
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-36083

Applied Optoelectronics, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

76-0533927
(I.R.S. Employer Identification No.)

13139 Jess Pirtle Blvd.
Sugar Land, TX 77478
(Address of principal executive offices)

(281) 295-1800
(Registrant's telephone number)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
	(Do not check if a smaller reporting company)	Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: as of May 3, 2018 there were 19,579,013 shares of the registrant's Common Stock outstanding.

Applied Optoelectronics, Inc.
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Part I. Financial Information**Item 1. Condensed Consolidated Financial Statements**

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	<u>March 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 82,251	\$ 82,936
Restricted cash	1,048	1,012
Short-term investments	—	36
Accounts receivable - trade, net of allowance of \$31 and \$33, respectively	53,655	59,850
Inventories	92,624	75,768
Prepaid income tax	1,326	1,394
Prepaid expenses and other current assets	10,921	8,701
Total current assets	241,825	229,697
Property, plant and equipment, net	204,644	197,943
Land use rights, net	6,448	804
Intangible assets, net	4,015	4,007
Deferred income tax assets	13,935	12,801
Other assets, net	4,750	7,732
TOTAL ASSETS	\$ 475,617	\$ 452,984
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current portion of notes payable and long-term debt	\$ 2,690	\$ 559
Accounts payable	46,223	43,624
Accrued income taxes	7,588	7,422
Accrued liabilities	13,358	19,103
Total current liabilities	69,859	70,708
Notes payable and long-term debt, less current portion	62,464	49,000
TOTAL LIABILITIES	132,323	119,708
Stockholders' equity:		
Preferred Stock; 5,000 shares authorized at \$0.001 par value; no shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	—	—
Common Stock; 45,000 shares authorized at \$0.001 par value; 19,538 and 19,451 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	20	19
Additional paid-in capital	286,938	285,376
Accumulated other comprehensive income	16,078	9,743
Retained earnings	40,258	38,138
TOTAL STOCKHOLDERS' EQUITY	343,294	333,276
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 475,617	\$ 452,984

The accompanying notes are an integral part of these condensed consolidated financial statements.

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except share and per share data)

	<u>Three months ended March 31,</u>	
	<u>2018</u>	<u>2017</u>
Revenue, net	\$ 65,239	\$ 96,224
Cost of goods sold	39,403	54,752
Gross profit	<u>25,836</u>	<u>41,472</u>
Operating expenses		
Research and development	11,736	7,432
Sales and marketing	2,474	1,903
General and administrative	9,456	7,822
Total operating expenses	<u>23,666</u>	<u>17,157</u>
Income from operations	<u>2,170</u>	<u>24,315</u>
Other income (expense)		
Interest income	52	35
Interest expense	(71)	(299)
Other expense, net	(1,027)	(608)
Total other expense	<u>(1,046)</u>	<u>(872)</u>
Income before income taxes	1,124	23,443
Income tax (expense) benefit	996	(3,654)
Net income	<u>\$ 2,120</u>	<u>\$ 19,789</u>
Net income per share		
Basic	\$ 0.11	\$ 1.06
Diluted	\$ 0.11	\$ 1.00
Weighted average shares used to compute net income per share:		
Basic	19,492,251	18,597,607
Diluted	19,988,575	19,702,047

The accompanying notes are an integral part of these condensed consolidated financial statements.

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited, in thousands)

	Three months ended	
	March 31,	
	2018	2017
Net income	\$ 2,120	\$ 19,789
Gain on foreign currency translation adjustment	6,335	4,457
Comprehensive income	<u>\$ 8,455</u>	<u>\$ 24,246</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Three months ended March 31, 2018
(Unaudited, in thousands)

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated other comprehensive gain (loss)	Retained earnings	Stockholders' equity
	Number of shares	Amount	Number of shares	Amount				
January 1, 2018	—	\$ —	19,451	\$ 19	\$ 285,376	\$ 9,743	\$38,138	\$ 333,276
Stock options exercised, net of shares withheld for employee tax	—	—	38	—	(609)	—	—	(609)
Issuance of restricted stock, net of shares withheld for employee tax	—	—	49	1	(398)	—	—	(397)
Share-based compensation	—	—	—	—	2,569	—	—	2,569
Foreign currency translation adjustment	—	—	—	—	—	6,335	—	6,335
Net income	—	—	—	—	—	—	2,120	2,120
March 31, 2018	—	\$ —	19,538	\$ 20	\$ 286,938	\$ 16,078	\$40,258	\$ 343,294

The accompanying notes are an integral part of these condensed consolidated financial statements.

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Three months ended	
	March 31,	
	2018	2017
Operating activities:		
Net income	\$ 2,120	\$ 19,789
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Lower of cost or market reserve adjustment to inventory	877	476
Depreciation and amortization	6,964	4,302
Deferred income taxes, net	(1,103)	612
Loss (gain) on disposal of assets	(1)	49
Share-based compensation	2,569	1,507
Unrealized foreign exchange gain	(710)	(110)
Changes in operating assets and liabilities:		
Accounts receivable, trade	6,195	(16,599)
Prepaid income tax	109	—
Inventories	(15,761)	(4,294)
Other current assets	(1,870)	(5,118)
Accounts payable	2,599	10,241
Accrued income taxes	—	3,042
Accrued liabilities	(6,052)	(4,221)
Net cash provided by (used in) operating activities	<u>(4,064)</u>	<u>9,676</u>
Investing activities:		
Maturities of short-term investments	36	2
Purchase of property, plant and equipment	(9,659)	(7,554)
Purchase of land use rights	(5,591)	—
Proceeds from disposal of equipment	—	165
Deposits and prepaid for equipment	3,128	(1,434)
Purchase of intangible assets	(134)	(108)
Net cash used in investing activities	<u>(12,220)</u>	<u>(8,929)</u>
Financing activities:		
Proceeds from issuance of notes payable and long-term debt	26,556	—
Principal payments of long-term debt and notes payable	(341)	(14,743)
Proceeds from line of credit borrowings	44,953	—
Repayments of line of credit borrowings	(55,583)	—
Repayments of bank acceptance payable	—	(307)
Exercise of stock options	52	623
Payments of tax withholding on behalf of employees related to share-based compensation	(1,061)	(366)
Proceeds from common stock offering, net	—	21,572
Net cash provided by financing activities	<u>14,576</u>	<u>6,779</u>
Effect of exchange rate changes on cash	1,059	1,043
Net increase (decrease) in cash, cash equivalents and restricted cash	(649)	8,569
Cash, cash equivalents and restricted cash at beginning of period	83,948	51,964
Cash, cash equivalents and restricted cash at end of period	<u>\$ 83,299</u>	<u>\$ 60,533</u>
Supplemental disclosure of cash flow information:		
Cash paid for:		
Interest	\$ 58	\$ 225
Income taxes	—	—

The accompanying notes are an integral part of these condensed consolidated financial statements.

Applied Optoelectronics, Inc. and Subsidiaries
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. Description of Business

Business Overview

Applied Optoelectronics, Inc. (“AOI” or the “Company”) is a Delaware corporation. The Company is a leading, vertically integrated provider of fiber-optic networking products, primarily for four networking end-markets: internet data center, cable television, telecommunications and fiber-to-the-home. The Company designs and manufactures a wide range of optical communications products at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment.

The Company has manufacturing and research and development facilities located in the U.S., Taiwan and China. In the U.S., at its corporate headquarters and manufacturing facilities in Sugar Land, Texas, the Company primarily manufactures lasers and laser components and performs research and development activities for laser component and optical module products. In addition, the Company also has a research and development facility in Duluth, Georgia. The Company operates in Taipei, Taiwan and Ningbo, China through its wholly-owned subsidiary Prime World International Holdings, Ltd. (“Prime World”, incorporated in the British Virgin Islands). Prime World is the parent of Global Technology, Inc. (“Global”, incorporated in the People’s Republic of China). Through Global, the Company primarily manufactures certain of our data center transceiver products, including subassemblies, as well as Cable TV Broadband (“CATV”) systems and equipment, and performs research and development activities for the CATV products. Prime World also operates a branch in Taiwan, which primarily manufactures transceivers.

