

1. Qualitative Information on Quarterly Results

(1) Explanation of Business Performance

In the first 2 quarters of fiscal 2018 (from April 1, 2017 to September 30, 2017), the Japanese economy continued on a moderate recovery trend, as the employment and income situations improved and personal consumption also maintained a steady pace. Despite lingering unpredictable factors surrounding the future, such as concerns over the increasing uncertainty in the trends and policies of the emerging economies, the global economy remained strong.

In such an environment, the ZENRIN Group in the first 2 quarters of fiscal 2018 reported net sales of 26,016 million yen (increased 1,233 million yen, or up 5.0%, compared to the same period of the previous fiscal year), operating income of 470 million yen (improvement of 849 million yen compared to the same period of the previous fiscal year), ordinary income of 725 million yen (improvement of 932 million yen compared to the same period of the previous fiscal year) and profit attributable to owners of parent of 213 million yen (improvement of 601 million yen compared to the same period of the previous fiscal year).

Please note that past net sales of the ZENRIN Group have shown trends of large seasonal fluctuations and sales concentrating in the fourth quarter.

[Segment Results of Operations]

Map Database Segment

The Map Database segment, which is the ZENRIN Group's core business, reported robust sales related to GIS-utilizing residential map databases, in addition to the strong sales from data for Japanese in-car navigation systems. In terms of profit (loss), while there was an increase in general and administrative expenses including personnel expenses, the ZENRIN Group managed to secure profits thanks to an increase in revenues.

As a result of the foregoing, the Map Database segment reported net sales of 21,932 million yen (increased 1,263 million yen, or up 6.1%, compared to the same period of the previous fiscal year) and segment income of 432 million yen (improvement of 817 million yen compared to the same period of the previous fiscal year).

General Printing Segment

In the General Printing segment, while we saw a slight decrease in sales, there was a decrease in temporary outsourcing costs, which had been reported in the previous fiscal year when the printing machines were replaced. As a result, the General Printing segment reported net sales of 1,549 million yen (decreased 106 million yen, or down 6.4%, compared to the same period of the previous fiscal year) and segment loss of 34 million yen (improvement of 36 million yen compared to the same period of the previous fiscal year).

Other

The segment other than the Map Database segment and the General Printing segment reported net sales of 2,535 million yen (increased 76 million yen, or up 3.1%, compared to the same period of the previous fiscal year) and segment income of 34 million yen (decreased 0 million yen, or down 2.3%, compared to the same period of the previous fiscal year).

(2) Explanation of Financial Position

Total assets at the end of the second quarter of fiscal 2018 amounted to 61,055 million yen (decreased 4,094 million yen, or down 6.3% compared to the end of the previous fiscal year). This was attributable to the decrease in trade notes and accounts receivable due to the collection of trade receivables, which were reported at the end of the previous fiscal year, in addition to the effects of seasonal fluctuations.

Liabilities amounted to 18,189 million yen (decreased 3,497 million yen, or down 16.1% compared to the end of the previous fiscal year). This was attributable to a decrease in short-term loans payable due to repayment and a decrease in income taxes payable due to tax payment.

Net assets amounted to 42,865 million yen (decreased 597 million yen, or down 1.4% compared to the end of the previous fiscal year). This was attributable to a decrease in retained earnings due to dividends of surplus despite the recognition of profit attributable to owners of parent.

As a result, the ratio of equity to total assets at the end of the second quarter of fiscal 2018 was 68.0% (up 3.4 points compared to the end of the previous fiscal year).

The following outlines the status of cash flows in the first 2 quarters of fiscal 2018.

Cash and cash equivalents at the end of the second quarter of fiscal year 2018 were 7,074 million yen (increased 256 million yen, or up 3.8 %, compared to the end of the previous fiscal year)

Cash Flows from Operating Activities

Net cash provided by operating activities amounted to 4,852 million yen (increased 1,216 million yen compared to the same period of the previous fiscal year). This was attributable to income before income taxes in the amount of 577 million yen, income taxes paid in the amount of 1,815 million yen, a decrease in trade notes and accounts payable in the amount of 784 million yen, an increase in inventories in the amount of 513 million yen, and other factors of decrease being offset by a decrease in trade notes and accounts receivable in the amount of 4,679 million yen and depreciation in the amount of 2,726 million yen and other factors of increase.

Cash Flows from Investing Activities

Net cash used in investing activities amounted to 2,581 million yen (decreased 373 million compared to the same period of the previous fiscal year). This was mainly attributable to purchase of property, plant and equipment and intangible assets in the amount of 1,982 million yen and purchase of investment securities in the amount of 429 million yen.

