significantly larger gain on foreign exchange balances and on translation of foreign operations.

Management continues to work to optimize costs with revenues.

Assets and non-current liabilities

As of December 31, 2018, the Corporation closed the year with $98,694 cash on hand (2017: $104,444), performance bonds of $111,536 (2017: $120,126) and prepaid amounts of $207,710 (2017: $138,835).

Intangible assets

Intangible assets relate to the upgrade of our internally developed Operations Support System/Business Support System (OSS/BSS) software product called NTS. Expenditures on development of the software were recognized as an asset from the time the Corporation has determined an indefinite future economic benefit exists.

NTS is a retail management software for telecommunication companies. The development costs are determined to have a useful life of 10 years are amortized on a straight line basis. The amount capitalized as at December 31, 2018 is $Nil (December 31, 2017: $Nil) in development costs. The amortization cost for the three and twelve months ended December 31, 2018 was the same as in 2017; $91,104 and $364,417 respectively. The NTS software will be fully amortized by 2023.

Management considers NTS to be a valuable asset; however the percentage of product-related revenue varies depending on the timing of product licenses and support billing. In 2018, product-related revenue was responsible for approximately 19% of the Corporation's revenue (2017: 15%). Development expenditures continue to be amortized at a consistent rate for the remainder of the life of the asset.

An impairment test is performed on the non-current assets at year end, or when indicators warrant it. A test was performed at year end 2018 and there was no impairment. The Corporation will continue to assess on a quarterly basis for indicators of impairment.

Property and equipment

Property and equipment of $221,980 as of December 31, 2018 (2017: $259,942) consists mainly of computer equipment and office furniture with a useful life of 4-10 years. The Corporation is not dependant on tangible assets and expects the purchase and disposal of property and equipment to be consistently modest in the foreseeable future.

The Corporation had additions of $26,138 during 2018 (2017: $47,095) and depreciation of $64,100 (2017: $59,732).

Non-current liabilities

As of December 31, 2018, there were no non-current liabilities.

Liquidity and Capital Resources

NTG's principal requirement for capital is to provide working capital to fund its operations and support its organic growth. Historically, we have funded operations by using profits generated by operations and through the issuance of equity. In 2018, we funded operations, changes in non-cash working capital and capital expenditures using internally generated cash flows, our credit facility, cash on hand, and the closing of two private placements.

Working capital as at December 31, 2018 was $(4,861,555) compared to $(4,990,696) at December 31, 2017. The working capital is improving with an increase in receivables, and bonds. The continuing negative working capital was primarily due to the use of working capital in 2016 to fund the investment in the development of our new software product (StageEM).

Efforts to address our working capital needs in 2018 included:

- increasing our collection activities.
- investigating alternate sources of raising funds. This has been difficult due to the last two years' results and the low share price.

Cash Flow Provided by Operations

The cash in-flow from operating activities for the year ended December 31, 2018 was $696,327 compared to a cash out-flow of $(449,705) for the same period in 2017. The substantial difference from last year was due to a much lower net loss of $(366,044) compared to $(1,116,183) in 2017.

Cash Flow from Financing Activities

The cash out-flow from financing activities for the year ended December 31, 2018 was $(675,939) compared to an in-flow of $366,482 for the same period in 2017.

The substantial change in in-flow compared to 2017 was due to:

- the issuance of common shares from the private placements ($744,122) and the exercising of options in 2017
- a decrease in bank indebtedness of $260,184 compared to a $56,214 increase in 2017.

Cash Flow from Investing Activities

Cash out-flow from investing activities for the year ended December 31, 2018, was $(26,138) compared to $(47,094) for the same period in 2017.

Commitments and Contractual Obligations

The Corporation is committed under agreements for the rental of office space in Canada at a monthly rate of $9,232 for the period from June 1, 2016 to May 31, 2021. Additionally, we have short term agreements for the rental of office space in Saudi Arabia, Oman, and Egypt, as well as lease obligations for office equipment.

Contractual obligations	2018	2019	2020	2021 and after	Total
Operating line of credit	$ 7,228,567	$ –	$ –	$ –	$ 7,228,567
Accounts payable and accrued liabilities	3,976,717	–	–	–	3,976,717
Operating lease	–	214,337	145,485	80,866	440,688

<u>Debt and Credit Facilities</u>

As of December 31, 2018, the Corporation has the following credit facilities with RBC Royal Bank:

- $2.7 million revolving operating line based on marginable receivables (revolving Facility 1)
- $3.1 million to support pre-shipping costs associated with exports (revolving Facility 2)
- a $1.5 million performance/bid bond facility for (Facility 3) (reduced to $250,000 in January 2019)
- $2,241,890 for the non-revolving (Facility 4).