Interim Financial Statements

The unaudited condensed consolidated financial statements of the Company as of March 31, 2018 and December 31, 2017 and for the three months ended March 31, 2018 and March 31, 2017, have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) for interim information and with the instructions on Form 10-Q and Rule 10-01 of Regulation S-X pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). In accordance with those rules and regulations, the Company has omitted certain information and notes required by GAAP for annual consolidated financial statements. In the opinion of management, the condensed consolidated financial statements contain all adjustments, except as otherwise noted, necessary for the fair presentation of the Company’s financial position and results of operations for the periods presented. The year-end condensed balance sheet data was derived from audited financial statements. These condensed consolidated financial statements should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in the Company’s Annual Report on Form 10-K (“Annual Report”) for the fiscal year ended December 31, 2017. The results of operations for the three months ended March 31, 2018 are not necessarily indicative of the results expected for the entire fiscal year. All significant intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported. Actual results could differ from those estimates in the consolidated financial statements and accompanying notes. Significant estimates and assumptions that impact these financial statements and the accompanying notes relate to, among other things, allowance for doubtful accounts, inventory reserve, product warranty costs, share-based compensation expense, estimated useful lives of property and equipment, and taxes.

Note 2. Significant Accounting Policies

There have been no changes in the Company’s significant accounting policies for the three months ended March 31, 2018, as compared to the significant accounting policies described in its 2017 Annual Report, except as described below.

Recent Accounting Pronouncements

Recent Accounting Pronouncements Adopted in 2018

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers (Topic 606). The new revenue recognition guidance establishes a new control-based revenue recognition model, changes the basis for deciding when revenue is recognized over time or at a point in time, provides new and more detailed guidance on specific topics and expands and improves disclosures about revenue. The Company evaluated its revenues and the new guidance had immaterial impacts to recognition practices upon adoption on January 1, 2018. As part of the adoption, the Company elected to apply the new guidance on a modified retrospective basis. The Company did not record a cumulative effect adjustment to retained earnings for initially applying the new guidance as no revenue recognition differences were identified in the timing or amount of revenue. See Note 3, "Revenue Recognition" for additional information on the required disclosures related to the impact of adopting this standard.

The FASB issued ASU No. 2016-01, Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities with further clarifications made in February 2018 with the issuance of ASU 2018-03. The amended guidance requires certain equity investments that are not consolidated and not accounted for under the equity method to be measured at fair value with changes in fair value recognized in net income rather than as a component of accumulated other comprehensive income (loss). It further states that an entity may choose to measure equity investments that do not have readily determinable fair values using a quantitative approach, or measurement alternative, which is equal to its cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The Company adopted this amended guidance on January 1, 2018, with no impact on the financial statements.

In March 2018, the FASB issued ASU 2018-05, "Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118." ASU 2018-05, effective 2018, expands income tax accounting and disclosure guidance to include SAB 118 issued by the SEC in December 2017. SAB 118 provides guidance on accounting for the income tax effects of the U.S. Tax Cuts and Jobs Act of 2017 (the "Tax Act") and among other things allows for a measurement period not to exceed one year for companies to finalize the provisional amounts recorded as of December 31, 2017. See Note 13. "Income Taxes" for additional information on the Company's accounting for the Tax Act.

Recent Accounting Pronouncements Yet to be Adopted

On February 25, 2016, the FASB released ASU No. 2016-02, Leases, to complete its project to overhaul lease accounting. The ASU codifies ASC 842, Leases, which will replace the guidance in ASC 840. The guidance will require lessees to recognize most leases on the balance sheet for capital and operating leases. The guidance is effective for public business entities in fiscal years beginning after December 15, 2018. The Company is evaluating the impact of the accounting standard on its financial statements by reviewing the standard itself, as well as reviewing literature about the new standard produced by nationally-recognized accounting firms and other third parties.

Note 3. Revenue Recognition

Revenue from Contracts with Customers

On January 1, 2018, the Company adopted Topic 606 using the modified retrospective method. Under the modified retrospective method, the Company did not record a cumulative effect adjustment to retained earnings for initially applying the new guidance as no revenue recognition differences were identified in the timing or amount of revenue. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Revenue Recognition ("Topic 605").

The adoption of Topic 606 represents a change in accounting principle that will provide financial statement readers with enhanced revenue recognition disclosures. In accordance with Topic 606, revenue is recognized when obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of products or services. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products or providing services. Certain customers may receive cash and/or non-cash incentives,

which are accounted for as variable consideration. To achieve this core principle, the Company applies the following five steps:

1. Identify the contract with a customer

A contract with a customer exists when (i) the Company enters into an agreement with a customer that defines each party's rights regarding the products or services to be transferred and identifies the payment terms related to these products or services, (ii) both parties to the contract are committed to perform their respective obligations, (iii) the contract has commercial substance, and (iv) the Company determines that collection of substantially all consideration for products or services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. The Company applies judgment in determining the customer's ability and intention to pay, which is based on a variety of factors including the customer's payment history or, in the case of a new customer, published credit and financial information pertaining to the customer.

2. Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the products or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the product or service either on its own or together with other resources that are readily available from third parties or from the Company, and are distinct in the context of the contract, whereby the transfer of the products or services is separately identifiable from other promises in the contract. To the extent a contract includes multiple promised products or services, the Company must apply judgment to determine whether promised products or services are capable of being distinct and distinct in the context of the contract. If these criteria are not met, the promised products or services are accounted for as a combined performance obligation. The Company has elected to account for shipping and handling activities as a fulfillment cost as permitted by the standard.

3. Determine the transaction price

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring products or services to the customer. To the extent the transaction price is variable, revenue is recognized at an amount equal the consideration to which the Company expects to be entitled. This estimate includes customer sales incentives which are accounted for as a reduction to revenue and estimated using either the expected value method or the most likely amount method, depending on the nature of the program. The Company will adjust its consideration for any rebates and commissions if it is more likely than not that these conditions will be met.

4. Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis unless a portion of the variable consideration related to the contract is allocated entirely to a performance obligation. The Company determines standalone selling price based on the price at which the performance obligation is sold separately.

5. Recognize revenue when or as the Company satisfies a performance obligation

The Company generally satisfies performance obligations at a point in time. Revenue is recognized based on the transaction price at the time the related performance obligation is satisfied by transferring a promised product or service to a customer.

Disaggregation of Revenue

Revenue is classified based on the location of where the product is manufactured. For additional information on the disaggregated revenues by geographical region, see Note 14, "Geographic Information."

Note 4. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the statement of financial position that sum to the total of the same such amounts in the statement of cash flows (in thousands):

	March 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 82,251	\$ 82,936
Restricted cash	1,048	1,012
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	<u>\$ 83,299</u>	<u>\$ 83,948</u>

Restricted cash includes guarantee deposits for customs duties and compensating balances required for certain credit facilities.

Note 5. Earnings Per Share

Basic net income per share has been computed using the weighted-average number of shares of common stock outstanding during the period. Diluted net income per share has been computed using the weighted-average number of shares of common stock and dilutive potential common shares from stock options and restricted stock units outstanding during the period.

The following table sets forth the computation of the basic and diluted net income per share for the periods indicated (in thousands, except per share amounts):

	Three months ended March 31,	
	2018	2017
Numerator:		
Net income	\$ 2,120	\$ 19,789
Denominator:		
Weighted average shares used to compute net income per share		
Basic	19,492	18,598
Effect of dilutive options and restricted stock units	497	1,104
Diluted	19,989	19,702
Net income per share		
Basic	\$ 0.11	\$ 1.06
Diluted	\$ 0.11	\$ 1.00

There were no securities that were excluded from the computation of diluted net income per share.

Note 6. Inventories

Inventories, net of inventory writedowns, consist of the following for the periods indicated (in thousands):

	March 31, 2018	December 31, 2017
Raw materials	\$ 32,454	\$ 26,648
Work in process and sub-assemblies	42,353	31,060
Finished goods	17,817	18,060
	<u>\$ 92,624</u>	<u>\$ 75,768</u>

The lower of cost or market adjustment expensed for inventory for the three months ended March 31, 2018 and 2017 was \$0.9 million and \$0.5 million, respectively.

