



MANAGEMENT'S DISCUSSION & ANALYSIS

Three and Nine Months Ended September 30, 2018
(Expressed in Canadian dollars)

Novra Technologies Inc.

Management's Discussion & Analysis

Nine months ended September 30, 2018

The following Management's Discussion and Analysis ("MD&A") of Novra Technologies Inc. ("Novra") should be read in conjunction with the unaudited interim Condensed Consolidated Financial Statements for the three and nine months ended September 30, 2018, and related notes included therein. These unaudited interim Condensed Consolidated Financial Statements have been prepared in accordance with International Accounting Standard ("IAS") 34, *Interim Financial Reporting*. They do not include all of the information required in annual financial statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and therefore these should be read in conjunction with Novra's annual 2017 Audited Financial Statements.

All information in this MD&A is presented in Canadian dollars, unless otherwise indicated. Tabular dollars are in thousands, except per share amounts. Amounts in tables may not reconcile due to rounding differences.

Throughout this MD&A, "we", "us", "our", "Novra", and "Company" refer to Novra Technologies Inc. and its subsidiaries.

This MD&A is dated as of November 29, 2018, and is current to this date. This MD&A and the unaudited interim Condensed Consolidated Financial Statements were approved and authorized for issuance by the Board of Directors.

Financial statements, MD&A and other information relating to Novra are available on SEDAR at www.sedar.com.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This MD&A contains "forward-looking statements" within the meaning of applicable Canadian securities laws, concerning but not limited to: our outlook, the expected cost savings from integrating the acquired Wegener operations with the Novra Group, the proposed acquisition of Westport Research & Associates, anticipated developments in our operations in future periods, the adequacy of Novra's financial resources and other events and conditions that may occur in the future. Forward-looking statements are generally identifiable by words such as "expects", "anticipates", "believes", "intends", "estimates", "predicts", "potential", "targeted", "plans", "possible", and similar expressions, or statements that events, conditions or results "will", "may", "could" or "should" occur or be achieved. As such, forward-looking statements are not historical facts but reflect our current assumptions and expectations regarding future events. These are subject to a number of risk and uncertainties that could cause actual results or events to differ materially from current expectations and assumptions. Some of these risks and uncertainties are described herein under the "Risks and Uncertainties" section of this MD&A.

For the above reasons, readers are cautioned not to place undue reliance on forward-looking statements.

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BUSINESS OVERVIEW

Novra Technologies Inc. (headquartered in Winnipeg, Canada) is a public company on the TSX Venture Exchange ("TSX-V") and trades under the stock symbol "NVI" and is a Class 1 reporting issuer. We have been in the satellite data distribution business since 2000. In 2016, we significantly expanded our product portfolio and global footprint with the acquisition of International Datacasting Corporation ("IDC"), a long-time leader in the same sector (based in Ottawa, Canada). On December 29, 2017, Novra acquired a 51.6% controlling interest of Wegener Corporation ("Wegener") to further expand its footprint in digital media management and distribution technologies for applications including digital signage, radio and television. The companies joined together to form the Novra group of companies ("Novra Group")

Today, the Novra Group is an international technology provider of products, systems, and services for the distribution of multimedia broadband content. Our applications focus includes: broadcast video and radio, digital cinema, digital signage, and high-speed data applications.

See our corporate website at www.novragroup.com for further details.

OVERALL PERFORMANCE

Q3 2018 vs. Q3 2017:

- Total revenue of \$3.6 million, a increase of 74%
- Gross profit at \$2.1 million was 58.7% of total revenue, compared to \$946 thousand or 46.2%
- Operating expenses were \$1.5 million, compared to \$815 thousand
- Adjusted EBITDA of \$862 thousand, compared to Adjusted EBITDA of \$244 thousand (this is a non-IFRS financial measure - refer to "Discussion of Operations" section below for further details)
- Operating cash flows were \$(400) thousand, compared to \$106 thousand
- Working capital was \$1.8 million, an 58% increase since June 30, 2018
- Included in the Q3 results, and reducing net income, is approximately \$230,000 of amortization expense for intangible assets associated with the purchase of IDC and Wegener.