Facility 1 has an annual interest rate of bank prime plus 2.05%. Facility 2 and Facility 4 have an annual interest rate of bank prime plus 1.05%. Facilities 1-3 are secured by a General Security Agreement over the assets of the Corporation and are supported by Export Development Canada (EDC) and Euler Hermes.

As of December 31, 2018, the Corporation continues to be in violation of its margin requirements under the Existing Loan Agreement and the amount owing on Facility 4 is $1,511,890 (2017: 2,041,890).

Subsequent to year end:

- in January 2019, NTG signed an agreement with the bank to restructure the credit facilities to provide more flexibility, increase the individual credit limits and include the new insurance provided by Euler Hermes[5].
- in February 2019, the bank extended the Facility 4 repayment deadline to September 30, 2019 and requires NTG to pay down $70,000 per month from the principal.

EDC currently supports bonds for NTG on an as needed basis. As of December 31, 2018, the Corporation had one advance payment guarantee, and one performance bond issued in its name and supported by EDC, in the amount of approximately $151,672 (2017: $474,558). The bonds have been financed by a Canadian financial institution and are supported and 100% insured by EDC. Bonds will expire in March, 2019. Premiums for these bonds for the three months and year ended December 31, 2018 were $Nil and $8,827 respectively (2017: $1,590 and $23,594).

Off-Balance Sheet Arrangements

The Corporation has not entered into off-balance sheet financing arrangements. All commitments are reflected on the Corporation's balance sheet.

Transactions with Related Parties

Transactions between the Corporation and its subsidiaries, which are related parties to the Corporation, have been eliminated on consolidation. Related parties include key management, the Board of Directors, close family members and entities which are controlled by these individuals as well as certain persons performing similar functions.

The standard key management compensation is listed in Note 24. In Q2 2015, the Board of Directors of the Corporation approved a loan to Ashraf Zaghloul in the amount of $300,000 to be repaid in two years time at an interest rate of 2%. In its meeting on May 29, 2017, the Board of Directors approved extending the repayment date for this loan for one year. In its meeting on August 28, 2018, the Board of Directors approved extending the repayment date for this loan for two years.

Basis of Preparation and Significant Accounting Policies

The audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Significant accounting policies are presented in detail in Note 3 of our audited consolidated financial statements for the year ended December 31, 2018. These are available on SEDAR (www.sedar.com). The policies applied in these statements are based on IFRS issued and outstanding as of April 23, 2019, the date the Board of Directors approved the consolidated financial statements.

Proposed Transactions

The Corporation intends to initiate a Shares for Debt transaction in Q1 2019. With Board approval, an application was made to the Exchange to issue 7,200,000 common shares in exchange for the debt owed by the Corporation to the creditors in the amount of $360,000.

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[5] See note 29.

Business Risk and Management

NTG's primary risk management objective is to protect our balance sheet and cash flow. Principal financial liabilities are made up of bank overdraft and trade and other payables.

The overall risk management program has not changed throughout the year and focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on financial performance.

We are exposed to market risk, interest rate risk, foreign exchange risk, credit risk, and liquidity risk. Senior management oversees the management of these risks and is supported by a Committee that advises on financial risks and the appropriate financial risk governance framework. The Board of Directors reviews and agrees policies for managing risks.

In addition to risks described elsewhere, the Corporation is subject to a number of risk factors. The Corporation has significant reliance on certain key personnel, some of whom are also key shareholders; Ashraf Zaghloul, CEO; Kristine Lewis, President; Adel Zaghloul, CEO, NTG Egypt; and Yaser Yousef, CTO. Though we have worked hard to diversify our customer base, we are dependent on a few large customers. In 2018, 20% (2017: 27%) of the Corporation's revenue was from one customer. As at December 31, 2018, approximately 39% (2017: 21%) of the Corporation's trade accounts receivable balance was from one customer. Management continues to work to diversify the customer base and country concentration.

Additionally, the Corporation mitigates this risk by insuring these receivables with Euler Hermes and EDC.

Additional risks and uncertainties not described below or not presently known to the Corporation may also impact our business. If any of these risks occur, the Corporation's business, financial condition or results of operations could be harmed and the trading price of the Corporation's common shares could be materially affected. The purpose of discussing these risks and uncertainties is to highlight factors that could cause actual results to differ materially from past results or from those described in forward-looking statements. It is not to describe facts, trends and circumstances that could have a positive impact on the results or financial position.

Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise several types of risk: interest rate risk, currency risk, commodity price risk, and other price risk, such as equity risk. The Corporation is not subject to price risk from fluctuations in market prices of commodities and has no exposure to equity price risk.