Note 7. Property, Plant & Equipment

Property, plant and equipment consisted of the following for the periods indicated (in thousands):

	<u>March 31, 2018</u>	<u>December 31, 2017</u>
Land improvements	\$ 806	\$ 806
Building and improvements	81,638	78,785
Machinery and equipment	179,801	168,993
Furniture and fixtures	4,932	4,663
Computer equipment and software	8,502	8,248
Transportation equipment	741	718
	<u>276,420</u>	<u>262,213</u>
Less accumulated depreciation and amortization	<u>(78,034)</u>	<u>(70,194)</u>
	198,386	192,019
Construction in progress	5,157	4,823
Land	1,101	1,101
Property, plant and equipment, net	<u>\$ 204,644</u>	<u>\$ 197,943</u>

For the three months ended March 31, 2018 and 2017, depreciation expense of property, plant and equipment was \$6.8 million and \$4.2 million, respectively.

Included in depreciation expense was \$3.8 million and \$2.6 million recorded as cost of sales for the three months ended March 31, 2018 and 2017, respectively.

Note 8. Intangible Assets, net

Intangible assets consisted of the following for the periods indicated (in thousands):

	<u>March 31, 2018</u>		
	<u>Gross Amount</u>	<u>Accumulated amortization</u>	<u>Intangible assets, net</u>
Patents	\$ 6,670	\$ (2,657)	\$ 4,013
Trademarks	14	(12)	2
Total intangible assets	<u>\$ 6,684</u>	<u>\$ (2,669)</u>	<u>\$ 4,015</u>

	<u>December 31, 2017</u>		
	<u>Gross Amount</u>	<u>Accumulated amortization</u>	<u>Intangible assets, net</u>
Patents	\$ 6,524	\$ (2,519)	\$ 4,005
Trademarks	14	(12)	2
Total intangible assets	<u>\$ 6,538</u>	<u>\$ (2,531)</u>	<u>\$ 4,007</u>

For the three months ended March 31, 2018 and 2017, amortization expense for intangible assets, included in general and administrative expenses on the income statement, was each \$0.1 million.

The remaining weighted average amortization period for intangible assets is approximately 8 years.

Note 9. Notes Payable and Long-Term Debt

Notes payable and long-term debt consisted of the following for the periods indicated (in thousands):

	<u>March 31, 2018</u>	<u>December 31, 2017</u>
Revolving line of credit with a U.S. bank up to \$60,000 with interest at LIBOR plus 1.4%, maturing September 28, 2020	\$ 38,370	\$ 49,000
Term loan with a U.S. bank with monthly payments of principal and interest at LIBOR plus 1.15%, maturing April 1, 2024	21,500	—
Term loan with a U.S. bank with monthly payments of principal and interest at LIBOR plus 1.3%, maturing April 1, 2023	5,056	—
Notes payable to a finance company due in monthly installments with 4.5% interest, maturing May 27, 2018	228	559
Total	<u>65,154</u>	<u>49,559</u>
Less current portion	<u>(2,690)</u>	<u>(559)</u>
Non-current portion	<u>\$ 62,464</u>	<u>\$ 49,000</u>

The current portion of long-term debt is the amount payable within one year of the balance sheet date of March 31, 2018. The one-month London Interbank Offered Rate (LIBOR) was 1.88% on March 31, 2018.

Maturities of long-term debt are as follows for the future one-year periods ending March 31, (in thousands):

2019	\$ 2,690
2020	40,832
2021	2,462
2022	2,462
2023	2,376
2024 and thereafter	<u>14,332</u>
Total outstanding	<u>\$ 65,154</u>

On June 14, 2016, the Company executed a Change in Terms Agreement, Notice of Final Agreement and Modification of the Construction Loan Agreement (the “Modification Agreement”) in connection with the Construction Loan Agreement with East West Bank for up to \$22.0 million dollars to finance the construction of the Company’s campus expansion plan in Sugar Land, Texas, originally dated January 26, 2015 (the “Construction Loan Agreement”). Under the Construction Loan Agreement, the loan bore interest at an annual rate based on the one-month LIBOR Borrowing Rate plus 2.75%, and the interest rate was adjusted to LIBOR Borrowing Rate plus 2.0% under the Modification Agreement.

On October 5, 2016, the Company executed a Change in Terms Agreement, Notice of Final Agreement and Second Modification to the Construction Loan Agreement (the “Second Modifications”) to the Construction Loan Agreement with East West Bank. The Second Modifications amended and restated in part the Company’s Promissory Note and Construction Loan Agreement, which was originally executed on January 26, 2015, and the Modification Agreement. The draw down period end date, under the Second Modifications, was amended from July 31, 2016 to September 30, 2016. On September 28, 2017, the Company repaid the outstanding balance of \$11.2 million and terminated the loan.

On June 24, 2016, the Company entered into a First Amendment to the Credit Agreement with East West Bank and Comerica Bank (“First Amendment”), a second lien deed of trust, multiple security agreements and promissory notes evidencing two credit facilities and a term loan originally entered into on June 30, 2015. The First Amendment increased the Company’s revolving lines of credit from \$25 million to \$40 million, which would have matured on June 30, 2018, and retained a \$10.0 million term loan which would have matured on June 30, 2020. The First Amendment also provided for an additional \$10.0 million equipment term loan with a one year drawdown period commencing on April 1, 2016 and maturing five years from the closing date of the First Amendment. The interest rate on these loans was adjusted by the First Amendment from the LIBOR Borrowing Rate plus 2.75% or 3.0% to LIBOR Borrowing Rate plus 2.0%. On

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September 28, 2017, the Company terminated the Credit Agreement and all outstanding balances of the loans had been repaid.

The Company also had a term loan with East West Bank of \$5.0 million with monthly payments of principal and interest that was originally scheduled to mature on July 31, 2019. On February 27, 2017, the Company repaid the outstanding balance of \$2.8 million and terminated the loan.

On September 28, 2017, the Company entered into a Loan Agreement, a Promissory Note, an Addendum to the Promissory Note, a BB&T Security Agreement, a Trademark Security Agreement, and a Patent Security Agreement (together the "Credit Facility") with Branch Banking and Trust Company ("BB&T"). The Credit Facility provides the Company with a three year, \$50 million, revolving line of credit. Borrowings under the Credit Facility will be used for general corporate purposes. The Company will make monthly payments of accrued interest with the final monthly payment being for all principal and all accrued interest not yet paid. The Company's obligations under the Credit Facility will be secured by the Company's accounts receivable, inventory, intellectual property, all business assets with the exception of real estate and equipment. Borrowings under the Credit Facility will bear interest at a rate equal to the one-month LIBOR plus 1.50%. The Credit Facility requires the Company to maintain certain financial covenants and also contains representations and warranties, and events of default applicable to the Company that are customary for agreements of this type.

On March 30, 2018, the Company executed a First Amendment to Loan Agreement, a Note Modification Agreement and Addendum to Promissory Note for \$60 million, a Promissory Note and Addendum to Promissory Note for \$26 million, a Promissory Note and Addendum to Promissory Note for \$21.5 million, a Texas Deed of Trust and Security Agreement, an Assignment of Lease and Rent, and an Environmental Certification and Indemnity Agreement, (collectively, the "Amended Credit Facility"), with BB&T. The Amended Credit Facility amends the Company's three-year \$50 million line of credit with BB&T, originally executed on September 28, 2017 (the "Existing Loan"). The Amended Credit Facility (1) increases the principal amount of the three-year line of credit from \$50 million to \$60 million (the "Line of Credit"); (2) allows the Company to borrow an additional \$26 million from BB&T in the form of a five-year capital expenditure loan (the "CapEx Loan") and (3) allows the Company to borrow an additional \$21.5 million in the form of a seventy-month real estate term loan (the "Term Loan") to refinance the Company's plant and facilities in Sugar Land, Texas. Borrowings under the Line of Credit will bear interest at a rate equal to the one-month LIBOR plus a Line of Credit margin ranging between 1.40% and 2.0%. Borrowings under the CapEx Loan will bear interest at a rate equal to the one-month LIBOR plus a CapEx Loan margin ranging between 1.30% and 2.0%. Borrowings under the Term Loan will bear interest at a rate equal to the one-month LIBOR plus a Term Loan margin ranging between 1.15% and 2.0%. The Company will make monthly payments of principal and accrued interest with the final monthly payments being for all principal and accrued interest not yet paid. The Company's obligations under the Amended Credit Facility will be secured by the Company's accounts receivable, inventory, equipment, intellectual property, real property, and virtually all business assets. As of March 31, 2018, the Company was in compliance with all covenants under the Amended Credit Facility. As of March 31, 2018, \$38.4 million was outstanding under the Line of Credit, \$21.5 million was outstanding under the Term Loan and \$5.1 million was outstanding under the CapEx Loan.