First 9 months of 2018 vs. 2017:

- Total revenue of \$7.2 million, an decrease of 7%
- Gross profit at 3.7 million was 51.6% of total revenue, compared to \$3.9 million and 50.3%
- Operating expenses were \$4.8 million, compared to \$2.8 million
- Adjusted EBITDA of \$(215) thousand, compared to Adjusted EBITDA of \$1.3 million (this is a non-IFRS financial measure - refer to "Discussion of Operations" section below for further details)
- Operating cash flows were \$(351) thousand, compared to \$2.6 million
- Working capital was \$1.8 million, a 13% increase since December 31, 2017
- As of September 30 2018, we had \$2.7 million in deferred revenue and \$2 million in booked sales backlog. The majority of our current backlog is expected to be shipped before the end of 2018,
- Included in the 9 months results, and reducing net income, is approximately \$690,000 of amortization expense for intangible assets associated with the purchase of IDC and Wegener.

For this reporting period our financials are consolidated with Wegener's operating results, and as expected, Wegener's weak Q1 and Q2 results continue to negatively affect our consolidated financials for this nine month reporting period. Despite Wegener not being wholly-owned by Novra (we acquired only 51.6% of its voting common shares on December 29, 2017), the accounting standards require us to consolidate 100% of Wegener's operating results. However, the consolidated net loss for this nine month reporting period attributable to Novra shareholders was \$399 thousand, which is less than the total net loss of \$1.1 million that is reported in our financials.

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Although for Q3 Wegener's Net Income was \$210 thousand, which positively affected our Q3 financial results, for this nine-month consolidated reporting period, Wegener contributed a Net Income loss of \$835 thousand because of their weak Q1 and Q2. Wegener's Q4 is expected to positively contribute to our Q4 results.

For the comparison nine months of 2017, we benefited from partial deliveries on the large sales backlog generated in the second half of 2016. We did not have a significant sales backlog going into 2018; however, we ended the first half of 2018 on a strong note with new customer orders and a healthy opportunities funnel looking into the next few quarters. Our strong Q3 and expected strong Q4 are the result of new customer orders in the first half of 2018 and with additional new sales in Q3.

RECENT DEVELOPMENTS

- In Q3, we received and shipped a large US military order of about \$1.0M CDN for next generation data broadcast system.
- Follow on orders from several global radio broadcasters including networks in Canada, the US, Brazil and Europe.
- A European radio network service provider selected IDC to provide the technology to upgrade their client's radio stations with an initial order.
- IDC was selected as the technology partner for a new high-speed satellite file transfer service for the Asian Pacific region. We have received initial orders for this service and we expect more as a wider deployment of this service begins in Q1 of 2019.
- We have developed our first joint IDC/Wegener product: The Edgecaster-Pro for digital program insertion, combining the sophisticated SCTE-35 targeting and blocking capabilities of IDC's Laser with video decoding and graphics overlay features of Wegener's respected iPump line.
- Deployed a new MISTiQ trial with a major North American broadcast customer.
- We shipped over 1,700 of our S300 receivers to a major US Bank for their in-branch Digital Signage.
- We achieved more than \$8.5 in combined revenue and bookings as of August 29, 2018. We have recognized revenue of about \$3.7M in the first half of 2018 and we expect to recognize the remainder of this combined total in the second half of 2018, in addition to new orders that will be received in the remainder of the year.
- We received two orders amounting to \$3.5 million from a major international radio broadcaster for an ongoing network upgrade as well as a technology refresh of satellite uplink infrastructure. We began shipments against this order in Q3 and expect to complete shipments in Q4.
- Our drive for synergies and efficiencies with the acquisition of Wegener has resulted in annualized operational savings of over \$400,000 which will be fully reflected in 2019. We expect additional cost reductions as we further merge and streamline our operations including restructuring our manufacturing vendors.
- Delivered STAR audio receivers for major global radio network, part of ongoing orders we expect to continue