There is a high concentration of competition in the telecom industry and no barrier of entry for new competitors into the market. Many of our competitors are larger companies that have greater resources. To help mitigate this risk, we have partnered with, or signed agreements to work through, a few of the large competitors, as we can offer seasoned resources at extremely competitive rates.

Changes in the regulatory environment would always affect our plans and investments. As we continue to grow, we will continually monitor and evaluate the various policies and procedures to ensure that they take into account changes in the Corporation and its marketplace.

In 2018, approximately 36% of our revenue came from work done in KSA (2017: 45%). As of September 21, 2018, EDC is "... off cover on all products in the Kingdom of Saudi Arabia."[6]. In November 2018, NTG conditionally signed a quote with an insurance company (Euler Hermes) to insure our receivables and

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[6] https://www.edc.ca/en/country-info/country/saudi-arabia.html

work in progress for all NTG customers, including those in Saudi Arabia (KSA). See Note 29 for more information. The majority of NTG's KSA customers are consistently within our 180 days payment terms.

New challenges occurred due to the severance of diplomatic relations between Canada and KSA in 2018. As a result, in September 2018, EDC withdrew insurance support for all work in KSA going forward. Canadian companies were not allowed to get direct contracts with any government agencies in KSA, which resulted in decreased revenue for NTG in KSA. NTG then retained new insurance from Euler Hermes for all customers, including those in KSA.

Historically 7-11% of our revenue comes from work done through our subsidiary NTG Egypt, based in Cairo, Egypt. Since 2014, the contribution percentage has grown from 13.7% to 24% in 2018. The contribution in Q4 2018 was 38%. The economic challenges in the region continue have a positive impact on our Egypt operations. Unconsolidated, NTG Egypt's revenue has increased by 9% over last year and professional services provided to tier 1 telecom and utility customers remain strong, contributing approximately 78% of Egypt's revenue.

Kuwait contributed 28% of the revenue in 2018 (2017: 31%), however the majority of that revenue is concentrated in 2 customers. Oman's one customer contributed 11% of the revenue in 2018 (2017: 7%).

Interest rate risk

The Corporation's exposure to interest rate fluctuations is primarily interest paid on its bank indebtedness and long-term loans. The Corporation has performed sensitivity analysis on interest rates at December 31, 2018 to determine how a change in interest rates would impact equity and net loss. During the year the Corporation paid $416,828 (2017: $515,161) on its bank loans. An increase or decrease of 100 basis points in the average interest rate paid during the period would have adjusted net earnings by approximately $41,683 (2017: $51,516). This analysis assumes that all other variables remain constant.

Credit risk

Credit risk is the risk of an unexpected loss if a customer or counterparty to a financial instrument fails to meet its contractual obligation. NTG's financial instruments that are exposed to credit risk consist primarily of trade receivable. Our exposure to credit risk is impacted by the economic conditions for the industry which could affect the customers' ability to satisfy their obligations. To reduce risks, we perform periodic credit evaluations of the financial conditions of its customers and typically does not require collateral from them. Management assesses the need for allowance for potential credit losses by considering the credit risk of specific customers, historical trends and other information.

We also mitigate credit risk through credit insurance coverage with Euler Hermes and EDC[7] as explained in Note 26. NTG Egypt deals with primarily with tier 1 telecom customers in the region. These customers are responsible for 78% of NTG Egypt's revenue (2017: 79%) and are insured through EDC and Euler Hermes.

The credit quality of all the accounts receivable of the Corporation that are neither past due nor impaired and the age of accounts receivable that are past due but not impaired have been assessed on an individual basis and determined to have a mitigated risk profile as they are insured receivables.

As at December 31, 2018, the Corporation has insured receivables in the amount of $2,496,454 (2017: $1,541,889) and unbilled revenue in the amount of $3,288,400 (2017: $3,675,762).

[7] See note 25.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. Our exposure to the risk of changes in foreign exchange rates relates primarily to operating activities, when revenue or expense are denominated in a different currency from our functional currency, the Canadian dollar.

We do not hedge the risk related to fluctuations of the exchange rate between USA and Canadian dollars from the date of the sales transactions to the collection date due to the short-term nature of this exposure. The Corporation does not hedge the risk related to fluctuations of the exchange rate between USA and Canadian dollars from the date of the sales transactions to the collection date due to the short-term nature of this exposure.

A 10% change in exchange rates on December 31, 2018 would have the following approximate impacts:

10% impact to:	U.S. Dollar USD	Omani Riyal OMR	Kuwait Dinar KWD	Saudi Riyal SAR	Qatari Riyal QAR	Egyptian Pound LE
P&L in CAD	35,819	35,855	73,243	78,569	416	56,846
Equity in CAD	26,327	26,353	53,834	57,748	306	41,782

Liquidity risk

Liquidity risk is the risk that the Corporation will not be able to meet its financial obligations as they fall due. The Corporation's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under normal and stressed conditions. The Corporation manages liquidity risk by reviewing its capital requirements on an ongoing basis. The Corporation continuously reviews both actual and forecasted cash flows to ensure that the Corporation has appropriate capital capacity.

