MANAGEMENT'S DISCUSSION & ANALYSIS

Year Ended December 31, 2017

(Expressed in Canadian dollars)

The following Management's Discussion and Analysis ("MD&A") of Novra Technologies Inc. ("Novra") should be read in conjunction with the audited Consolidated Financial Statements for the years ended December 31, 2017 and 2016, and related notes included therein (the "Consolidated Financial Statements"). The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). 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 April 30, 2018 and is current to this date. The MD&A and the Consolidated Financial Statements were approved and authorized for issuance by the Board of Directors on April 30, 2018.

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 Wegener operations with the Novra Group, 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 risks 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- see "Recent Developments" section of this MD&A for further details on the acquisition. The companies joined together to form the Novra group of companies ("Novra Group") – see our new website at www.novragroup.com.

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.

We offer a comprehensive product portfolio including hardware, software, and services. In addition to our core video, radio, and data products, areas of expertise and added value include: encryption and cybersecurity, next-generation hybrid networks (satellite/terrestrial/cloud), and efficient bandwidth utilization.

Our core product lines are:

- *Video distribution:* products and systems for providing end-to-end solutions for traditional and non-traditional video networks. Our video products target the following key market niches:
  - Broadcast video networks of all sizes
  - Digital program insertion (for targeted advertising, regionalization, and blackout management)
  - Live and file-based video content distribution
  - Digital signage

- *Broadcast Radio:* we are a leading provider of end-to-end infrastructure solutions to broadcast radio networks small, medium, and large. We have a reputation for reliable, cost-effective delivery of high-quality audio via satellite, terrestrial, or hybrid networks. The radio product line includes uplink and receive site equipment as well as network management, encryption, and targeted regionalization/ad insertion options.

- *Data distribution:* our broadband multimedia distribution technology is ideally suited for networks requiring fast, ultra reliable, secure delivery of data via satellite. In addition to providing the hardware infrastructure (transmit and receive), we offer an advanced content distribution network (CDN) software solution (Datacast XD) for ultra-reliable and secure file broadcasting.

- *Digital cinema:* we provide leading digital cinema networks with their core distribution infrastructure (uplink equipment, content management, and network management) and high-end appliances for cinemas as well as decoders for live events and alternative content (entertainment and sports) in 2D and 3D. Additionally, we offer a digital cinema distribution software solution for integration onto commercially available servers and third-party equipment.

- *Satellite and terrestrial broadband receivers:* we offer a line of cost-effective, reliable DVB and ATSC compliant receivers for the expanding broadband communications network market.

OVERALL PERFORMANCE

Q4 2017 vs. Q4 2016:

- Total revenue of $1.8 million, a decrease of 41%
- Gross profit at $0.9 million was 51.0% of total revenue, compared to $1.4 million or 44.2%
- Operating expenses were $1 million, unchanged from prior year
- Adjusted EBITDA of $41 thousand, compared to Adjusted EBITDA of $435 thousand (this is a non-IFRS financial measure - refer to "Discussion of Operations" section below for further details)
- Operating cash flows were $(43) thousand, compared to $(349) thousand
- Working capital was $1.6 million, an increase of 35%

Year 2017 vs. 2016:

- Total revenue of $9.5 million, an increase of 89%
- Gross profit at $4.8 million was 50.4% of total revenue, compared to $2.2 million or 43.0%
- Operating expenses were $3.9 million, compared to $2.8 million
- Adjusted EBITDA was $1.4 million, compared to Adjusted EBITDA of $(256) thousand
- Operating cash flows were $2.5 million, compared to $(1.7) million
- Shareholders' equity was $2.2 million at December 31st, an increase of 167%

The above financial highlights include IDC's operating results from June 15, 2016 to December 31, 2016, the post-acquisition period. As we closed the acquisition of the 51.6% controlling interest of Wegener (the "Wegener Acquisition") on December 29, 2017, none of Wegener's 2017 operating results are reflected in the above financial highlights. However, starting on January 2, 2018, Wegener's operating results will be included in Novra Group's consolidated operating results.