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- Radio network in Mexico becomes the first network with hybrid satellite and terrestrial—MISTiQ—capabilities.
- We were selected by the national broadcaster of Nepal for a Radio network.
- Reached an agreement with a major international radio broadcaster to launch a hybrid MISTiQ platform, they have taken delivery of their first batch of receivers with more orders expected.
- New technology breakthroughs – Working with clients we demonstrated in the field new leading edge technologies and features, including:
 - Successful Proof of Concept (POC) for dual transponder operation of ultra high-speed (over 100Mb/s) file transfer technologies.
 - Successful POC in Asia for digital signage over a DVB-T2 network
 - Successful POC for seamless protection switching for digital cinema live events

OUTLOOK

With the acquisition of 51.6% controlling interest of Wegener Communications in December 2017, we are executing on our vision to bring great companies with complementary technologies together to capitalize on market opportunities by consolidating and refocusing engineering to provide world-class leading-edge products and services to our clients. As a result of these acquisitions, Novra has significantly evolved into a strong, scalable global company in the growing multimedia broadband content distribution business.

Although our revenues for the first half of 2018 were soft as expected, the second half of 2018 is much stronger, and our sales funnel, our bookings and our deferred revenues are healthy as we approach 2019. Although our current sales backlog is about \$2.0 million, we expect additional orders in Q4. Our deferred revenue as of September 30th was \$2.7M, of which \$1.7M is current and expected to be recognized as revenue over the next 12 months as we deliver our products and services to our clients.

Our high priority goals for 2018/19 are:

- To continue to drive costs efficiencies as we bring Wegener into the Novra group of companies. Some costs efficiencies have been achieved in 2018 and some additional efficiencies are expected in the first half of 2019.
- Achieve operational efficiencies by merging operational divisions across the three companies. Currently, Marketing, Finance and Engineering have been merged but we still need to complete manufacturing and customer support divisions.
- Refocus our engineering to develop new and innovative products by taking the best features from our existing product lines to create flexible, modular and cost-effective solutions that will meet market demand and increase our market share. New products using this modular approach will be released in 2019.
- Our technology strategy is to develop products that provide our clients protection of their investment even if in the future their requirements change to meet new operational needs. This will give us a competitive advantage and, in many cases, shorten the technology selection process that clients go through.

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- Identify new innovative and strategic technological opportunities that will be created for the new LEO (Low Earth Orbiting) and MEO (Medium Earth Orbiting) satellites that are being developed. Our strategic direction is to develop a partnership with one or more of the major players in this domain to develop solutions to help them capitalize on the capabilities for these large LEO/MEO constellations that are going to be launched over the next 5-7 years.
- To manage, refocus and energize our global re-seller network to enable them to offer a wider range of products and solutions to their clients.
- Position Novra for additional acquisitions, over the next 12 months, of companies with complementary technologies that will increase our sales and profitability.

Novra's goal is to move from being an engineering-centric to a client-centric company - our product development will be driven by identifying client requirements and real market trends. Our clients are looking for cost effective solutions with built-in flexibility to enable them to deliver their services with the lowest operational costs not only today but over the life-span of our products. Only offering hardware and software is not adequate in this technologically dynamic environment. We want to offer to our clients complete solutions and would like for them to consider Novra as their technology partner that they can depend on to help them solve their engineering problems.

We take these challenges very seriously and all of us at the Novra Group of companies are committed and determined in achieving these very important goals for our clients and our shareholders.