The following table summarizes the amount of contractual undiscounted future cash flow requirements for financial instruments as at December 31, 2018:

Contractual obligations	2018	2019	2020	2021 and after	Total
Operating line of credit	$ 7,228,567	$ –	$ –	$ –	$ 7,228,567
Accounts payable and accrued liabilities	3,976,717	–	–	–	3,976,717
Operating lease	–	214,337	145,485	80,866	440,688

Long term debt is calculated by adding the current portion of long term debt and the interest due in 2018. The interest due ranges from prime + 1.05% to prime + 2.05%. The Corporation accrues expenses when incurred. Accounts are deemed payable once an event occurs that requires payment by a specific date. The contractual maturity of the majority of accounts payable is within one month. The aging of trade accounts payable are as follows:

December 31,	2018	2017
Current	$ 1,169,027	$ 482,645
31 – 60 days	143,003	140,484
61 – 90 days	93,386	211,177
91 – 180 days	236,399	398,662
More than 180 days	830,606	1,483,666
	$ 2,472,421	**$ 2,716,634**

Capital Management

NTG manages its capital, which consists of cash provided from operations and long term debt, with the primary objective being safeguarding sufficient working capital to sustain operations. The Board of Directors has not established capital benchmarks or other targets. As at December 31, 2018, the Corporation was pursuing additional capital through the issuance of additional equity or debt financing. There can be no guarantee that they will be successful in raising additional capital.

There have been no changes in the Corporation's approach to capital management during the year ending December 31, 2018. Also, no changes were made in the objectives, policies, or processes during the year ending December 31, 2018. The Corporation will continually assess the adequacy of its capital structure and capacity and make adjustments within the context of the Corporation's strategy, economic conditions, and the risk characteristics of the business.

The Corporation’s objectives when managing capital are to:

(i) safeguard the Corporation's ability to continue as a going concern, so that it can provide adequate returns for shareholders and benefits for other stakeholders;

(ii) fund capital projects for facilitation of business expansion provided there is sufficient liquidly of capital to enable the internal financing; and

(iii) maintain a capital base to maintain investor, creditor, and market confidence.

NTG considers the items included in the consolidated statements of changes in shareholders' equity as capital. The Corporation manages the capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, we may issue new shares, however we are not subject to externally imposed capital requirements.

Legal claim contingency

The Corporation is subject to a variety of claims and suits that arise from time to time in the ordinary course of business. Although management currently believes that resolving claims against the Corporation, individually or in aggregate, will not have a material adverse impact on the Corporation’s financial position, results of operations, and cash flows. These matters are subject to inherent uncertainties and management's view of these matters may change in the future. To date, there are no claims or suits outstanding.

Guarantees

The Corporation indemnifies its directors and officers against claims reasonably incurred and resulting from the performance of their services to the Corporation, and maintains liability insurance for its directors and officers.

Collateral

The Corporation has pledged its assets under a General Security Agreement ("GSA") as disclosed in Note 17. The Corporation did not hold collateral at December 31, 2018, and December 31, 2017.

Disclosure Controls and Procedures and Internal Controls over Financial Reporting

The Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Corporation’s disclosure controls and procedures as of December 31, 2018 and have concluded that such disclosure controls and procedures were effective to provide reasonable assurance that material information relating to the Corporation or its subsidiaries is made known to them.

In contrast to the certificate required for non-venture issuers under National Instrument 52-109 Certification of Disclosure in Issuers’ Annual and Interim Filings (NI 52-109), this Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as defined in NI 52-109. In particular, the certifying officers (CFO and CEO) filing the NI 52-109 certificate are not making any representations relating to the establishment and maintenance of:

i) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer’s GAAP (IFRS).

The issuer’s certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in the NI 52-109 certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in NI 52- 109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

Standards issued but not yet effective

As at April 23, 2019, the date of authorization of these financial statements, certain new standards, amendments, and interpretations to existing IFRS standards have been published but are not yet effective and have not been adopted by the Corporation.

The International Accounting Standards Board issued on January 13, 2016 a new accounting standard called IFRS 16 Leases. IFRS 16 Leases replaces IAS 17 Leases. IFRS 16 requires all leases to be reported on an entity's statement of financial position as assets and liabilities. IFRS 16 is effective January 1, 2019. The Corporation has assessed and determined that there will be no impact to the financial statements upon adoption.

All other standards were early adopted as explained in the prior year's financial statements.