The significant variation in the above annual financial highlights is primarily driven by the acquisition of IDC which closed on June 15, 2016. The 2017 operating performance was strong primarily due to delivering on large contracts previously announced in 2016 and significant orders from U.S. defence contractors in 2017.

RECENT DEVELOPMENTS

- In March 2017, we announced a cybersecurity partnership agreement with DataPath Inc. Through this partnership, we now offer professional cybersecurity consulting to our global customers to enhance their cyber security risk management including threat detection, incident response, and regulatory compliance, as well as network vulnerability scanning plus meditation, and 24/7 live monitoring from DataPath's cyber security operations center. Starting in late Q2 2017, we have enhanced our professional customer support – gold plan to include Datapath's cybersecurity checkup/threat analysis.

- In April 2017, at the National Association of Broadcasters (NAB) 2017 Show, we announced the launch of our new MISTIQ audio platform – a hybrid satellite/terrestrial/cloud distribution for professional audio networks. Further, we announced our next generation for our well-known IPE 4000 IP Encapsulator, as well as our upcoming S400 DVB-S2 receiver to be available later in the first half of 2018.

- In November 2017, our Board approved a legally binding term sheet to acquire Wegener under a two-step acquisition approach for 100% of Wegener Corporation.

- On December 29, 2017, we closed the acquisition of 51.6% controlling interest of Wegener (the "Wegener Acquisition") for a total purchase consideration of $260 thousand by issuing 2 million common shares of Novra. We believe the addition of Wegener to the Novra Group will immediately give us a larger footprint in the USA and Mexico as well as providing us with a complimentary portfolio of innovative product and software solutions. For further financial information regarding this acquisition, refer to Note 4 (a) of the Consolidated Financial Statements.

- In Q1 2018, we won our first significant MISTIQ audio order for a LATAM-based customer.

- As announced on April 9, 2018, we successfully closed approximately $6 million of new orders by the end of Q1 2018, including two new orders amounting to $3.2 million from a major international radio broadcaster for on ongoing network upgrade as well as a technology refresh of satellite uplink infrastructure.

OUTLOOK

We are pleased with our positive 2017 results as they reflect the first complete year of operations after the acquisition of IDC. With the acquisition of 51% controlling interest of Wegener Communications on December 2017, we are executing on our vision to bring great companies together with complementary technologies 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 we reported that we had over $6.0 million in sales and bookings for the first quarter, we expect our sales for the first half of 2018 to be soft as several of our clients' projects have been delayed for various reasons. Our sales funnel is healthy, and we expect sales to be much stronger in the second half of 2018.

Our high priority goals for 2018 are:

- To drive costs efficiencies as we bring Wegener into the Novra family of companies,

- Achieve operational efficiencies by merging operational divisions across the three companies.

- Refocus our engineering into developing new and innovating 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.

- 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 to 18 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 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 technological 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.

SELECTED ANNUAL INFORMATION

The following table provides a summary of financial data derived from our audited Consolidated Financial Statements for the past three years:

	2017		2016		2015	
Revenue	$	9,532	$	5,043	$	2,713
Net income (loss)	$	778	$	(796)	$	361
Basic earnings per share ("EPS")	$	0.02	$	(0.03)	$	0.02
Diluted EPS	$	0.02	$	(0.03)	$	0.02
Total assets	$	9,060	$	8,069	$	2,380
Total non-current liabilities	$	2,995	$	1,371	$	377

Factors causing significant fluctuations for the above years were as follows:

2017 vs. 2016:

- The merger with IDC contributed to the significant growth in our revenue.
- The change from net loss to net income was driven primarily by the merger synergies with IDC, coupled with winning a $3 million radio network order and a $1.3 million encryption system order from a U.S. defence contractor in the second half of 2016 with the bulk of the delivery taking place in 2017. Additionally, we also won several significant orders from U.S. defence contractors in 2017.
- Total assets increased largely due to the Wegener Acquisition.
- The increase in non-current liabilities was driven mainly by the assumption of Wegener's line of credit as part of our controlling interest acquisition on December 29, 2017. This was partially offset by partial repayments on related party promissory notes and the conversion of a convertible note to equity.