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DISCUSSION OF OPERATIONS

The following table shows selected information from our Condensed Consolidated Financial Statements, including a reconciliation of IFRS to non-IFRS measures, for the periods indicated:

<i>(in thousands)</i>	Third Quarter			Nine Months Ended September 30,		
	2018	2017	% Chg	2018	2017	% Chg
Revenue by type:						
Products	\$ 2,908	\$ 1,654	76%	\$ 5,494	\$ 6,785	-19%
Services	650	394	65%	1,730	946	83%
Total revenue	3,558	2,048	74%	7,224	7,731	-7%
Gross profit	2,087	946	121%	3,725	3,886	-4%
<i>Gross margin</i>	<i>58.7%</i>	<i>46.2%</i>		<i>51.6%</i>	<i>50.3%</i>	
Operating expenses ⁽¹⁾	1,527	815	87%	4,808	2,842	69%
Operating income (loss) ⁽¹⁾	560	131	NM	(1,083)	1,044	NM
Other income (expenses) ⁽¹⁾	(93)	(88)	6%	(5)	(119)	-96%
Net income (loss) as reported under IFRS	\$ 467	\$ 43	NM	\$ (1,088)	\$ 924	NM
<i>Adjustments:</i>						
Finance income ⁽¹⁾	(8)	(1)	NM	(10)	(4)	NM
Finance costs ⁽¹⁾	64	18	256%	176	92	91%
Depreciation and amortization	302	95	NM	869	286	NM
Tax expense (recovery)	-	-	NM	-	1	NM
EBITDA - non-IFRS measure	825	155	NM	(53)	1,299	NM
Loss (gain) on foreign exchange	37	20		(161)	47	
Share-based compensation	-	18		-	48	
Loss (gain) on Wegener options	-	51		-	(16)	
Adjusted EBITDA - non-IFRS measure	\$ 862	\$ 244	NM	\$ (215)	\$ 1,378	NM

NM - Not meaningful

Revenue and Gross Margin

Total revenue for the nine month reporting period decreased by 7% or \$507 thousand. The decrease in product revenue was mainly due to fewer product shipments because of manufacturing lead-times and slower sales than anticipated from IDC and Wegener due to delays in several of our clients' projects for various reasons. Further, as previously stated, the same period 2017 benefited from a strong sales backlog from 2016 going into 2017.

We have a healthy sales backlog at the end of Q3 2018 and much of this backlog will be delivered before the end of 2018. Accordingly, we expect this trend to reverse for the second half of 2018 and product revenues to increase.

The increase in services revenue is primarily driven by the acquisition of Wegener which contributed \$562 thousand to the services revenue, coupled with the benefit from new support contracts and renewals in 2017 continuing into 2018.

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Our revenue is generally concentrated on a few customers from quarter to quarter. Our top 10 customers accounted for 64% of total revenue for the first nine months of 2018, with the first and second largest accounting for 16% and 11%, respectively, or \$1.9 million in aggregate. For the same period last year, Novra's top 10 customers accounted for 88% of total revenue, with the three largest accounting for 45%, 22%, and 11%, respectively, or \$2.5 million in aggregate. No other customers accounted for more than 10% of total revenue.

While our revenue may be concentrated on a few customers quarterly, with approximately 2,000 customers in over 100 countries, including over 200,000 installations since inception, we have a well-established customer base to provide diversification in our revenue base. The following table summarizes the geographic distribution of our revenues for the nine month period:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Canada	\$ 116	\$ 89	\$ 474	\$ 2,525
Americas ex-Canada	3,314	1,644	5,564	4,015
APAC	85	110	684	446
EMEA	43	205	502	745
	\$ 3,558	\$ 2,048	\$ 7,224	\$ 7,731

Gross margin was 51.6% for the current nine month reporting period, a 1.3 percentage point increase over the comparable period in 2017. The increase in gross margin was driven by increased services sales, coupled with product mix. Excluding Wegener, our gross margin was 54%, which is higher than last year's 50.3% and in line with historical norms.