On May 27, 2015, the Company's Taiwan branch entered into a Purchase and Sale Contract and a Finance Lease Agreement with Chailease Finance Co, Ltd. ("Chailease") in connection with certain equipment, structured as a sale lease-back transaction. Pursuant to the Purchase and Sale contract, the Company's Taiwan branch sold certain equipment to Chailease for a purchase price of 180,148,532 New Taiwan dollars, approximately \$6 million, and simultaneously leased the equipment back from Chailease pursuant to the Finance Lease Agreement. The monthly lease payments ranging from 3,784,000 New Taiwan dollars, approximately \$0.1 million, to 3,322,413 New Taiwan dollars, approximately \$0.1 million, during the term of the Finance Lease Agreement, including an initial payment in an amount of 60,148,532 New Taiwan dollars, approximately \$2.0 million. The Finance Lease Agreement has a three-year term, with monthly payments, maturing on May 27, 2018. The title to the equipment will be transferred to the Company's Taiwan branch upon the expiration of the Finance Lease Agreement. As of March 31, 2018, \$0.2 million was outstanding under this Finance Lease Agreement.

On March 31, 2016, the Company's Taiwan branch entered into a Purchase and Sale Contract and a Finance Lease Agreement with Chailease in connection with certain equipment, structured as a sale lease-back transaction. Pursuant to the Purchase and Sale Contract, the Company's Taiwan branch sold certain equipment to Chailease for a purchase price of 312,927,180 New Taiwan dollars, approximately \$10.1 million, and simultaneously leased the equipment back from Chailease pursuant to the Finance Lease Agreement. The Finance Lease Agreement had a three-

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year term with monthly lease payments ranging from 6,772,500 New Taiwan dollars, approximately \$0.2 million, to 7,788,333 New Taiwan dollars, approximately \$0.3 million, during the term of the Finance Lease Agreement, including an initial payment in an amount of 62,927,180 New Taiwan dollars, approximately \$2.0 million. Based on the payments made under the Finance Lease Agreement, the annual interest rate was calculated to be 4.0%. The title to the equipment was to be transferred to the Company's Taiwan branch upon the expiration of the Finance Lease Agreement. On October 6, 2017, the Company repaid the outstanding balance and terminated the loan, and title to the equipment was transferred to its Taiwan branch.

The Company's Chinese subsidiary had credit facilities with China Construction Bank totaling \$13.2 million, which could be drawn in U.S. currency, RMB currency, issuing bank acceptance notes to vendors with different interest rates or issuing standby letters of credit. The Company pledged the land use rights and buildings of its Chinese subsidiary as collateral for the credit facility. The Company's Chinese subsidiary used \$10.0 million of its credit facility to issue standby letters of credit as collateral for the Company's Taiwan branch line of credit with China Construction Bank. On March 29, 2017, the Company repaid the outstanding balance and terminated the loan.

As of March 31, 2018 and December 31, 2017, the Company had \$42.6 million and \$1.0 million of unused borrowing capacity, respectively.

As of March 31, 2018 and December 31, 2017, there were no restricted cash, investments or security deposit associated with the loan facilities, respectively.

Note 10. Accrued Liabilities

Accrued liabilities consisted of the following for the periods indicated (in thousands):

	March 31, 2018	December 31, 2017
Accrued payroll	\$ 7,921	\$ 11,693
Accrued rent	1,234	1,180
Accrued employee benefits	919	2,035
Accrued state and local taxes	218	951
Advance payments	371	441
Accrued product warranty	1,237	1,118
Accrued commission expenses	246	425
Accrued professional fees	174	181
Accrued other	1,038	1,079
	<u>\$ 13,358</u>	<u>\$ 19,103</u>

Note 11. Other Income and Expense

Other income and (expense) consisted of the following for the periods indicated (in thousands):

	Three months ended	
	March 31,	
	2018	2017
Foreign exchange transaction loss	(1,040)	(572)
Other non-operating gain	12	13
Gain (loss) on disposal of assets	1	(49)
	<u>\$ (1,027)</u>	<u>\$ (608)</u>

Note 12. Share-Based Compensation

Equity Plans

The Company's board of directors and stockholders approved the following equity plans:

- the 1998 Share Incentive Plan
- the 2000 Share Incentive Plan

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- the 2004 Share Incentive Plan
- the 2006 Share Incentive Plan
- the 2013 Equity Incentive Plan (“2013 Plan”)

The Company issued stock options, restricted stock awards (“RSAs”) and restricted stock units (“RSUs”) to employees, consultants and non-employee directors. Stock option awards generally vest over a four year period and have a maximum term of ten years. Stock options under these plans have been granted with an exercise price equal to the fair market value on the date of the grant. Nonqualified and Incentive Stock Options, RSAs and RSUs may be granted from these plans. Prior to the Company’s initial public offering in September 2013, the fair market value of the Company’s stock had been historically determined by the board of directors and from time to time with the assistance of third party valuation specialists.

Stock Options

Options have been granted to the Company’s employees under the five incentive plans and generally become exercisable as to 25% of the shares on the first anniversary date following the date of grant and 12.5% on a semi-annual basis thereafter. All options expire ten years after the date of grant.

The following is a summary of option activity (in thousands, except per share data):

	Number of shares	Weighted Average Exercise Price	Weighted Average Share Price on Date of Exercise	Weighted Average Fair Value	Remaining Contractual Life	Aggregate Intrinsic Value
(in thousands, except price data)						
Outstanding, January 1, 2018	536	\$ 10.04		\$ 5.19		\$ 14,888
Exercised	(38)	9.95	\$ 31.12	5.14		808
Forfeited	(47)	9.96		5.10		711
Outstanding, March 31, 2018	451	\$ 10.05		\$ 5.20	5.36	\$ 6,762
Exercisable, March 31, 2018	451	\$ 10.05			5.36	\$ 6,762
Vested and expected to vest	451	\$ 10.05			5.36	\$ 6,762

As of March 31, 2018, there was no unrecognized stock option expense.

Restricted Stock Units/Awards

The following is a summary of RSU/RSA activity (in thousands, except per share data):

	Number of shares	Weighted Average Share Price on Date of Release	Weighted Average Fair Value	Aggregate Intrinsic Value
(in thousands, except price data)				
Outstanding at January 1, 2018	707		\$ 29.23	\$ 26,732
Granted	499		33.42	16,685
Released	(77)	\$ 33.72	25.86	2,596
Cancelled/Forfeited	(14)		32.78	355
Outstanding, March 31, 2018	1,115		\$ 31.29	\$ 27,940
Exercisable, March 31, 2018	6			\$ 141
Vested and expected to vest	1,115			\$ 27,940

As of March 31, 2018, there was \$32.5 million of unrecognized compensation expense related to these RSUs and RSAs. This expense is expected to be recognized over 3.2 years.

Share-Based Compensation

Employee share-based compensation expenses recognized for the periods indicated (in thousands):

	Three months ended March 31,	
	2018	2017
Share-based compensation - by expense type		
Cost of goods sold	\$ 178	\$ 78
Research and development	576	265
Sales and marketing	227	80
General and administrative	1,588	1,084
Total share-based compensation expense	<u>\$ 2,569</u>	<u>\$ 1,507</u>
Share-based compensation - by award type		
Employee stock options	\$ 12	\$ 278
Restricted stock units	2,557	1,229
Total share-based compensation expense	<u>\$ 2,569</u>	<u>\$ 1,507</u>

Note 13. Income Taxes

The Company's tax provision or benefit from income taxes for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items, if any, that are taken into account in the relevant period. The Company's quarterly tax provision, and its quarterly estimate of our annual effective tax rate, is subject to significant variation due to several factors, including variability in accurately predicting its pre-tax income and loss and the mix of jurisdictions to which they relate, tax law developments, and relative changes in permanent tax benefits or expenses

The Company's effective tax rate for the three months ended March 31, 2018 and 2017 was (88.63%) and 15.59%, respectively. For the three months ended March 31, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, and recognition of the U.S. global intangible low-taxed income ("GILTI") which is partially offset by foreign tax credits. For the three months ended March 31, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions.