2016 vs. 2015:

- The merger with IDC contributed to the significant growth in our revenue and total assets.
- Despite earnings generated by IDC during the post-acquisition period, we incurred a net loss for 2016. This loss was driven by non-recurring acquisition costs and weaker sales for our DVB satellite receivers.
- The increase in non-current liabilities was driven mainly by additional funding provided by a related party to finance the acquisition of IDC, coupled with a new government funding for specified R&D projects as well as long-term deferred revenue.

DISCUSSION OF OPERATIONS

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

(in thousands)	Fourth Quarter			Year Ended December 31,		
	2017	2016	% Chg	**2017**	2016	% Chg
Revenue by type:						
Products	**$ 1,398**	$ 2,742	-49%	**$ 8,183**	$ 4,352	88%
Services	**403**	314	28%	**1,349**	691	95%
Total revenue	**1,801**	3,056	-41%	**9,532**	5,043	89%
Gross profit	**918**	1,350	-32%	**4,804**	2,169	121%
Gross margin	***51.0%***	*44.2%*		***50.4%***	*43.0%*	
Operating expenses [1]	**1,010**	1,008	0%	**3,853**	2,765	39%
Operating income (loss) [1]	**(93)**	342	NM	**952**	(596)	NM
Other income (expenses) [1]	**(52)**	2	NM	**(174)**	(200)	-13%
Net income (loss) as reported under IFRS	**$ (145)**	$ 344	NM	**$ 778**	$ (796)	NM
Adjustments:						
Finance income [1]	**(3)**	(3)	0%	**(7)**	(7)	0%
Finance costs [1]	**17**	54	-69%	**109**	144	-24%
Depreciation and amortization	**95**	93	2%	**380**	197	93%
Tax expense (recovery)	**(1)**	-	-	**-**	-	NM
EBITDA - non-IFRS measure	**(37)**	488	NM	**1,260**	(462)	NM
Loss (gain) on foreign exchange	**(10)**	(24)		**38**	28	
Loss on disposal of equipment	**-**	-		**-**	12	
Share-based compensation	**19**	-		**67**	-	
Acquistion-related costs	**20**			**20**	143	
Loss (gain) on Wegener options	**49**	(29)		**32**	23	
Adjusted EBITDA - non-IFRS measure	**$ 41**	$ 435	-91%	**$ 1,417**	$ (256)	NM

NM - Not meaningful

(1) the 2016 comparatives were restated to conform with the 2017 presentation.

Revenue and Gross Margin

Q4 2017 vs. Q4 2016:

Total revenue decreased 41% to $1.8 million. The decrease in product revenue was mainly due to a softer quarter for customer orders – there were some delays in placing orders which came to fruition in Q1 2018 as noted under "Recent Developments" section of this MD&A. Q4 2016 revenue benefitted from the partial shipment on the $3.2 million radio network order we won during the summer 2016. Services revenue increased by 28% mainly due to new support agreements with the U.S. military for products sold earlier this year as well as selling enhanced professional support plans for certain existing customers.

Our revenue is generally concentrated on a few customers from quarter to quarter. For Q4 2017, our top 10 customers accounted for 73% of total revenue, with the three largest accounting for 17%, 13% and 10%, respectively, or $717 thousand in aggregate. For Q4 2016, our top 10 customers accounted for 82% of total revenue, with the two largest accounting for 39% and 17%, respectively, or $1.7 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 quarter:

		2017	% of Total		2016	% of Total
Americas ex-Canada	$	806	45%	$	1,277	42%
Canada		470	26%		1,440	47%
EMEA		468	26%		138	5%
APAC		57	3%		201	7%
	$	1,801	100%	$	3,056	100%

Gross margin was 51.0% for the current quarter, a 6.8 percentage point increase over the comparable quarter in 2016. The significant improvement in gross margin was driven by product mix; in Q4 2017 we sold significant IPEs and software at higher margins than for our other product lines.