Operating Expenses ("OPEX")

(in thousands)	Third Quarter			Nine Months Ended September 30,		
	2018	2017	% Chg	2018	2017	% Chg
General and administrative	\$ 322	\$ 151	113%	\$ 1,228	\$ 481	155%
Sales and marketing	328	228	43%	914	1,010	-10%
Research and development, net	878	436	101%	2,667	1,350	98%
Total operating expenses	\$ 1,527	\$ 815	87%	\$ 4,808	\$ 2,842	69%

Total OPEX increased by 69% during the first 9 months of 2018 compared to the same period in 2017, primarily due to the increase in personnel, depreciation and occupancy costs relating to acquisition of Wegener, which closed on December 29, 2017. For financial reporting purposes, we allocate facility costs to OPEX (G&A, S&M, and R&D) and cost of revenues.

General and administrative ("G&A") expenses consist primarily of compensation paid to the corporate, IT, and finance staff as well as professional fees, and public company related costs.

Our Sales and Marketing ("S&M") costs include compensation, including sales commissions, paid to our sales team, as well as tradeshow, promotion and travel and entertainment costs.

Research and Development (R&D) costs will continue to be a significant component of our total operating expenses as we continue to develop innovative products and solutions to remain competitive in our industry. R&D costs include primarily compensation paid to engineering personnel and prototype costs.

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Notably, expenses related to amortization of intangible assets from the acquisitions of IDC and Wegener are also included in R&D costs. This amortization of about \$230,000 per quarter (\$690,000 for this reporting period) distorts our R&D expenditures as a % of revenue and it has an impact on our net Operating results. R&D product development costs are expensed as incurred; we do not capitalize development costs. Certain R&D costs may be partially subsidized by Federal and Provincial investment tax credits if qualified as scientific research and experimental development ("SR&ED"). We did not accrue any investment tax credits during the first nine months of 2018 or 2017.

Foreign Exchange Gain (Loss)

For the current nine month reporting period, we had a foreign exchange gain of \$161 thousand, compared to a loss of \$47 thousand in 2017, primarily due to the strengthening of the USD. As previously disclosed in our 2017 MD&A, while we do not have a formal currency hedging program, we do actively manage our foreign currency risk and may also enter speculative currency positions based on management's best judgement. At September 30, 2018, we had no outstanding forward foreign exchange contracts.

At September 30, 2018, the foreign currency denominated assets and liabilities, subject to remeasurement, are as follows:

<i>(in thousands)</i>	USD	Euro
Assets	\$ 3,363	€ -
Liabilities	(477)	0
Net assets before hedging	\$ 2,886	€ -
Currency derivative contracts	0	0
Net assets -unhedged	\$ 2,886	€ -
Impact on Novra's earnings if 5% change in foreign exchange rates	\$ 144	€ -

Depreciation and Amortization

The significant increase in depreciation and amortization costs in the current period over the comparable period in 2017 was mainly due to the acquisition of Wegener. We acquired \$50 thousand of equipment and \$2.9 million of intangible assets. These assets are being depreciated over their respective useful lives. This depreciation is primarily included in as part of R&D operating expenses.

EBITDA and Adjusted EBITDA

EBITDA and Adjusted EBITDA are non-IFRS measures. EBITDA is defined as earnings before income tax expense, net financing costs, depreciation and amortization. Adjusted EBITDA is defined as EBITDA adjusted for foreign exchange gain or loss, acquisition-related costs, gain or loss on Wegener options, share-based compensation, restructuring charges, material write-down of inventories, and any other material impairment charges.

