MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS of Plaintree Systems Inc.

March 31, 2018 and March 31, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

PLAINTREE SYSTEMS INC.

For the years ended March 31, 2018 and 2017

Date: July 27, 2018

The following discussion and analysis is the responsibility of management and has been reviewed by the Audit Committee of Plaintree Systems Inc ("Plaintree" or the "Company") and approved by the Board of Directors of Plaintree. The Board of Directors carries out its responsibilities for the financial statements and management's discussion and analysis principally through the Audit Committee, which is comprised exclusively of independent directors.

The following discussion of the financial condition, changes in financial condition and results of operations of Plaintree is for the years ended March 31, 2018 and 2017. Historical results of operations, percentage relationships and any trends that may be inferred there from are not necessarily indicative of the operating results of any future periods. Unless otherwise stated all amounts are in Canadian dollars following the requirements of the International Financial Reporting Standards ("IFRS). The information contained herein is dated as of July 27, 2018 and is current to that date, unless otherwise stated. Management is responsible for ensuring that processes are in place to provide sufficient knowledge to support the representations made in the annual filings. Our Audit Committee and Board of Directors provide an oversight role with respect to all public financial disclosures by the Company, and have reviewed this MD&A and the accompanying financial statements.

W. David Watson II, President and Chief Executive Officer, and Lynn E. Saunders, Chief Financial Officer, in accordance with National Instrument 52-109 ("NI52-109"), have both certified that they have reviewed the annual financial statements and this MD&A ("the annual Filings") and that, based on their knowledge having exercised reasonable diligence, (a) the annual Filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made with respect to the period covered by the annual Filings; and (b) the annual financial statements together with the other financial information included in the annual Filings fairly present in all material respects the financial condition, financial performance and cash flows of the Company, as of the dates and for the periods presented in the annual Filings.

Investors should be aware that the inherent limitations on the ability of certifying officers of a venture issuer to design and implement, on a cost effective basis, Disclosure Controls and Procedures and Internal Controls over Financial Reporting 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.

Caution Regarding Forward Looking Information

This MD&A of the Company contains certain statements that, to the extent not based on historical events, are forward-looking statements based on certain assumptions and reflect Plaintree's current expectations. Forward-looking statements include, without limitation, statements evaluating market and general economic conditions, and statements regarding growth strategy and future-oriented project revenue, costs and expenditures. Actual results could differ materially from those projected and should not be relied upon as a prediction of future events. A variety of inherent risks, uncertainties and factors, many of which are beyond Plaintree's control, affect the operations, performance and results of Plaintree and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks, uncertainties and factors include the impact or unanticipated impact of: companies evaluating Plaintree's products delaying purchase decisions; current, pending and proposed legislative or regulatory developments in the

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jurisdictions where Plaintree operates; change in tax laws; political conditions and developments; intensifying competition from established competitors and new entrants in the industry; technological change; currency value fluctuation; general economic conditions worldwide, including in China; Plaintree's success in developing and introducing new products and services, expanding existing distribution channels, developing new distribution channels and realizing increased revenue from these channels. This list is not exhaustive of the factors that may affect any of Plaintree's forward-looking statements. Plaintree undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results otherwise. Readers are cautioned not to put undue reliance on forward-looking statements. Readers should also carefully review the risks concerning the business of the Company and the industries in which it operates generally described in the documents filed from time to time with Canadian securities regulatory authorities.