Year 2017 vs. 2016:

Total revenue increased by 89% to $9.5 million. This growth was driven from both Products and Services, in part due to the merger with IDC in June 2016. Product revenue growth also benefited from deliveries on the large radio broadcast network project awarded in August 2016, the large encryption system order from a U.S. defence contractor awarded in November 2016, and the IDC LASER™ video broadcast network project in Mexico awarded in December 2016. The growth in Services revenue was also driven by new and renewed customer support contracts as well as professional installation and training services on the large contracts previously noted.

Our top 10 customers accounted for 68% of total revenue for 2017 with the two largest accounting for 27% and 13%, respectively, or $3.8 million in aggregate. For 2016, revenue from our top 10 customers accounted for 72% of total revenue for 2016 with the three largest accounting for 27%, 11%, and 10%, respectively, or $2.4 million in aggregate. No other customers accounted for more than 10% of total revenue.

The following table summarizes the geographic distribution of our revenues for the year:

	2017	% of Total	2016	% of Total
Americas ex-Canada	**$ 4,822**	**51%**	$ 2,383	47%
Canada	**2,994**	**31%**	1,773	35%
EMEA	**1,213**	**13%**	368	7%
APAC	**503**	**5%**	518	10%
	$ 9,532	**100%**	$ 5,042	100%

Gross margin was 50.4% for the current quarter, a 7.4 percentage point increase over the comparable quarter in 2016. Excluding the low-margin sales of inventory supplies to Wegener, our gross margin was 54% for 2017 vs. 47% in YTD 2016. The 7 percentage points improvement in gross margin excluding Wegener is primarily driven by product mix as a result of the merger with IDC, coupled with higher revenue to cover overhead costs in 2016.

Operating Expenses

(in thousands)	Fourth Quarter			Year Ended December 31,		
	2017	2016	% Chg	**2017**	2016	% Chg
General and administrative ("G&A")	**$ 291**	$ 292	0%	**$ 773**	$ 883	-12%
Sales and marketing ("S&M")	**266**	226	18%	**1,276**	592	116%
Research and development, net ("R&D")	**453**	490	-8%	**1,805**	1,290	40%
Total operating expenses	**$ 1,010**	$ 1,008	0%	**$ 3,854**	$ 2,765	39%

For Q4 and full year 2017, total operating expenses ("OPEX") increased by nil% and 39%, respectively, compared to the same prior periods. Total OPEX for the year 2017 increased by 39% over 2016 mainly to an increase in headcount, amortization costs and facility costs from the IDC merger, as well as higher sales commission expense and tradeshow costs. This was offset partially by lower acquisition-related costs incurred in 2017 to consummate the acquisition of Wegener vs. IDC.

For financial reporting purposes, we allocate facility costs to OPEX (G&A, S&M, and R&D) and cost of revenues. For Q4 2017, $99 thousand and $22 thousand facility costs were allocated to OPEX and cost of revenues, respectively, compared to $99 thousand and $24 thousand, respectively, for the same prior period. For 2017, $390 thousand and $100 thousand facility costs were allocated to OPEX and cost of revenues, respectively, compared to $257 thousand and $63 thousand, respectively, for the same prior period. The increase in 2017 was driven by the merger with IDC.

General and administrative ("G&A") expenses consist primarily of compensation paid to the corporate, IT, and finance staff as well as professional fees, occupancy costs, and public company related costs. Our Q4 2017 G&A was line with Q4 2016. The decrease for the full year 2017 over 2016 was driven primarily by lower acquisition-related costs; partially offset by the higher G&A costs in the second half of 2016 due to the IDC merger.

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. S&M increased by 116% in 2017 over 2016 mainly due to an increase of sales headcount from the IDC merger, as well as higher sales commission expense and tradeshow 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. R&D costs are expensed as incurred; we do not capitalize development costs. These R&D costs are also partially subsidized by Federal and Provincial investment tax credits for qualified scientific research and experimental development ("SR&ED"). For 2017, the significant increase in R&D costs was primarily driven by the merger with IDC. The 8% reduction in Q4 2017 over Q4 2016 is primarily due to a retirement; partially offset by a profit sharing accrual.