Management believes that EBITDA and Adjusted EBITDA provide important financial measures of Novra's operating performance because they allow management, investors, and other stakeholders to evaluate and compare Novra's core operating results from period to period by removing the impact of its capital structure (interest expense), asset base (depreciation and amortization), and tax consequences. Because EBITDA and Adjusted EBITDA do not have any standardized meanings prescribed by IFRS, other companies may calculate these non-IFRS measures differently, and therefore our EBITDA and Adjusted EBITDA may not be comparable to similar titled measures of other companies. Accordingly,

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readers are cautioned to not place undue reliance on these financial measures and encouraged to read all IFRS accounting disclosures presented in the audited Consolidated Financial Statements.

Adjusted EBITDA for the current nine month reporting period was \$(215) thousand, compared to \$1.4 million in the same period in 2017. This significant decrease was primarily driven by slightly lower revenues and a significant increase in OPEX due to the acquisition of Wegener.

SELECTED QUARTERLY FINANCIAL INFORMATION

(dollars in thousands, except per share data)

The following table sets out selected financial information for our current and eight most recently completed quarters.

	Sep 30 2018	Jun 30 2018	Mar 31 2018	Dec 31 2017	Sep 30 2017	Jun 30 2017	Mar 31 2017	Dec 31 2016	Sep 30 2016
Revenue	3,558	1,594	\$ 2,072	\$ 1,801	\$ 2,048	\$ 3,261	\$ 2,422	\$ 3,056	\$ 1,170
Gross profit	2,087	758	880	918	946	1,810	1,130	1,350	463
Operating expenses	1,527	1,582	1,699	1,010	815	1,074	953	979	1,056
Foreign exchange gain (loss)	(37)	90	109	10	(20)	(32)	5	24	8
Net income (loss) as reported under IFRS	467	(791)	(763)	(145)	43	639	242	344	(656)
Adjusted EBITDA income (loss)	862	(490)	(587)	41	244	860	274	464	(465)
Earnings (loss) per share - diluted	\$ 0.012	\$ (0.024)	\$ (0.023)	\$ (0.004)	\$ 0.001	\$ 0.021	\$ 0.008	\$ 0.012	\$ (0.023)
Weighted average shares outstanding	33,348	33,348	33,336	33,308	33,285	30,369	29,079	29,077	29,077

We occasionally receive large orders from customers and partners which can provide revenue visibility for future quarters. However, generally a large portion of Novra's quarterly revenues are generated from orders received in the quarter rather than from order backlog going into the quarter. As a result, Novra's revenue, profitability and cash flows are difficult to predict and may fluctuate significantly from quarter to quarter.

We expect continued significant volatility in revenue from quarter to quarter due to particular timing of orders from existing customers, continued economic and trade relationship instability in certain geographic regions and significant unpredictability in the length of sales cycles with new and existing customers in the sales pipeline. The result of limited order visibility is that revenue and, accordingly, profitability and cash flows, will be difficult to predict and will fluctuate.

LIQUIDITY

Quick Ratio

Our principal liquidity requirements are for working capital, capital expenditures and for pending acquisitions as previously announced. Management measures liquidity based on Novra's unrestricted cash and accounts receivable. The following table shows our total liquid assets at the following reporting periods.

	September 30, 2018	December 31, 2017
Cash	\$ 1,244	\$ 1,805
Accounts receivable	3,444	1,539
Total liquid assets	\$ 4,688	\$ 3,344
Quick ratio ⁽¹⁾	1.66:1	1.96:1

(1) Total liquid assets over total current liabilities, excluding amounts due to related parties and deferred revenue

The quick ratio as defined above is a non-IFRS financial measure. We believe this an important financial metric to investors and other stakeholders to assess Novra's ability to meet its third party short-term obligations with its most liquid assets. The related parties have expressed no intent to call on their debt in

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the near term until such time that Novra is in a stronger capital position. We also excluded deferred revenue in the quick ratio calculation as it does not represent a contractual financial obligation i.e. it is a liability that will reverse once revenue recognition has been met.

At September 30, 2018, Novra's quick ratio was 1.66:1 or \$1.66 of liquid assets available to cover each \$1.00 of third party current liabilities, a reduction from 1.96:1 at December 31, 2017.