Overview

Plaintree Systems Inc. ("Plaintree" or the "Company") was incorporated in Canada under the Canada Business Corporation Act and is publicly traded on the Canadian Securities Exchange ("CSE") under "NPT". The Company operates an Electronics division (the Hypernetics business), Summit Aerospace USA Inc. ("Summit Aerospace") and a Specialty Structures division (the Triodetic business), Spotton Corporation and 9366920 Canada Inc. (operating as Madawaska Doors). Plaintree is a diversified company with proprietary technologies and manufacturing capabilities in structural design and aerospace. The Hypernetics business manufactures avionic components for various applications including aircraft antiskid braking, aircraft instrument indicators, solenoids, and permanent magnet alternators. The Triodetic business is a design/build manufacturer of steel, aluminum, and stainless steel specialty structures such as commercial domes, free form structures, barrel vaults, space frames, and industrial dome coverings. Summit Aerospace specializes in the high-end machining of super-alloys for the aircraft and helicopter markets. Spotton's business involves the design and manufacture of high-end custom hydraulic and pneumatic valves and cylinders for the industrial, oil and gas markets. Madawaska Doors business involves the manufacturing and selling of high quality, 100% natural solid wood custom doors and related parts and materials. Until June 2017 the Speciality Structures division included Arnprior Fire Trucks Corp. ("AFTC") and on June 6, 2017, the Company completed the sale of assets and business of AFTC.

The address of the Company's registered office and principal place of business is 10 Didak Drive, Arnprior, Ontario.

The Company's common shares are quoted on the CSE under symbol "NPT" in Canada.

Control Activities

The Company's Chief Executive Officer and Chief Financial Officer exercise reasonable diligence around the controls and procedures designed to provide reasonable assurance that financial information disclosed is recorded, processed and disclosed reliability.

Selected Annual Financial Information

Company's consolidated financial statements are stated in Canadian dollars and are prepared in accordance with International Financial Reporting Standards ("IFRS"). The following table sets forth selected financial information from the Company's interim financial statements:

(\$000s, except per share amounts)

	2018	2017
	\$	\$
Revenue	19,006	12,844
Net earnings (loss) and comprehensive earnings (loss)	2,548	(2,640)
Net earnings (loss) attributed to common shareholders	1,082	(4,106)
Basic and diluted earnings (loss) per share		
	0.08	(0.32)

(\$000s, except per share amounts)

	2018	2017
	\$	\$
Total assets	12,185	10,342
Total liabilities	12,752	13,457
Long-term liabilities	7,679	7,025
Cash dividends declared per share	nil	nil

Results from Operations

Results from Operations	Plaintree Syste (\$000s, except	ms Inc. per share and %	amounts)
	2018	2017	Change from 2017 to 2018
Revenue	\$ 19,006	\$ 12,844	\$ 6,162
Cost of sales	13,319	11,354	1,965
Gross margin	<u>5,687</u> 30%	<u>1,490</u> 12%	4,197
Operating expenses: Research and development Finance and administration Sales and marketing Impairment loss (Gain) loss of disposal of assets Bad debt Interest expense Loss on foreign exchange	1,414 1,362 479 - 7 32 345 43 3,682	1,174 971 694 311 (56) - 255 82 3,431	240 391 (215) (311) 63 32 90 (39) 251
Net profit (loss) and comprehensive profit (loss) before other income	2,005	(1,941)	3,946
Other gain (losses) Gain (loss) from discontinued operations Net earnings (loss) and comphrensive	543	(698)	1,241
earnings (loss)	2,548	(2,639)	5,187

Business segment information

The Company's chief decision maker, the CEO, tracks the Company's operations as two business segments - the design, development, manufacture, marketing and support of electronic products, and the specialty structural products. The Company determines the geographic location of revenue based on the location of its customers. Of the total balance of \$4,467,526 in property, plant and equipment \$1,956,435 is located in Canada and \$2,511,091 in the United States. All of the Company's intangible assets are primarily located in Canada.

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Revenue by division

	2018	2017
	\$	\$
Electronics Specialty Structures	6,213,805 12,791,875	6,200,658 6,643,452
	19,005,680	12,844,110

Revenue by geographical location

	2018	2017
	\$	\$
Canada	7,348,090	5,141,769
United States	6,808,215	7,516,686
Chile	3,421,756	71,867
Argentina	938,154	_
Kuwait	444,798	_
Other	44,667	113,788
	19,005,680	12,844,110

Net income (loss) before taxes by division

	20:	18 2016	
		\$ \$	
Electronics	628,65	53 656,816	
Specialty structures	1,376,29	(2,598,092)	
	2,004,95	52 (1,941,276)	_

Product revenue concentration (customers with revenue in excess of 10%)

	2018	2017
	_	
Number of customers	1	2
% of total revenue	16%	10%, 12%

Assets by division

	2018	2017
	\$	\$
Electronics	11,533,668	6,611,843
Specialty structures	600,853	3,730,260
	12,134,521	10,342,103

Revenues

Total product revenue for fiscal 2018 was \$19,005,680 compared to \$12,844,110 in fiscal 2017.