With the Wegener Acquisition, we expect our quarterly OPEX to increase initially by approximately $325 to $350 thousand; however we expect this quarterly burn rate will come down as we realize some cost savings during 2018 by streamlining certain processes and integrating its operations with the Novra Group.

Foreign Exchange Gain (Loss)

Foreign exchange gain (loss) results from the translation of foreign currency transactions in the functional currency of the respective entity of Novra and its subsidiaries. Except for Wegener, we have determined that the functional currency for all entities is the Canadian (CAD) dollar. For the Q1 2018 financial reporting, we will review the functional currency of Wegener as we will commence reporting its results as part of our Novra Group's operating results.

As noted above under Revenue and Gross Margin, we generate a significant portion of our revenue outside of Canada, denominated in USD and Euro currencies. Additionally, most sales in Canada were also denominated in USD currency. Further, the procurement for most of our raw materials is denominated in USD currency; however, our operating costs are denominated in CAD currency. Accordingly, Novra's financial position and operating results are significantly exposed to foreign currency movements. We actively manage our foreign currency risk and may also enter speculative currency positions based on management's best judgement.

For Q4 2017, we incurred a foreign exchange gain of $10 thousand, compared to a gain of $24 thousand in Q4 2016. For the full year 2017, we incurred a foreign exchange loss of $38 thousand, compared to a loss of $28 thousand in 2016.

At December 31, 2017, the foreign currency denominated assets and liabilities, subject to remeasurement, are as follows:

(in thousands)		**USD**		**Euro**
Assets	$	2,088	€	19
Liabilities		(568)		(27)
Net assets before hedging	$	1,521	€	(8)
Currency derivative contracts		(1,700)		0
Net assets -unhedged	$	(179)	€	(8)
Impact on Novra's earnings if 5% change in foreign exchange rates	**$**	**(9)**	**€**	**-**

The above excludes Wegener's assets and liabilities which are denominated in USD. At December 29, 2017, Wegener's net assets were nominal.

Finance Costs

Finance costs were $17 thousand for Q4 2017, a 69% reduction over last year's Q4 due to repayment of RBC Credit Facilities in Q1 2017 and partial conversion of IMT loans to equity in Q2 2017. For calendar year 2017, finance costs were $109 thousand, a 24% reduction over 2016 for the same reasons.

Depreciation and Amortization

The significant increase in depreciation and amortization costs for the year 2017 over 20016 was due to the merger with IDC. We acquired $143 thousand of equipment and $940 thousand of intangible assets. These assets are being depreciated over their respective useful lives (refer to Note 2 of the Consolidated Financial Statements for further details).

Tax Expense

Due to the net operating loss in Q4 2017, there was no current tax provision to recognize. While we earned a taxable income for the full year 2017, we used non-capital loss carry forwards to eliminate the corporate income tax liability associated with the taxable income. Accordingly, we did not record a tax provision for 2017.

Despite the significant non-capital loss carry forwards and available investment tax credits (see Note 19 of the Consolidated Financial Statements) to shelter future taxable income from income taxes, we have not recognized deferred tax asset at December 31, 2017 and 2016 because management concluded it was not probable to realize this benefit in the foreseeable future. In making this determination, management considered the uncertainties in projecting future taxable income, the uncertainties related to the technology industry and competition in which we operate, and the lack of available income tax planning strategies.

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, *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 Q4 and calendar year 2017 was $41 thousand and $1,417 thousand, respectively, compared to an Adjusted EBITDA of $435 thousand and $(256) thousand for the same periods in 2016, respectively. The decrease in Q4 was primarily driven by lower sales; partially offset by higher gross margin. For 2017, the significant improvement in operating performance was primarily driven by higher revenues at higher margins, partially offset by an increase in OPEX for YTD Adjusted EBITDA.

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.