On December 22, 2017, the President of the United States signed Public Law No. 115-97, commonly referred to as the Tax Cut and Jobs Act of 2017 (the "Tax Act"). The Tax Act makes significant change to the U.S. tax code, which include, but are not limited to, a U.S. federal corporate tax rate decrease from 35% to 21% effective January 1, 2018, a shift to a modified territorial tax regime, which requires companies to pay a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of certain foreign subsidiaries as of December 31, 2017, a new provision designed to tax GILTI of foreign subsidiaries, a limitation of the deduction for net operating losses, elimination of net operating loss carrybacks, immediate deductions for depreciation expense for certain qualified property, additional limitations on the deductibility of executive compensation, and limitations on the deductibility of interest.

The Company was able to reasonably estimate the transition tax and recorded an initial provisional transition tax obligation of \$5.0 million, with a corresponding adjustment of \$5.0 million to income tax expense for the year ended December 31, 2017. As a result of new interpretive guidance issued by the Treasury and the IRS, the Company recognized an additional measurement-period adjustment of (\$0.8 million), with a corresponding adjustment of \$0.8 million to income tax benefit during the period. The effect of the measurement-period adjustment on the first quarter 2018 effective tax rate was approximately (71.6)%. However, the Company is continuing to gather additional information to more precisely compute the amount of the transition tax, and its accounting for this item is not yet complete because the final foreign earnings and profits calculations have not been completed. The Company expects to complete its accounting within the prescribed measurement period.

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The Company will continue to refine its estimates related to the impact of the Tax Act during the one year measurement period allowed under Staff Accounting Bulletin 118 (“SAB 118”).

Additionally, the Company previously considered the earnings in its non-U.S. subsidiaries to be indefinitely reinvested and, accordingly, recorded no deferred income taxes. The Company is currently analyzing its global working capital and cash requirements and the potential tax liabilities attributable to a repatriation, but the Company has yet to determine whether it plans to change its prior assertion and repatriate earnings. While the transition tax resulted in the reduction of the excess of the amount for financial reporting over the tax basis in our foreign subsidiaries, an actual repatriation from its non-U.S. subsidiaries could be subject to additional foreign and U.S. state income taxes. Accordingly, the Company has not recorded any deferred taxes attributable to our investments in its foreign subsidiaries. The Company will record the tax effects of any change in its prior assertion in the period that it completes its analysis and are able to make a reasonable estimate, and disclose any unrecognized deferred tax liability for temporary differences related to our foreign investments, if practicable.

Note 14. Geographic Information

The Company operates in one reportable segment. The Company’s Chief Executive Officer, who is considered to be the chief operating decision maker, manages the Company’s operations as a whole and reviews financial information presented on a consolidated basis, accompanied by information about product revenue, for purposes of evaluating financial performance and allocating resources.

The following tables set forth the Company’s revenue and asset information by geographic region. Revenue is classified based on the location of where the product is manufactured. Long-lived assets in the tables below comprise only property, plant, equipment and intangible assets (in thousands):

	Three months ended March 31,	
	2018	2017
Revenues:		
United States	\$ 3,563	\$ 4,519
Taiwan	33,202	51,624
China	28,474	40,081
	<u>\$ 65,239</u>	<u>\$ 96,224</u>

	As of the period ended	
	March 31,	December 31,
	2018	2017
Long-lived assets:		
United States	\$ 75,404	\$ 75,446
Taiwan	68,479	67,379
China	71,224	59,929
	<u>\$ 215,107</u>	<u>\$ 202,754</u>

Note 15. Contingencies***Litigation******Overview***

From time to time, the Company may be subject to legal proceedings and litigation arising in the ordinary course of business, including, but not limited to, inquiries, investigations, audits and other regulatory proceedings, such as described below. The Company records a loss provision when it believes it is both probable that a liability has been incurred and the amount can be reasonably estimated. Unless otherwise disclosed, the Company is unable to estimate the possible loss or range of loss for the legal proceeding described below.

Except for the lawsuit described below, the Company believes that there are no claims or actions pending or threatened against it, the ultimate disposition of which would have a material adverse effect on it.

Class Action and Shareholder Derivative Litigation

On August 5, 2017, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against the Company and two of its officers in *Mona Abouzi v. Applied Optoelectronics, Inc., Chih-Hsiang (Thompson) Lin, and Stefan J. Murry, et al.*, Case No. 4:17-cv-02399. The complaint in this matter seeks class action status on behalf of the Company's shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, its chief executive officer, and its chief financial officer, arising out of its announcement on August 3, 2017 that "we see softer than expected demand for our 40G solutions with one of our large customers that will offset the sequential growth and increased demand we expect in 100G." A second, related action was filed by Plaintiff Chad Ludwig on August 16, 2017 (Case No. 4:17-cv-02512) in the Southern District of Texas. The two cases were consolidated before Judge Vanessa D. Gilmore. On January 22, 2018, the court appointed Lawrence Rougier as Lead Plaintiff and Levi & Korinsky LLP as Lead Counsel. Lead Plaintiff filed an amended consolidated class action complaint on March 6, 2018. The amended complaint requests unspecified damages and other relief. The Company disputes the allegations and intends to vigorously contest the matter. We filed a motion to dismiss on April 4, 2018. Briefing on the motion to dismiss is expected to be completed on May 16, 2018.

Note 16. Subsequent Events

The Company has evaluated subsequent events through the date the financial statements were available to be issued.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the accompanying notes appearing elsewhere in this Quarterly Report on Form 10-Q for the period ended March 31, 2018 and the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2017 included in our Annual Report on Form 10-K. References to "Applied Optoelectronics" "we," "our" and "us" are to Applied Optoelectronics, Inc. and its subsidiaries unless otherwise specified or the context otherwise requires.

This Quarterly Report on Form 10-Q contains "forward-looking statements" that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Quarterly Report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Terminology such as "believe," "may," "estimate," "continue," "anticipate," "intend," "should," "could," "would," "target," "seek," "aim," "believe," "predicts," "think," "objectives," "optimistic," "new," "goal," "strategy," "potential," "is likely," "will," "expect," "plan," "project," "permit," or by other similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

We have based these forward-looking statements largely on our current expectations and projections about future events and industry and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified in "Part II—Item 1A. Risk Factors" provided below, and those discussed in other documents we file with the SEC. Furthermore, such forward-looking statements speak only as of the date of this Quarterly Report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of this Quarterly Report.

Overview

We are a leading, vertically integrated provider of fiber-optic networking products, primarily for four networking end-markets: internet data center, cable television, or CATV, telecommunication, or telecom and fiber-to-the-home, or FTTH. We design and manufacture a range of optical communications products at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment.

In designing products for our customers, we begin with the fundamental building blocks of lasers and laser components. From these foundational products, we design and manufacture a wide range of products to meet our customers' needs and specifications, and such products differ from each other by their end market, intended use and level of integration. We are primarily focused on the higher-performance segments within all four of our target markets, which increasingly demand faster connectivity and innovation.

The four end markets we target are all driven by significant bandwidth demand fueled by the growth of network-connected devices, video traffic, cloud computing and online social networking. To address this increased bandwidth demand, CATV and telecommunications service providers are competing directly against each other by providing bundles of voice, video and data services to their subscribers and investing to enhance the capacity, reliability and capability of their networks. The trend of rising bandwidth consumption also impacts the internet data center market, as reflected in the shift to higher speed server connections. As a result of these trends, fiber-optic networking technology is becoming essential in all four of our target markets, as it is often the only economic way to deliver the desired bandwidth.

Our vertically integrated manufacturing model provides us several advantages, including rapid product development, fast response times to customer requests and control over product quality and manufacturing costs. We design, manufacture and integrate our own analog and digital lasers using a proprietary Molecular Beam Epitaxy, or MBE, and Metal Organic Chemical Vapor Deposition (MOCVD) fabrication process, which we believe is unique in our industry. We manufacture the majority of the laser chips and optical components that are used in our products. The lasers

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we manufacture are proven to be reliable over time and highly tolerant of changes in temperature and humidity, making them well-suited to the CATV and FTTH markets where networking equipment is often installed outdoors.