Plaintree has two diversified business divisions: Specialty Structures and Electronics.

Plaintree's Electronics Division revenues remained virtually constant at \$6,213,805 in fiscal 2018 compared to \$6,200,658 in fiscal 2017.

Plaintree's Specialty Structures Division revenue increased to \$12,791,875 in fiscal 2018 from \$6,643,452 in fiscal 2017.

Gross Margin

Total gross margin increased in fiscal 2018 to 30% compared to 11.6% in fiscal 2017. Increased customer demand for product during fiscal 2018 resulted in greater efficiencies positively affecting the Company's gross margin.

Operating Expenses

Research and development expenses

Research and development expenses were \$1,414,423 and \$1,173,394 in fiscals 2018 and 2017, respectively. Research and development expenditures consist primarily of development engineering and personnel expenses.

Research and development expenses are expected to remain at comparable levels throughout fiscal 2019.

Finance and administration expenses

Finance and administration expenses were \$1,361,540 and \$971,194 in fiscals 2018 and 2017, respectively. Finance and administration expenses consist primarily of costs associated with managing the Company's finances, which included financial staff, legal and audit activities. Expenses increased in fiscal 2018 due to increased legal and consulting fees associated with the Company's financing and banking activities.

Finance and administration expenses are expected to return to 2017 levels throughout fiscal 2019.

Sales and marketing expenses

Sales and marketing expenses were \$479,096 and \$693,703 in fiscals 2018 and 2017, respectively. These expenses consisted primarily of personnel and related costs associated with Company's sales and marketing departments, which include sales commissions, advertising, travel, trade shows and other promotional activities.

Sales and marketing expenses are expected to increase moderately in fiscal 2019.

Interest expense

Interest expense consists of interest incurred on bank and related party debt. Interest expenses amounted to \$344,496 and \$255,134 for fiscals 2018 and 2017, respectively. The majority of the Company's debt accrues interest at variable rates based on the Company's bank prime lending rate of interest. During fiscal 2018, a related party refinanced it's approximately \$345,000 mortgage on one of its properties, increasing the mortgage to \$900,000. Plaintree guaranteed the loan and granted a security interest over its assets as security for this guarantee. The related party used a portion of the proceeds from the refinancing to loan \$554,447 to the Company. The related party loan bears interest at a rate of 14% per annum. Interest is payable monthly and the principal is due on maturity. All other related parties with loans to the Company agreed to discontinue interest payments accruing on balances as of April 1, 2016.

Gain on foreign exchange

The Company reported loss on foreign exchange of \$43,203 and \$82,069 for fiscals 2018 and 2017, respectively. The gain/loss on foreign exchange represents the gain/loss, realized or unrealized, of transactions and year end foreign balances that are completed in currencies other than the Company's reporting currency.

Net earnings (loss), Comprehensive earnings (loss) and Net earnings (loss) Attributable to Common Shareholders

Net earnings (loss) and comprehensive earnings (loss) for fiscal 2018 was \$2,547,514 and \$(2,639,634) in fiscal 2017. Net income attributed to common shareholders is calculated by reducing net income by the \$1,466,000 cumulative dividends that accrue annually on the Class A preferred shares. The cumulative dividends accrue at 8% per annum on the face value of the \$18,325,000 for the Class A preferred shares and as March 31, 2018 the accrued and unpaid dividends on the Class A preferred shares were \$13,860,000 (March 31, 2017 - \$12,394,000).