	Dec 31 2017	Sep 30 2017	Jun 30 2017	Mar 31 2017	Dec 31 2016	Sep 30 2016	Jun 30 2016	Mar 31 2016	Dec 31 2015
Revenue	$ 1,801	$ 2,048	$ 3,261	$ 2,422	$ 3,056	$ 1,170	$ 501	$ 816	$ 679
Gross profit	918	946	1,810	1,130	1,350	463	268	357	73
Operating expenses	1,010	815	1,074	953	979	1,056	476	708	146
Foreign exchange gain (loss)	10	(20)	(32)	5	24	8	4	(64)	23
Net income (loss) as reported under IFRS	(145)	43	639	242	344	(656)	(177)	(307)	(23)
Adjusted EBITDA income (loss)	41	244	860	274	464	(465)	(89)	(118)	(71)
Earnings (loss) per share - diluted	$ (0.004)	$ 0.001	$ 0.021	$ 0.008	$ 0.012	$ (0.023)	$ (0.008)	$ (0.014)	$ (0.001)
Weighted average shares outstanding	33,308	33,285	30,369	29,079	29,077	29,077	23,564	22,388	22,388

We occasionally receive large orders from customers and partners which can provide revenue visibility for future quarters. However, 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 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 December 31, 2017 and 2016.

	December 31, 2017	December 31, 2016
Cash	**$ 1,805**	$ 1,265
Accounts receivable	**1,539**	2,804
Total liquid assets	**$ 3,344**	$ 4,069
Quick ratio (1)	**1.96:1**	1.07:1

(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 the near term until such time 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 December 31, 2017, Novra's quick ratio was 1.96:1 or $1.96 of liquid assets available to cover each $1.00 of third party current liabilities, a significant improvement from 1.07:1 at December 31, 2016. This improvement was driven by improved operating performance which enabled us to repay borrowings during 2017.

The following is a summary of cash flows by activities for 2017 vs. 2016.

Operating activities

We had positive cash flows from operating activities of $2.5 million for 2017, compared to negative cash flows from operating activities of $1.7 million for 2016. The significant improvement was mainly driven by strong cash conversion of our receivables and inventories during 2017; whereas in 2016 our operating cash flows were negatively impacted by the company's rebuilding phase following the merger with IDC in which inventories level was inadequate to meet sales orders received during Q3 2016.

Investing activities

We completed the purchase of 51.6% controlling interest of Wegener Corporation by issuing 2,000,000 voting common shares to Wegener. In return, we received 14,000,000 common shares, 51.6% of Wegener's total outstanding and issued common shares at December 31, 2017. We assumed Wegener's cash on hand at closing and therefore net cash inflow from closing the merger was $66 thousand. In 2016, we acquired IDC for a net cash outflow of $51 thousand – for further details refer to Note 4 of the Consolidated Financial Statements. During the fourth quarter of 2016, we also purchased equipment for our customer support lab to support a large customer over the next few years.

Financing activities

We applied $2.0 million net cash to financing activities in 2017, driven mainly by full repayment of borrowings under the RBC Credit Facilities and partial repayment on the IMT unsecured promissory note. These repayments were partially offset by proceeds of $205 thousand from issuance of common shares due to exercised warrants and $120 thousand of additional repayable funding from the Western Economic Diversification Canada.

In 2016, we generated $2.5 million from financing activities. The increase in cash was driven by the amended credit facilities (see below). Additionally, we raised $1.0 million of additional financing with IMT to fund our working capital (see below "Capital Resources" section for further details). In 2016, we received $64 thousand under a repayable government contribution agreement with Western Economic Diversification that was approved in 2015 and will provide a loan for up to $448 thousand to fund specific R&D projects. These inflows were partially offset by $120 thousand instalment payment on the loan payable to Crocus Investment Fund.