We have three manufacturing sites: Sugar Land, Texas, Ningbo, China and Taipei, Taiwan. Our research and development functions are generally partnered with our manufacturing locations, and we have an additional research and development facility in Duluth, Georgia. In our Sugar Land facility, we manufacture laser chips (utilizing our MBE and MOCVD processes), subassemblies and components. The subassemblies are used in the manufacture of components by our other manufacturing facilities or sold to third parties as modules. We manufacture our laser chips only within our Sugar Land facility, where our laser design team is located. In our Taiwan location, we manufacture optical components, such as our butterfly lasers, which incorporate laser chips, subassemblies and components manufactured within our Sugar Land facility. In addition, in our Taiwan location, we manufacture transceivers for the internet data center, telecom, FTTH and other markets. In our China facility, we take advantage of lower labor costs and manufacture certain more labor intensive components and optical equipment systems, such as optical subassemblies and transceivers for the internet data center market, CATV transmitters (at the headend) and CATV outdoor equipment (at the node). Each manufacturing facility conducts testing on the components, modules or subsystems it manufactures and each facility is certified to ISO 9001:2015. Our facilities in Ningbo, China, Taipei, Taiwan, and Sugar Land, Texas are all certified to ISO 14001:2015.

Our sales model focuses on direct engagement and close coordination with our customers to determine product design, qualifications, and performance through coordination of our sales, product engineering and manufacturing teams. Our strategy is to use our direct sales force to sell to key accounts within our markets, increasing product penetration within those customers while also growing our overall customer base in certain international and domestic markets. We have direct sales personnel in each of our U.S., Taiwan and China locations focusing on a direct and local interaction with our internet data center, CATV, telecom and FTTH customers. Throughout our sales cycle, we work closely with our customers to achieve design wins that we believe provide long-lasting relationships and promote higher customer retention.

Our principal executive offices are located at 13139 Jess Pirtle Blvd., Sugar Land, TX 77478, and our telephone number is (281) 295-1800.

Results of Operations

The following table set forth our consolidated results of operations for the periods presented and as a percentage of our revenue for those periods (in thousands, except percentages):

	Three months ended		Three months ended	
	March 31,		March 31,	
	2018		2017	
Revenue, net	\$65,239	100.0 %	\$96,224	100.0 %
Cost of goods sold	39,403	60.4 %	54,752	56.9 %
Gross profit	25,836	39.6 %	41,472	43.1 %
Operating expenses				
Research and development	11,736	18.0 %	7,432	7.7 %
Sales and marketing	2,474	3.8 %	1,903	2.0 %
General and administrative	9,456	14.5 %	7,822	8.1 %
Total operating expenses	23,666	36.3 %	17,157	17.8 %
Income from operations	2,170	3.3 %	24,315	25.3 %
Other income (expense)				
Interest income	52	0.1 %	35	0.0 %
Interest expense	(71)	(0.1)%	(299)	(0.3)%
Other expense, net	(1,027)	(1.6)%	(608)	(0.6)%
Total other expense	(1,046)	(1.6)%	(872)	(0.9)%
Income before income taxes	1,124	1.7 %	23,443	24.4 %
Income tax (expense) benefit	996	1.5 %	(3,654)	(3.8)%
Net income	\$ 2,120	3.2 %	\$19,789	20.6 %

Comparison of Financial Results

Revenue

We generate revenue through the sale of our products to equipment providers and network operators for the internet data center, CATV, telecom and FTTH markets. We derive a significant portion of our revenue from our top ten customers, and we anticipate that we will continue to do so for the foreseeable future. The following charts provide the revenue contribution from each of the markets we served for the three months ended March 31, 2018 and 2017 (in thousands, except percentages):

	Three months ended March 31,				Change	
	2018	% of Revenue	2017	% of Revenue	Amount	%
Data Center	\$50,583	77.5%	\$79,594	82.7%	\$(29,011)	(36.4)%
CATV	10,568	16.2%	13,094	13.6%	(2,526)	(19.3)%
Telecom	3,586	5.5%	3,171	3.3%	415	13.1 %
FTTH	111	0.2%	98	0.1%	13	13.3 %
Other	391	0.6%	267	0.3%	124	46.4 %
Total Revenue	\$65,239	100.0%	\$96,224	100.0%	\$(30,985)	(32.2)%

During the three months ended March 31, 2018, revenues in the internet data center market decreased by \$29.0 million. This decrease was driven primarily by decreasing demand for our 40 Gbps and 100 Gbps transceivers as one of our customers reduced its demand for optical transceivers due to changes in the way they architect their network. The decrease in revenues in the CATV market for the three months ended March 31, 2018 was a result of decreased available production capacity in our China factory associated with staff turnover related to the Lunar New Year. Revenue in our telecom market increased modestly for the three month period ended March 31, 2018, compared to the prior year. The increase was primarily attributable to increased orders for some of our telecom customers, particularly in China. The increase in revenue in our FTTH market is due to the fluctuation in demand for certain older legacy products and this demand is expected to continue to fluctuate.

For the three months ended March 31, 2018 and 2017, our top ten customers represented 94.3% and 96.7% of our revenue, respectively.

Cost of goods sold and gross margin

	Three months ended March 31,				Change	
	2018	% of Revenue	2017	% of Revenue	Amount	%
(in thousands, except percentages)						
Cost of goods sold	\$39,403	60.4 %	\$54,752	56.9 %	\$(15,349)	(28.0)%
Gross margin	25,836	39.6 %	41,472	43.1 %		

Cost of goods sold decreased by \$15.3 million, or 28.0%, for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017, primarily due to the decrease in revenue over the prior year. The decrease in gross margin for the three months ended March 31, 2018 compared to the same periods ended March 31, 2017 was primarily the result of higher production costs associated with reduced capacity utilization in our China and Taiwan factories associated with the Lunar New year.

Operating expenses

	Three months ended March 31,					
	2018		2017		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$11,736	18.0 %	\$ 7,432	7.7 %	\$4,304	57.9 %
Sales and marketing	2,474	3.8 %	1,903	2.0 %	571	30.0 %
General and administrative	9,456	14.5 %	7,822	8.1 %	1,634	20.9 %
Total operating expenses	<u>\$23,666</u>	<u>36.3 %</u>	<u>\$17,157</u>	<u>17.8 %</u>	<u>\$6,509</u>	<u>37.9 %</u>

Research and development expense

Research and development expense increased by \$4.3 million, or 57.9%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. Research and development costs consist of R&D work orders, R&D material usage and other project related costs related to 40 Gbps, 100 Gbps, and 200/400 Gbps data center products, DOCSIS 3.1 capable CATV products, including remote-PHY products, and other new product development, and depreciation expense resulting from R&D equipment investments. Research and development costs increased for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 due mainly to increases in personnel-related costs, depreciation expenses associated with new R&D equipment purchased or transferred during the year, materials and supplies used in R&D activities and an increase in costs from R&D work orders.

Sales and marketing expense

Sales and marketing expense increased by \$0.6 million, or 30.0%, for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. These increases were due to an increase in personnel costs, an increase in customs taxes, duties and freight, and increased trade show expenses, partially offset by decreased commissions and professional fees.

General and administrative expense

General and administrative expense increased by \$1.6 million, or 20.9%, for the three months ended March 31, 2018 compared to the three months ended March 31, 2017. These increases were primarily due to an increase in personnel-related costs, share-based compensation expenses, insurance expenses and professional service fees.

General and administrative expenses include costs to comply with Section 404 of the Sarbanes-Oxley Act, or SOX, and other regulations governing public companies, costs of directors' and officers' liability insurance and investor relations activities. As of June 30, 2017, the market value of our common stock held by non-affiliates exceeded \$700 million. As of December 31, 2017, we became a "large accelerated filer" and, accordingly, no longer qualify as an emerging growth company and no longer are able to rely on certain exemptions that were available to us as an emerging growth company. We anticipate that general and administrative expenses will continue to increase in absolute dollars in the future as we continue to incur additional spending to ensure continued SOX and other regulatory compliance. We expect such expenses to decline as a percentage of our revenues over time as our revenues grow.