Quarterly Results

The following table sets out selected unaudited consolidated financial information for the last eight quarters in fiscals 2018 and 2017:

Quarters ended (unaudited, in \$000s except per share data)

	Mar 31 2018 Q4- 2018	Dec 31 2017 Q3- 2018	Sept 30 2017 Q2- 2018	June 30 2017 Q1- 2018	Mar 31 2017 Q4- 2017	Dec 31 2016 Q3- 2017	Sept 30 2016 Q2- 2017	June 30 2016 Q1- 2017
Revenue (1)	\$ 6,517	\$ 4,462	\$ 4,410	\$ 3,617	\$ 2,811	\$ 3,057	\$ 3,543	\$ 3,433
Net earnings (loss) and total comprehensive earnings (loss)	803	817	576	352	(1,600)	(564)	(327)	(149)
Net earnings (loss) attributed to common shareholders	435	451	210	(14)	(1,894)	(930)	(693)	(589)
Basic and diluted earnings (loss) per share	0.03	0.03	0.02	0.00	(0.15)	(0.07)	(0.05)	(0.05)

(1) Revenue of discontinued operations has been removed for all periods.

Liquidity and Capital Resources

(\$000s)

	2018	2017	Change from 2017 to 2018
Cash	\$ (315)	\$ (325)	\$ 10
Working Capital	2,117	(1,872)	3,989
	2018	2017	Change from 2017 to 2018
	\$	\$	\$
Net cash provided by (us	•	050	(220)
Operating activities Investing activities	636 (270)	856 (17)	(220) (253)
Financing activities	(356)	(1,159)	803

Cash

As at March 31, 2018, the Company was in a cash deficit balance of \$314,710, a decrease of \$9,856 from cash deficit balance of \$324,566 in March 31, 2016.

Working Capital

Working capital represents current assets less current liabilities. As at March 31, 2018, the Company had working capital of \$2,117,174 compared to a negative working capital of \$(1,871,810) at March 31, 2017 after the bank debt was reclassified as a current liability due to a breach of bank covenants. The Company is subject to various covenants on the long-term debt (including debt to tangible net worth, current assets to current liabilities and debt service ratios). The Company was in breach of the debt servicing and current ratio covenants as at March 31, 2017 to which the bank had provided forbearance until December 31, 2017. IFRS requires that a financial liability be classified as current basis is completed after the reporting period and before the financial statements are authorized for issue. The Company's working capital without this reclassification of current bank debt was \$(808,741) as at March 31, 2017.

Operating activities

Cash provided by operating activities for fiscal 2018 was \$635,998 representing an decrease of \$220,074 from cash provided of \$856,072 for the respective period during fiscal 2017. Cash provided by operating activities during fiscal 2018 was primarily the result a return to profitability.

Investing activities

Cash used in investing activities for fiscal 2018 was \$(270,105) representing an increase of \$252,655 from cash used in investing activities of \$(17,450) in the respective period during fiscal 2017. The increase in cash used during fiscal 2018 was primarily due to the payments to acquire capital.

Financing activities

Cash used in financing activities for fiscal 2018 was \$(356,037) representing a decrease of \$802,575 from cash used of \$(1,158,612) during fiscal 2017. Cash used in financing activities during the fiscal 2018 relates primarily to repayment of long term debt offset by increased related party borrowings.

Outlook

The Company has in place a credit facility of up to \$2,100,000 through its bank based on acceptable trade receivables and inventory. The total amount available to the Company as at March 31, 2018 was \$1,929,805 of which \$370,316 was in use and a letter of credit in the amount of US\$287,200 (\$370,316 CAD) leaving \$1,559,489 available. The Company's analysis of forecasted sales and expenses indicate improvement in both sales and cash flow as a result of contracts bid and/or signed, and their expected margins on these projects. As a result, the Company believes that it has sufficient cash resources to meet its obligations, beyond the next 12 months.