As noted above, in 2016 we executed an amended credit facilities agreement with RBC to add a $1.45 million USD non-revolving term facility. The use of this new facility is restricted to finance 90% of eligible pre-shipment costs in connection with the large radio network contract we won in August 2016. The following table provides a summary of the RBC Credit Facilities at December 31, 2017:

	Balance at January 1 2017	Additional Borrowings	Interest	Foreign Exchange	Repayments	Balance at December 31 2017	Interest Rate	Maturity
Revolving Demand Facility (for general use)	$ 300	$ 80	$ 1	$ -	$ (381)	$ -	Royal Bank Prime + 0.50%	None; Due on demand
Revolving Demand Facility (for pre-shipment	368	-	2	-	(370)	-	Royal Bank Prime + 0.75%	None; Due on demand
Non-Revolving Demand Facility (for pre-shipment financing of a large contract)	1,462	-	9	(20)	(1,451)	-	Royal Bank US Base Rate + 1.05%	Terminated during Q1 2017
	$ 2,130	$ 80	$ 12	$ (20)	$ (2,202)	$ -		

Due to strong cash collections during the first quarter of 2017, we have fully repaid all of the above outstanding amounts. We have also terminated the non-revolving demand facility of $1.45 million USD as we have completed the shipment of all orders associated with the specified large contract during Q1 2017.

Working Capital Ratio

Novra's working capital ratio was as follows:

	December 31, 2017	December 31, 2016
Working Capital:		
Current assets	$ 5,545	$ 7,096
Current liabilities	3,914	5,891
Working capital	$ 1,631	$ 1,205
Working capital, excluding related party and deferred revenue balances	$ 3,843	$ 3,301
Working capital ratio[1]	3.26:1	1.87:1

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

Working capital improved to $1.6 million at December 31, 2017, from $1.2 million at December 31, 2016.

"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.

Excluding related party and deferred revenue balances, Novra's working capital increased to $3.8 million at December 31, 2017, from $3.3 million at December 31, 2016. Our working capital ratio (as defined above) remained healthy at 3.26:1 or $3.26 per $1.00 of current liabilities at December 31, 2017.

Contractual obligations and commitments

At December 31, 2017, Novra's contractual obligations and commitments were as follows:

Payment due:		Total		Within 1 year		1 to 3 years		3 to 5 years
Borrowings (Note 13)	**$**	**2,512**	$	109	$	349	$	2,054
Operating leases (Note 24)		**1,488**		615		733		140
Purchase commitments (Note 24)		**207**		69		138		-
Trade payables and other payables		**545**		545		-		-
Total third party contractual obligations		**4,752**		1,338		1,220		2,194
Promissory notes from related party (Note 22)		**1,017**		736		215		66
Advances from related parties (Note 22)		**418**		418		-		-
Total contractual obligations	**$**	**6,187**	**$**	**2,492**	**$**	**1,435**	**$**	**2,260**

See Consolidated Financial Statements notes for further details.

Based on the December 31, 2017 liquid assets (as defined above) and working capital, we have sufficient liquid resources to fund all third party contractual obligations coming due in 2018.

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 December 31, 2017 and 2016, Novra's total outstanding voting common shares were 33,308,312 and 29,077,435, respectively. Our capital resources at December 31st were as follows:

		2017		2016
Borrowings (drawn)	**$**	**2,512**	$	2,571
Promissory notes from related party		**1,017**		1,172
Convertible note from related party		**-**		285
Shareholders' equity		**2,150**		806
Total capital resources	**$**	**5,679**	$	4,834

The significant change in capital resources during 2017 was due to the following:

- While the borrowings level remained relatively consistent at December 31 2017 vs. December 31, 2016, we have proactively repaid all borrowings under RBC Credit Facilities with the excess cash during the year. This was offset by the assumption of $2.0 million in borrowings from the Wegener Acquisition (refer to Note 4(a) of the Consolidated Financial Statements).

- With the remaining excess cash, we also partially repaid the IMT unsecured promissory note, including accrued interest.

- The Convertible Note with IMT was converted to common shares.

- Shareholders' equity increased by $1.3 million mainly due to net earnings and common stock issuance.

Based on Novra's current liquidity and the recent enhancement to its capital structure, 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. However, we anticipate that we may need to raise additional capital in 2018 to develop products outside our current vertical markets, to further realize the synergies of the Novra group of companies and to be ready for additional acquisitions.

OFF BALANCE SHEET ARRANGEMENTS

At December 31, 2017, and 2016, 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 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 22 of the Consolidated Financial Statements for a complete disclosure of all related party transactions, including amounts due at December 31, 2017.