Other income (expense), net

	Three months ended March 31,					
	2018		2017		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Interest income	\$ 52	0.1 %	\$ 35	0.0 %	\$ 17	48.6 %
Interest expense	(71)	(0.1)%	(299)	(0.3)%	228	(76.3)%
Other income (expense), net	<u>(1,027)</u>	<u>(1.6)%</u>	<u>(608)</u>	<u>(0.6)%</u>	<u>(419)</u>	<u>68.9 %</u>
Total other expense, net	<u>\$(1,046)</u>	<u>(1.6)%</u>	<u>\$(872)</u>	<u>(0.9)%</u>	<u>\$(174)</u>	<u>20.0 %</u>

Interest income increased 48.6% for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017, due to larger cash balances.

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Interest expense decreased 76.3% for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. These decreases were due to repayment of debt that had been previously borrowed to fund expansion projects.

Other income (expense) for the three months ended March 31, 2018 was expense of \$1.0 million, a \$0.4 million unfavorable increase as compared to the three months ended March 31, 2017. These increases were due to the increase of foreign exchange losses resulting from the unfavorable fluctuation of certain Asian currencies against the U.S. dollar.

Benefit (provision) for income taxes

	Three months ended March 31,		
	2018	2017	Change
	(in thousands, except percentages)		
Benefit (provision) for income taxes	\$ 996	\$(3,654)	4,650 (127.3)%

Our tax provision or benefit from income taxes for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items, if any, that are taken into account in the relevant period. Our quarterly tax provision, and our quarterly estimate of our annual effective tax rate, is subject to significant variation due to several factors, including variability in accurately predicting our pre-tax income and loss and the mix of jurisdictions to which they relate, tax law developments, and relative changes in permanent tax benefits or expenses.

Our effective tax rate for the three months ended March 31, 2018 and 2017 was (88.63%) and 15.59%, respectively. For the three months ended March 31, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, and recognition of the U.S. global intangible low-taxed income ("GILTI") which is partially offset by foreign tax credits. For the three months ended March 31, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions.

On December 22, 2017, the President of the United States signed Public Law No. 115-97, commonly referred to as the Tax Cut and Jobs Act of 2017 (the "Tax Act"). The Tax Act makes significant change to the U.S. tax code, which include, but are not limited to, a U.S. federal corporate tax rate decrease from 35% to 21% effective January 1, 2018, a shift to a modified territorial tax regime, which requires companies to pay a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of certain foreign subsidiaries as of December 31, 2017, a new provision designed to tax GILTI of foreign subsidiaries, a limitation of the deduction for net operating losses, elimination of net operating loss carrybacks, immediate deductions for depreciation expense for certain qualified property, additional limitations on the deductibility of executive compensation, and limitations on the deductibility of interest.

We were able to reasonably estimate the transition tax and recorded an initial provisional transition tax obligation of \$5.0 million, with a corresponding adjustment of \$5.0 million to income tax expense for the year ended December 31, 2017. As a result of new interpretive guidance issued by the Treasury and the IRS, we recognized an additional measurement-period adjustment of (\$0.8 million), with a corresponding adjustment of \$0.8 million to income tax benefit during the period. The effect of the measurement-period adjustment on the first quarter 2018 effective tax rate was approximately (71.6)%. However, we are continuing to gather additional information to more precisely compute the amount of the transition tax, and our accounting for this item is not yet complete because the final foreign earnings and profits calculations have not been completed. We expect to complete our accounting within the prescribed measurement period.

We will continue to refine our estimates related to the impact of the Tax Act during the one year measurement period allowed under Staff Accounting Bulletin 118 ("SAB 118").

Additionally, we previously considered the earnings in our non-U.S. subsidiaries to be indefinitely reinvested and, accordingly, recorded no deferred income taxes. We are currently analyzing our global working capital and cash requirements and the potential tax liabilities attributable to a repatriation, but we have yet to determine whether we plan to change our prior assertion and repatriate earnings. While the transition tax resulted in the reduction of the excess of the amount for financial reporting over the tax basis in our foreign subsidiaries, an actual repatriation from our non-U.S. subsidiaries could be subject to additional foreign and U.S. state income taxes. Accordingly, we have not recorded any

deferred taxes attributable to our investments in our foreign subsidiaries. We will record the tax effects of any change in our prior assertion in the period that we complete our analysis and are able to make a reasonable estimate, and disclose any unrecognized deferred tax liability for temporary differences related to our foreign investments, if practicable.

Liquidity and Capital Resources

From inception until our initial public offering in September 2013, we financed our operations through private sales of equity securities, cash generated from operations and from various lending arrangements. As of March 31, 2018, we had \$42.6 million of unused borrowing capacity from all of our loan agreements. As of March 31, 2018, our cash, cash equivalents, restricted cash and short-term investments totaled \$83.3 million. Cash and cash equivalents are held for working capital purposes and are invested primarily in money market or time deposit funds. We do not enter into investments for trading or speculative purposes. On October 17, 2016, we filed a Registration Statement on Form S-3 with the Securities and Exchange Commission, which was declared effective on November 1, 2016, providing for the public offer and sale of certain securities of the Company from time to time, at our discretion, up to an aggregate amount of \$250 million. Between November 22, 2016 and March 2, 2017, the Company sold 1.6 million shares of common stock at a weighted average price of \$31.55 per share, providing proceeds of \$48.8 million, net of expenses and underwriting discounts and commissions.

The table below sets forth selected cash flow data for the periods presented (in thousands):

	Three months ended	
	March 31,	
	2018	2017
Net cash provided by (used in) operating activities	\$ (4,064)	\$ 9,676
Net cash used in investing activities	(12,220)	(8,929)
Net cash provided by financing activities	14,576	6,779
Effect of exchange rates on cash and cash equivalents	1,059	1,043
Net increase (decrease) in cash and cash equivalents	\$ (649)	\$ 8,569

Operating activities

For the three months ended March 31, 2018, net cash used in operating activities was \$4.1 million. Net cash provided by operating activities consisted of our net income of \$2.1 million, after the exclusion of non-cash items of \$8.6 million, as well as an increase in accounts payable to our vendors of \$2.6 million and a decrease in accounts receivable from our customers of \$6.2 million. These cash increases were offset by a decrease in accrued liabilities of \$6.1 million and an increase in inventory of \$15.8 million.

For the three months ended March 31, 2017, net cash provided by operating activities was \$9.7 million. Net cash provided by operating activities consisted of our net income of \$19.8 million, after the exclusion of non-cash items of \$7.7 million, as well as an increase in accounts payable from our vendors of \$10.2 million. These cash increases were offset by an increase in accounts receivable from our customers of \$16.6 million, an increase in inventories of \$4.3 million, an increase in prepaid assets of \$5.1 million and a decrease in accrued liabilities of \$4.2 million.

Investing activities

For the three months ended March 31, 2018, net cash used in investing activities was \$12.2 million, mainly for the purchase of additional machinery and equipment and land use rights in China.

For the three months ended March 31, 2017, net cash used in investing activities was \$8.9 million, mainly for the purchase of additional machinery and equipment.

Financing activities

For the three months ended March 31, 2018, our financing activities provided \$14.6 million in cash. This increase in cash was due to net borrowings of \$15.6 million offset by \$1.1 million of withholding taxes paid on behalf of employees related to their share-based compensation.

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For the three months ended March 31, 2017, our financing activities provided \$6.8 million in cash. We received \$21.6 million in net proceeds from the sale of our common stock pursuant to an at-the market offering. In addition, we repaid \$14.7 million of notes payable.

Loans and commitments

We have lending arrangements with several financial institutions, including a revolving line of credit with Branch, Banking and Trust Company (“BB&T”) in the U.S. and a finance lease agreement for our Taiwan branch. As of March 31, 2018, we had \$42.6 million of unused borrowing capacity.

On June 14, 2016, we executed a Change in Terms Agreement, Notice of Final Agreement and Modification of the Construction Loan Agreement (the “Modification Agreement”) in connection with our Construction Loan Agreement with East West Bank for up to \$22.0 million dollars to finance the construction of our campus expansion plan in Sugar Land, Texas, originally dated January 26, 2015 (the “Construction Loan Agreement”). Under the Construction Loan Agreement, the loan bore interest at an annual rate based on the one-month LIBOR Borrowing Rate plus 2.75%, and the interest rate was adjusted to LIBOR Borrowing Rate plus 2.0% under the Modification Agreement.