Cash Flows from Financing Activities

Net cash used in financing activities amounted to 2,008 million yen (increased 1,099 million yen compared to the same period of the previous fiscal year). This was mainly attributable to proceeds from long-term loans payable in the amount of 550 million yen, which was offset by repayments of long-term loans payable in the amount of 1,039 million yen, cash dividends paid in the amount of 645 million yen, repayments of lease obligations in the amount of 449 million yen and net decrease in short-term loans payable in the amount of 400 million yen.

(3) Explanation of Forecast for Consolidated Results of Operations and Other Forward-Looking Statements

The forecast for the consolidated results of operations in fiscal 2018 remains unchanged from the forecast announced on May 8, 2017.

2. Quarterly Consolidated Financial Statements
(1) Quarterly Consolidated Balance Sheet

[Unit: million yen]

	Fiscal 2017	Second quarter of fiscal 2018
	As of March 31, 2017	As of September 30, 2017
Assets		
Current assets		
Cash and deposits	6,824	7,080
Notes and accounts receivable – trade	14,475	9,766
Electronically recorded monetary claims – operating	87	111
Merchandise and finished goods	760	809
Work in process	313	783
Raw materials and supplies	65	69
Other	3,147	3,398
Allowance for doubtful accounts	(16)	(11)
Total current assets	25,658	22,008
Non-current assets		
Property, plant and equipment		
Land	6,743	6,753
Other, net	8,174	8,028
Total property, plant and equipment	14,917	14,782
Intangible assets		
Goodwill	1,549	1,325
Software	11,825	11,244
Other	2,017	2,121
Total intangible assets	15,392	14,690
Investments and other assets		
Other	9,327	9,704
Allowance for doubtful accounts	(146)	(130)
Total investments and other assets	9,181	9,573
Total non-current assets	39,491	39,046
Total assets	65,150	61,055

[Unit: million yen]

	Fiscal 2017 As of March 31, 2017	Second quarter of fiscal 2018 As of September 30, 2017
Liabilities		
Current liabilities		
Accounts payable – trade	2,555	1,779
Short-term loans payable	2,879	1,579
Income taxes payable	1,896	450
Provision for directors' bonuses	160	52
Provision for sales returns	3	3
Other	10,586	10,456
Total current liabilities	18,082	14,322
Non-current liabilities		
Long-term loans payable	665	1,075
Provision for directors' retirement benefits	132	132
Provision for management board benefit trust	22	22
Net defined benefit liability	238	244
Asset retirement obligations	37	36
Other	2,508	2,355
Total non-current liabilities	3,603	3,867
Total liabilities	21,686	18,189
Net assets		
Shareholders' equity		
Capital stock	6,557	6,557
Capital surplus	13,491	13,491
Retained earnings	22,750	22,021
Treasury shares	(2,192)	(2,194)
Total shareholders' equity	40,607	39,876
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	441	553
Foreign currency translation adjustment	18	109
Remeasurements of defined benefit plans	993	949
Total accumulated other comprehensive income	1,454	1,612
Non-controlling interests	1,401	1,375
Total net assets	43,463	42,865
Total liabilities and net assets	65,150	61,055

(2) Quarterly Consolidated Statement of Income and Quarterly Consolidated Statement of Comprehensive Income
Quarterly Consolidated Statement of Income [cumulative]

[Unit: million yen]

	First 2 quarters of fiscal 2017 From: April 1, 2016 To: September 30, 2016	First 2 quarters of fiscal 2018 From: April 1, 2017 To: September 30, 2017
Net sales	24,783	26,016
Cost of sales	15,683	15,576
Gross profit	9,099	10,440
Selling, general and administrative expenses		
Personnel expenses	5,463	5,809
Provision for directors' bonuses	43	47
Retirement benefit expenses	137	117
Provision of allowance for doubtful accounts	11	—
Other	3,822	3,995
Total selling, general and administrative expenses	9,478	9,969
Operating income (loss)	(378)	470
Non-operating income		
Interest income	5	6
Dividend income	101	92
Other	95	178
Total non-operating income	202	277
Non-operating expenses		
Interest expenses	16	16
Share of loss of entities accounted for using equity method	8	—
Other	6	5
Total non-operating expenses	31	22
Ordinary income (loss)	(207)	725
Extraordinary income		
Gain on sales of non-current assets	1	12
Other	10	0
Total extraordinary income	12	12
Extraordinary losses		
Loss on sales and retirement of non-current assets	68	37
Impairment loss	—	108
Other	4	13
Total extraordinary losses	73	159
Income (loss) before income taxes and minority interest	(268)	577
Income taxes – current	225	430
Income taxes – deferred	(114)	(58)
Total income taxes	110	372
Profit (loss)	(378)	205
Profit (loss) attributable to non-controlling interests	8	(7)
Profit (loss) attributable to owners of parent	(387)	213