PROPOSED TRANSACTIONS

In February 2014, we announced that we intended to acquire Westport Research and Associates ("Westport"), a U.S. private company. Since 2014, Westport has made some changes to its operational and ownership structure, positioning itself well for us to successfully negotiate an acceptable term sheet. We recently resumed our discussions with Westport about a possible acquisition in 2018.

ACCOUNTING MATTERS

Critical Accounting Estimates

The 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 material items requiring such subjective and complex estimates are as follows:

- Revenue recognition
- Inventory obsolescence
- Fair value under a business combination
- Impairment of non-financial assets

- Product warranty

Refer to Note 3 of the 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.

Future Accounting Pronouncements

The IASB has recently issued the following accounting standards but are not yet effective:

- IFRS 15 – Revenue from Contracts with Customers;
- IFRS 9 – Financial Instruments; and
- IFRS 16 – Leases.

We have completed our assessment of IFRS 15 and 9 and both will not have a significant impact to Novra's Consolidated Financial Statements. We have not started the review of IFRS 16. Refer to Note 2 of the Consolidated Financial Statements for further details on the above new accounting standards.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

Refer to Note 5 of the Consolidated Financial Statements for disclosure relating to Novra's financial instruments and financial risk management objectives and policies.

RISKS AND UNCERTAINTIES

The risks and uncertainties below are not the only ones facing Novra. Additional risk and uncertainties not presently known to us or that we currently consider immaterial may also impair Novra's business operations and cause the price of Novra's common shares to decline. If any of the following risks occur, Novra's business may be harmed and its financial condition and results of operations may suffer significantly. In that event, the trading price of Novra's common shares could decline, and an investor may lose all or part of his, her or its investment. Accordingly, potential investors are strongly recommended to consult an independent financial advisor before deciding to invest in Novra.

- We rely on a small number of customers for a large percentage of our revenue. Accordingly, our quarterly revenue and operating results can be difficult to predict and can fluctuate materially, which may negatively impact Novra's results of operations.
- We may not timely identify emerging technology and market trends, enhance our existing technologies or develop new technologies to effectively compete in the multimedia broadband content distribution business.
- We face significant competition from several competitors and if we do not compete effectively with these competitors, our revenue may not grow and could decline.
- The amended RBC credit facilities agreement is subject to annual review. There is no assurance RBC will renew the existing credit facilities in 2018.
- Historically, we relied significantly on a related party (IMT) for new capital. There is no assurance that IMT will participate in future capital funding activities.
- We may engage in future acquisitions that could disrupt our business, cause dilution to our shareholders and/or negatively impact Novra's financial condition and operating results.

- Failure to manage Novra's growth successfully, including integration of acquired companies, may adversely impact Novra's operating results.
- The industry in which we operate is subject to rapid technological changes, and our continued success will depend upon our ability to react to such changes and having the financial resources to continue developing innovative products. Additionally, rapid technological changes may lead to material inventory obsolescence if we failed to manage effectively our inventory holdings.
- We have limited intellectual property protection for our product solutions.
- Discontinued third party components and defects in components or design of Novra's product solutions could result in significant costs to Novra and could impair our ability to sell existing product solutions.
- We rely on limited contract manufacturers for our product solutions.
- Our ability to recruit and retain key personnel is crucial to our ability to develop, market, sell and support our products and services.
- A substantial portion of Novra's revenues and expenses is denominated in U.S. dollar and Euro currencies and therefore we are exposed to significant currency risk. Failing to actively manage currency risk may negatively impact Novra's operating results.
- We are exposed to significant customer credit risk, particularly as the majority of our business is with foreign customers, which could lead to significant impairment charges.
- We may have unintentionally infringed on the intellectual property rights of others without appropriate licensing arrangement in place, which could lead to litigation and significant costs to Novra.
- We rely on resellers and distributors to complement our small sales team to drive future sales growth.
- Economic and geopolitical uncertainty may negatively affect our ability to grow sales.