Due to related parties

	2018	2017
	\$	\$
Due to senior officers and directors	4,309,565	4,450,665
Dividends payable	60,000	60,000
Due to Targa Group Inc., interest convertible debentures	247,672	247,672
Due to Tidal Quality Management Inc.	762,073	228,616
Due to Targa Group Inc., demand loan	66,581	66,581
Due to Targa Group Inc., line of credit	532,763	646,763
Due to Targa Group Inc., demand loan interest	134,812	134,812
	6,113,466	5,835,109
Less: current portion	(356,000)	
	5,757,466	5,835,109

As at March 31, 2018, a balance of \$4,273,565 (\$3,037,931 principal and \$1,235,634 interest) (\$4,450,950 (\$3,215,031 principal and \$1,235,634 interest in 2017) remained owing to senior officers of the Company after repayments of \$177,100. As at March 31, 2018, a balance of \$36,000 (nil in 2017) remained owing to a director of the Company for additional consulting services. A balance of \$4,309,565 remained owing to senior officers and a director of the Company as at March 31, 2018. The senior officers have agreed to cancel their current consulting agreements taking nominal payments only and discontinue interest payments accruing on balances as of April 1, 2016. The amount of \$3,953,565 is classified as long-term as the related party has agreed not to demand repayment before August 2019.

On July 14, 2011, the board of directors of the Company declared a cash dividend of \$10.91405 per Class A preferred share (\$200,000 in the aggregate) payable on July 22, 2011, to the holders of record at the close of business on July 18, 2011. The Class A preferred shares are held by related parties and are entitled to annual cumulative dividends of 8% on the \$1,000 redemption amount of the Class A preferred share. An amount of \$60,000 (\$60,000 in 2017) of the dividend remains outstanding as at March 31, 2018. The balance is classified as long-term as the related party has agreed not to demand payment before August 2019.

As at March 31, 2018, a balance of \$247,672 (\$247,672 in 2017) of the due to related parties related to the interest portion on convertible debentures. The balance is classified as long-term as the related party has agreed not to demand payment before August 2019.

Until March 31, 2003, the Company leased facilities from a company controlled by Targa. Lease arrears owing to this related party amounted to \$174,974 (\$174,974 in March 31, 2017). The Company accepted partial financing in the form of a note payable in the amount of \$373,473 during fiscal 2014 from Tidal for a new facility in Pocono Summit. As at March 31, 2018 a balance of \$269,767 remains outstanding. Loans totaling \$420,003 owed to Spotton by Tidal have been consolidated into the net balance as of April 1, 2014, with the acquisition of Spotton Corp by the Company. The party agreed to discontinue interest accruing on unpaid balances as at April 1, 2016. Until then the interest was at bank prime plus 2% and accrues on the principal balance for a balance of \$182,889 as of March 31, 2018 (\$182,889 in March 31, 2017). The party has agreed not to demand repayment of the total balance of \$207,626 (\$228,616 in March 31, 2017) before August 2019 and the amount is classified as long-term.

On May 31, 2017, Tidal refinanced it's approximately \$345,000 mortgage on one of its properties, increasing the mortgage to \$900,000. Plaintree has guaranteed the Tidal loan and granted a security interest over its assets as security for this guarantee. Tidal used a portion of the proceeds from the refinancing to loan \$554,447 to the Company. The related party loan bears interest at a rate of 14% per annum. Interest is payable monthly and the principal is due on maturity. The balance is classified as long-term as the related party has agreed not to demand payment before August 2019.

The Company has a demand loan of up to \$1,800,000 and a revolving line of credit of up to \$1,000,000 with Targa. The party has agreed to discontinue interest payments accruing on balances as of April 1, 2016. Under the loan agreements, all amounts advanced to the Company are payable on demand and bear interest at bank prime plus 2%. The Targa Demand Loan is secured by a security interest granted over the assets of the Company. As at March 31, 2018, nil, (nil in 2017) remained outstanding on the demand loan with accumulated interest of \$66,581 (\$66,581 in 2017). As at March 31, 2018, \$290,165 (\$404,165 in 2017) remained outstanding on the line of credit with accumulated interest of \$242,598 (\$242,598 in 2017) for a balance of \$532,763 (\$646,763 in 2017). Targa has agreed that it will not demand repayment before August 2019 and, accordingly, the amounts are classified as long-term.