The following is a summary of cash flows by activities for the first 9 months of 2018 vs. the same period in 2017.

Operating activities

We had negative cash flows from operating activities of \$351 thousand for the current nine month reporting period in 2018, compared to positive \$2.6 million for the same period in 2017. This was driven by poorer operating results in the current period.

Investing activities

We had no cash flows driven by investing activities during the first nine months of 2018 and negative \$1 thousand in 2017.

Financing activities

We had negative \$27 thousand net cash from financing activities in the current period, compared to negative \$2.0 million in the comparable prior period. In the first nine months of 2017, we used a portion of the excess cash generated from operating activities to fully repay the borrowings under the RBC Credit Facilities and make a partial repayment on the IMT unsecured promissory note. We also received funding from WEDC and through warrants exercised during that period. In the first nine months of 2018, we received additional funding from WEDC and we borrowed from our revolving line of credit with the Chymiak Trust to fund our working capital requirements. We also made repayments on our long term debt and IMT promissory notes this period.

As of the date of this MD&A, we continue to have access to the following RBC Credit Facilities:

	Currency	Borrowing Limit	Availability Based On	Outstanding Amounts	Remaining Borrowing Limit	Interest Rate	Maturity
Revolving Demand Facility (for general use)	CAD	\$ 350	75% of Good Accounts Receivable in Canada and 50% of encumbered inventories up to \$150	\$ -	\$ 350	Royal Bank Prime + 0.50%	None; Due on demand
Revolving Demand Facility (for pre-shipment financing)	CAD	\$ 495	100% of eligible pre-shipment costs	\$ -	\$ 495	Royal Bank Prime + 0.75%	None; Due on demand

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Working Capital Ratio

Novra's working capital ratio was as follows:

	September 30, 2018	December 31, 2017
Working Capital:		
Current assets	\$ 7,752	\$ 5,545
Current liabilities	5,912	3,914
Working capital	\$ 1,840	\$ 1,631
Working capital, excluding related party and deferred revenue balances	\$ 4,922	\$ 3,843
Working capital ratio⁽¹⁾	2.74:1	3.26:1

(1) "Working capital, excluding related party and deferred revenue balances" and "Working capital ratio" as defined above are both non-IFRS financial measures. Management believes these are useful, relevant financial measures to investors and other stakeholders in order to assess the available working capital to fund Novra's day-to-day operations.

Working capital increased to \$1.8 million at September 30, 2018, from \$1.6 million at December 31, 2017.

Excluding related party and deferred revenue balances, Novra's working capital increased to \$4.9 million at September 30, 2018, from \$3.8 million at December 31, 2017. Our working capital ratio, excluding related party and deferred revenue balances (as defined above) was 2.74:1 or \$2.74 per \$1.00 of current third party liabilities at September 30, 2018.

Contractual obligations and commitments

At September 30, 2018, Novra's contractual obligations and commitments were as follows:

Payment due:	Total	Within 1 year	1 to 3 years	3 to 5 years
Borrowings	\$ 2,590	\$ 113	\$ 306	\$ 2,171
Operating leases	1,067	583	312	172
Purchase commitments	136	71	65	-
Trade payables and other payables	775	775	-	-
Total third party contractual obligations	4,568	1,542	683	2,343
Promissory notes from related party	968	721	148	99
Advances from related parties	635	635	-	-
Total contractual obligations	\$ 6,171	\$ 2,898	\$ 831	\$ 2,442

Based on the September 30, 2018 liquid assets and working capital (as defined above), in addition to the unused RBC Credit Facilities, we believe that we have sufficient liquid resources to fund all third party contractual obligations coming due within one year.

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CAPITAL RESOURCES

Our key objectives and policies for managing capital are to maintain a strong capital base in order to:

- maintain investor, creditor and market confidence;
- advance Novra's corporate strategies to generate attractive risk-adjusted return over the long-term for our shareholders;
- sustain Novra's operations and growth through all cycles; and
- ensure compliance with the covenants of any applicable credit facility and other financing facilities.