Quarterly Consolidated Statement of Comprehensive Income [cumulative]

[Unit: million yen]

	First 2 quarters of fiscal 2017 From: April 1, 2016 To: September 30, 2016	First 2 quarters of fiscal 2018 From: April 1, 2017 To: September 30, 2017
Profit (loss)	(378)	205
Other comprehensive income		
Valuation difference on available-for-sale securities	(84)	112
Foreign currency translation adjustment	(212)	128
Remeasurements of defined benefit plans, net of tax	(15)	(43)
Share of other comprehensive income of entities accounted for using equity method	(37)	(38)
Total other comprehensive income	(349)	158
Comprehensive income	(728)	364
[Comprehensive income attributable to]		
Comprehensive income attributable to owners of parent	(714)	372
Comprehensive income attributable to non-controlling interests	(14)	(7)

(3) Quarterly Consolidated Statement of Cash Flows

[Unit: million yen]

	First 2 quarters of fiscal 2017 From April 1, 2016 to September 30, 2016	First 2 quarters of fiscal 2018 From: April 1, 2017 to September 30, 2017
Cash flows from operating activities		
Income (loss) before income taxes and minority interest	(268)	577
Depreciation	2,714	2,726
Impairment loss	—	108
Amortization of goodwill	139	230
Increase (decrease) in provision for directors' bonuses	(66)	(108)
Decrease (increase) in net defined benefit asset	(42)	(89)
Increase (decrease) in net defined benefit liability	4	7
Interest and dividend income	(106)	(98)
Interest expenses	16	16
Share of (profit) loss of entities accounted for using equity method	8	—
Loss (gain) on sales and retirement of non-current assets	67	25
Decrease (increase) in notes and accounts receivable - trade	3,149	4,679
Decrease (increase) in inventories	(283)	(513)
Increase (decrease) in notes and accounts payable - trade	(981)	(784)
Increase (decrease) in accrued expenses	(108)	(161)
Increase (decrease) in accrued consumption taxes	(226)	(297)
Other	603	272
Subtotal	4,620	6,590
Interest and dividend income received	102	94
Interest expenses paid	(16)	(16)
Income taxes paid	(1,070)	(1,815)
Net cash provided by (used in) operating activities	3,636	4,852
Cash flows from investing activities		
Purchase of property, plant and equipment and intangible assets	(2,099)	(1,982)
Purchase of investment securities	(91)	(429)
Purchase of shares of subsidiaries resulting in change in scope of consolidation	(809)	—
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	20	—
Payments for the unpaid portion of acquisition of shares from subsidiaries resulting in change in scope of consolidation	—	(114)
Other	24	(55)
Net cash provided by (used in) investing activities	(2,954)	(2,581)
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	103	(400)
Proceeds from long-term loans payable	500	550
Repayments of long-term loans payable	(269)	(1,039)
Repayments of lease obligations	(611)	(449)
Proceeds from sales of treasury shares	181	—
Cash dividends paid	(622)	(645)
Dividends paid to non-controlling interests	(5)	(18)
Other	(184)	(4)
Net cash provided by (used in) financing activities	(908)	(2,008)
Effect of exchange rate change on cash and cash equivalents	(152)	(6)
Net increase (decrease) in cash and cash equivalents	(380)	256
Cash and cash equivalents at beginning of period	5,099	6,817
Cash and cash equivalents at end of period	4,719	7,074

(4) Notes to Quarterly Consolidated Financial Statements

Notes on the Going Concern Assumption

Not applicable.

Notes in the Event of Material Change in the Amount of Shareholders' Equity

Not applicable.

Changes in Significant Subsidiaries in the First 2 Quarter of Fiscal 2018

Not applicable.

While not qualifying as a change in specified subsidiary, C.E. Info Systems Private Limited and INFOTRACK TELEMATICS PTE. LTD., which had been affiliates accounted for by the equity method, have been excluded from the scope of companies accounted for using the equity method, starting from the first quarter of fiscal 2018, due to their diminished significance.