Accumulated interest in the amount of \$134,812 (\$134,812 in 2017), on a loan from Targa remains outstanding as of March 31, 2018. The party has agreed not to demand repayment before August 2019 and, accordingly, the amount is classified as long-term.

Facilities

The Company leases a 135,500 sq. /ft. building at 10 Didak Drive in Arnprior, Ontario.

The Company along with its wholly-owned US subsidiary owns a 16,300 sq. ft. manufacturing facility in Pocono Summit, PA.

The Company, through a wholly-owned subsidiary owns a 33,000 sq. ft. manufacturing facility in Barry's Bay, ON for the manufacturing of its Madawaska Door business.

New Standards effective April 2018

IFRS 9 – Financial instruments

IFRS 9 Financial Instruments ("IFRS 9") The IASB issued the final version of IFRS 9 on July 24, 2014, which replaces IAS 39 Financial Instruments: Recognition and Measurement. This final version of IFRS 9 represents the completion of this project and it includes requirements for recognition and measurement, impairment, derecognition and general hedge accounting. IFRS 9 does not address the specific accounting for open portfolios or macro hedging as these items are part of a separate IASB project that is currently ongoing. This final Standard introduces a single, principles-based approach that amends both the categories and associated criteria for the classification and measurement of financial assets, which is driven by the entity's business model for the portfolio in which the assets are held and the contractual cash flows of these financial assets. Certain amendments have been made to the financial asset classification and measurement principles in prior versions of IFRS 9.

This new Standard supersedes all prior versions of IFRS 9. The effective date for this standard began for annual periods beginning on or after April 1, 2018. The Company will begin to report under this standard for its reporting periods in fiscal 2019. IFRS 9 requires the Company to record expected credit losses on all trade receivables, either on a 12-month or lifetime basis. The Company is in the process of assessing the impact of this standard on its consolidated financial statements.

IFRS 15 – Revenue from contracts with customers

IFRS 15 Revenue from Contracts with Customers ("IFRS 15") IFRS 15 was issued by the IASB on May 28, 2014, and will replace IAS 18, Revenue, IAS 11, Construction Contracts, and related interpretations on revenue. IFRS 15 sets out the requirements for recognizing revenue that apply to all contracts with customers, except for contracts that are within the scope of the Standards on leases, insurance contracts and financial instruments. IFRS 15 uses a control based approach to recognize revenue which is a change from the risk and reward approach under the current standard. Companies can elect to use either a full or modified retrospective approach when adopting this standard and it is effective for annual period beginning on or after January 1, 2018. The Company has transitioned to the standard effective April 1, 2018 and is using the modified retrospective approach. The Company is currently evaluating the impact of IFRS 15 on its consolidated financial statements.

IFRS 16 – Leases

IFRS 16 Leases ("IFRS 16") The IASB issued a new standard, IFRS 16 on January 13, 2016, which supersedes IAS 17 Leases. The new standard brings most leases on the balance sheet for lessees under a single model and eliminates the distinction between operating and finance leases. Lessor accounting remains largely unchanged. The new standard will come into effect for periods beginning on or after April 1, 2019. The Company is currently evaluating the impact of IFRS 16 on its consolidated financial statements.

Summary of Outstanding Share Data

As at July 24, 2018 the following equity instruments of the Company were issued and outstanding:

<u>Common Shares:</u> 12,925,253

Class A Preferred Shares: * 18,325

* The Class A Preferred shares provide an 8% cumulative dividend based on a value of \$1,000 per share, are redeemable at the option of the Company at any time at \$1,000 per share plus accrued dividends and they are non-voting.

<u>Convertible Debentures:**</u> \$nil principal value

None

** The Company has issued various tranches of convertible debentures to related parties for total outstanding value at March 31, 2018 of \$247,672 in accrued interest only. Interest is convertible in cash only.

Options:***

Additional information relating to the Company may be found on SEDAR at <u>www.sedar.com</u> or the Company's website at <u>www.plaintree.com</u>.