At September 30, 2018, our total outstanding voting common shares were 33,348,312, excluding the 2,000,000 common shares held by our subsidiary, Wegener. The total represents an increase of 40,000 from December 31, 2017 as a result of exercise of options during the current period.

Our capital resources were as follows:

	September 30, 2018	December 31, 2017
Borrowings (drawn)	\$ 2,760	\$ 2,512
Promissory notes from related party	989	1,017
Shareholders' equity ⁽¹⁾	1,288	2,150
Total capital resources	\$ 5,038	\$ 5,679

(1) Shareholders' equity is calculated before non-controlling loss of \$690 thousand.

The significant change in capital resources during the current nine month period was due to the following:

- Shareholders' equity decreased by \$430 thousand mainly due to net losses for the first six months of the current period.

Based on Novra's current liquidity (as discussed above), management believes Novra has sufficient capital resources to fund Novra's operations for the foreseeable future, including the contractual obligations and commitments as noted above.

OFF BALANCE SHEET ARRANGEMENTS

At September 30, 2018, we had no off balance sheet arrangements.

TRANSACTIONS WITH RELATED PARTIES

In addition to key management personnel compensation, we have material unsecured promissory notes with IMT (IMT is a shareholder, IMT's CEO is on our Board of Directors and our President & CEO has a controlling interest in IMT) as disclosed in the "Liquidity" and "Capital Resources" sections of this MD&A. Refer to Note 4 of the unaudited interim Condensed Consolidated Financial Statements for a complete disclosure of all related party transactions, including amounts due at September 30, 2018.

ACCOUNTING MATTERS

Critical Accounting Estimates

The unaudited interim Condensed Consolidated Financial Statements include certain amounts that are inherently uncertain and judgmental in nature. As a result, management is required to make assumptions and best estimates in order to determine the reported values. We consider an accounting estimate to be critical if: (1) it requires that significant assumptions be made in order to deal with uncertainties; and (2) changes in the estimate could have a material impact on our results of operations, financial condition or liquidity.

We believe that the critical accounting policies and estimates disclosed in Novra's Audited Financial Statements and MD&A for the year ended December 31, 2017 continue to describe the significant estimates and judgments included in the preparation of the unaudited interim Condensed Consolidated Financial Statements for the current period. These are as follows:

- Revenue recognition
- Inventory obsolescence
- Impairment of non-financial assets

Refer to Note 3 of the 2017 Consolidated Financial Statements for further details.

We believe that the amounts included in these financial statements reflect management's best judgment. However, factors including, without limitation, those noted under "Risks and Uncertainties" below could cause actual events or results to differ materially from our underlying assumptions and estimates. Accordingly, this could lead to a material adverse impact on our results of operations, financial condition and/or liquidity.

New Accounting Standards

On January 1, 2018, we have adopted the following two new accounting standards:

- IFRS 15, Revenue from Contracts with Customers; and
- IFRS 9, Financial Instruments

The adoption of these two new accounting standards did not result in a material impact to Novra's Condensed Consolidated Financial Statements and its internal accounting processes and procedures. Refer to Note 2 of the Condensed Consolidated Financial Statements for further details on these new accounting standards.

Future Accounting Pronouncements

Refer to Note 3 of the Condensed Consolidated Financial Statements.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

There were no new financial instruments. Refer to Note 5 of the 2017 Consolidated Financial Statements for disclosure relating to Novra's financial instruments and financial risk management objectives and policies.

Novra Technologies Inc.

Management's Discussion & Analysis

Nine months ended September 30, 2018

RISKS AND UNCERTAINTIES

Refer to our 2017 MD&A for a list of risks and uncertainties facing Novra. We are currently not aware of any new material risks and uncertainties.