Additionally, in the first quarter of fiscal 2018, Dynamic Map Planning Co, Ltd. (company name changed to Dynamic Map Platform Co., Ltd. effective June 30, 2017), which had been an affiliate not accounted for by the equity method, ceased being an affiliate due to the decrease in the Company's equity interest in the said company as a result of its issue of new shares through third-party allotment.

The Company, effective October 3, 2017, acquired the shares of DAITO Marketing Solutions Inc. and intends to include said company in the scope of the Company's consolidation starting from the third quarter of fiscal 2018.

[Reportable Segment Information]

Segment Information

I. First 2 Quarters of Fiscal 2017 (from April 1, 2016 to September 30, 2016)

(a) Information on Reportable Segment Net Sales and Income or Loss Amount

[Unit: million yen]

	Reportable segments			Other [Note]	Total
	Map Database segment	General Printing segment	Total		
Net sales					
Net sales to external customers	20,668	1,655	22,324	2,459	24,783
Intersegment net sales or transfers	42	188	230	148	379
Total	20,711	1,843	22,554	2,607	25,162
Segment income (loss)	(385)	(71)	(456)	35	(421)

[Note] The "Other" item encompasses the selling of purchased products, direct mail delivery services and other business activities that are not attributable to reportable segments.

(b) Total Amount of Reportable Segment Income or Loss Amount and its Difference in Amount with Amount on Quarterly Consolidated Statement of Income, and Principal Components of the Difference in Amount (Matters Concerning Reconciliation of Differences)

[Unit: million yen]

Income	Amount
Total for reportable segments	(456)
Income of "Other" item	35
Eliminations of intersegment transactions	42
Operating income (loss) on quarterly consolidated statement of income	(378)

(c) Information on Impairment Loss on Non-Current Assets and Goodwill by Reportable Segment

Material Change in the Amount of Goodwill

In the Map Database segment, Abalta Technologies, Inc. and its subsidiary, Abalta Technologies EOOD have been included in the scope of consolidation starting from the second quarter of fiscal 2017, in conjunction with the acquisition of its shares. As a result of this event the amount of increase in goodwill stood at 797 million yen in the first 2 quarters of fiscal 2017.

II. First 2 Quarters of Fiscal 2018 (from April 1, 2017 to September 30, 2017)

(a) Information on Reportable Segment Net Sales and Income or Loss Amount

[Unit: million yen]

	Reportable segments			Other [Note]	Total
	Map Database segment	General Printing segment	Total		
Net sales					
Net sales to external customers	21,932	1,549	23,481	2,535	26,016
Intersegment net sales or transfers	37	179	217	80	298
Total	21,970	1,728	23,699	2,615	26,315
Segment income (loss)	432	(34)	397	34	432

[Note] The "Other" item encompasses the selling of purchased products, direct mail delivery services and other business activities that are not attributable to reportable segments.

(b) Total Amount of Reportable Segment Income or Loss Amount and its Difference in Amount with Amount on Quarterly Consolidated Statement of Income, and Principal Components of the Difference in Amount (Matters Concerning Reconciliation of Differences)

[Unit: million yen]

Income	Amount
Total for reportable segments	397
Income of "Other" item	34
Eliminations of intersegment transactions	38
Operating income (loss) on quarterly consolidated statement of income	470

(c) Information on Impairment Loss on Non-Current Assets and Goodwill by Reportable Segment

Significant impairment loss on Non-Current Assets

In the Map Database segment, an impairment loss has been reported. The amount of said impairment loss stood at 106 million yen in the second quarter of fiscal 2018.

4. Supplementary Information

Sales Turnover based on Business Categories under the Medium- to Long-Term Business Plan ZGP2020

Business category	First 2 quarters of fiscal 2017	First 2 quarters of fiscal 2018	Amount of increase (decrease)	Rate of increase (decrease)	Main products
	million yen	million yen	million yen	%	
Publishing business	3,367	3,221	(146)	(4.3)	Printed residential maps, special-purpose maps, purchased products, and various media
GIS business	5,646	6,328	682	12.1	Residential map databases
ICT business	5,545	5,079	(466)	(8.4)	Services for smartphones, and map data provision for internet services
ITS business	5,612	6,997	1,385	24.7	Data for Japanese in-car navigation systems
Global business	1,145	1,005	(139)	(12.2)	Data for overseas in-car navigation systems, and various overseas content
Other business	3,466	3,384	(82)	(2.4)	General printing goods, direct mail delivery services, in-ship (enclosing in mail/packages) advertising, ...etc.
Total	24,783	26,016	1,233	5.0	