On October 5, 2016, we executed a Change in Terms Agreement, Notice of Final Agreement and Second Modification to the Construction Loan Agreement (the “Second Modifications”) to the Construction Loan Agreement with East West Bank. The Second Modifications amended and restated in part our Promissory Note and Construction Loan Agreement, which was originally executed on January 26, 2015, and the Modification Agreement. The draw down period end date, under the Second Modifications, was amended from July 31, 2016 to September 30, 2016. On September 28, 2017, we repaid the outstanding balance of \$11.2 million and terminated the loan.

On June 24, 2016, we entered into a First Amendment to the Credit Agreement with East West Bank and Comerica Bank (the “First Amendment”), a second lien deed of trust, multiple security agreements and promissory notes evidencing two credit facilities and a term loan originally entered into on June 30, 2015. The First Amendment increased our revolving lines of credit from \$25 million to \$40 million, which would have matured on June 30, 2018, and retained a \$10.0 million term loan which would have matured on June 30, 2020. The First Amendment also provided for an additional \$10.0 million equipment term loan with a one year drawdown period commencing on April 1, 2016 and maturing five years from the closing date of the First Amendment. The interest rate on these loans was adjusted by the First Amendment from the LIBOR Borrowing Rate plus 2.75% or 3.0% to LIBOR Borrowing Rate plus 2.0%. On September 28, 2017, we terminated the credit agreement and all outstanding balances of the loans had been repaid.

We also had a term loan with East West Bank of \$5.0 million with monthly payments of principal and interest that was originally scheduled to mature on July 31, 2019. On February 27, 2017, we repaid the outstanding balance of \$2.8 million and terminated the loan.

On September 28, 2017, we entered into a Loan Agreement, a Promissory Note, an Addendum to the Promissory Note, a BB&T Security Agreement, a Trademark Security Agreement, and a Patent Security Agreement (together the “Credit Facility”) with BB&T. The Credit Facility provides us with a three year, \$50 million, revolving line of credit. Borrowings under the Credit Facility will be used for general corporate purposes. We will make monthly payments of accrued interest with the final monthly payment being for all principal and all accrued interest not yet paid. Our obligations under the Credit Facility will be secured by our accounts receivable, inventory, intellectual property, all business assets with the exception of real estate and equipment. Borrowings under the Credit Facility will bear interest at a rate equal to the one-month LIBOR plus 1.50%. The Credit Facility requires us to maintain certain financial covenants and also contains representations and warranties, and events of default applicable to us that are customary for agreements of this type.

On March 30, 2018, we executed a First Amendment to Loan Agreement, a Note Modification Agreement and Addendum to Promissory Note for \$60 million, a Promissory Note and Addendum to Promissory Note for \$26 million, a Promissory Note and Addendum to Promissory Note for \$21.5 million, a Texas Deed of Trust and Security Agreement, an Assignment of Lease and Rent, and an Environmental Certification and Indemnity Agreement, (collectively, the “Amended Credit Facility”), with BB&T. The Amended Credit Facility amends our three-year \$50 million line of credit with BB&T, originally executed on September 28, 2017 (the “Existing Loan”). The Amended Credit Facility (1) increases the principal amount of the three-year line of credit from \$50 million to \$60 million (the “Line of Credit”); (2) allows us to borrow an additional \$26 million from BB&T in the form of a five-year capital expenditure loan (the

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“CapEx Loan”) and (3) allows us to borrow an additional \$21.5 million in the form of a seventy-month real estate term loan (the “Term Loan”) to refinance our plant and facilities in Sugar Land, Texas. Borrowings under the Line of Credit will bear interest at a rate equal to the one-month LIBOR plus a Line of Credit margin ranging between 1.40% and 2.0%. Borrowings under the CapEx Loan will bear interest at a rate equal to the one-month LIBOR plus a CapEx Loan margin ranging between 1.30% and 2.0%. Borrowings under the Term Loan will bear interest at a rate equal to the one-month LIBOR plus a Term Loan margin ranging between 1.15% and 2.0%. We will make monthly payments of principal and accrued interest with the final monthly payments being for all principal and accrued interest not yet paid. Our obligations under the Amended Credit Facility will be secured by our accounts receivable, inventory, equipment, intellectual property, real property, and virtually all business assets. As of March 31, 2018, we were in compliance with all covenants under the Amended Credit Facility. As of March 31, 2018, \$38.4 million was outstanding under the Line of Credit, \$21.5 million was outstanding under the Term Loan and \$5.1 million was outstanding under the CapEx Loan.

On May 27, 2015, our Taiwan branch entered into a Purchase and Sale Contract and a Finance Lease Agreement with Chailease Finance Co, Ltd. (“Chailease”) in connection with certain equipment, structured as a sale lease-back transaction. Pursuant to the Purchase and Sale Contract, our Taiwan branch sold certain equipment to Chailease for a purchase price of 180,148,532 New Taiwan dollars, approximately \$6 million, and simultaneously leased the equipment back from Chailease pursuant to the Finance Lease Agreement. The monthly lease payments range from 3,784,000 New Taiwan dollars, approximately \$0.1 million, to 3,322,413 New Taiwan dollars, approximately \$0.1 million, during the term of the Finance Lease Agreement, including an initial payment in an amount of 60,148,532 New Taiwan dollars, approximately \$2.0 million. The Finance Lease Agreement has a three-year term, with monthly payments, maturing on May 27, 2018. The title to the equipment will be transferred to our Taiwan branch upon the expiration of the Finance Lease Agreement. As of March 31, 2018, \$0.2 million was outstanding under this Finance Lease Agreement.

On March 31, 2016, our Taiwan branch entered into a Purchase and Sale Contract and a Finance Lease Agreement with Chailease in connection with certain equipment, structured as a sale lease-back transaction. Pursuant to the Purchase and Sale Contract, our Taiwan branch sold certain equipment to Chailease for a purchase price of 312,927,180 New Taiwan dollars, approximately \$10.1 million, and simultaneously leased the equipment back from Chailease pursuant to the Finance Lease Agreement. The Finance Lease Agreement had a three-year term with monthly lease payments ranging from 6,772,500 New Taiwan dollars, approximately \$0.2 million, to 7,788,333 New Taiwan dollars, approximately \$0.3 million, during the term of the Finance Lease Agreement, including an initial payment in an amount of 62,927,180 New Taiwan dollars, approximately \$2.0 million. Based on the payments made under the Finance Lease Agreement, the annual interest rate was calculated to be 4.0%. The title to the equipment was to be transferred to our Taiwan branch upon the expiration of the Finance Lease Agreement. On October 6, 2017, we repaid the outstanding balance and terminated the loan, and title to the equipment was transferred to our Taiwan branch.

Our Chinese subsidiary had credit facilities with China Construction Bank totaling \$13.2 million, which could be drawn in U.S. currency, RMB currency, issuing bank acceptance notes to vendors with different interest rates or issuing standby letters of credit. We pledged the land use rights and buildings of our Chinese subsidiary as collateral for the credit facility. Our Chinese subsidiary used \$10.0 million of its credit facility to issue standby letters of credit as collateral for our Taiwan branch line of credit with China Construction Bank. On March 29, 2017, we repaid the outstanding balance and terminated the loan.

As of March 31, 2018, there were no security deposits associated with the loan facilities, respectively.

Future liquidity needs

We believe that our existing cash and cash equivalents, and cash flows from our operating activities and borrowings from our lenders will be sufficient to meet our anticipated cash needs for the next 12 months. Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support our research and development efforts, the expansion of our sales and marketing activities, the introduction of new and enhanced products, the expansion of our manufacturing capacity and the continuing market acceptance of our products. In the event that additional liquidity is required to meet our long-term investments, we may need to explore additional sources of liquidity by additional bank credit facilities or raising capital through additional equity or debt financing including our equity financing under our Registration Statement filed with the SEC in October 2016. The sale of additional equity or convertible securities could result in additional dilution to our stockholders, and the terms and prices

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of any such sale may not be acceptable to us. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be adversely affected.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of March 31, 2018 (in thousands):

	Payments due by period				
	Total	Less than 1			More than
		Year	1-3 Years	3-5 Years	5 Years
Notes payable and long-term debt ⁽¹⁾	\$68,782	\$ 3,492	\$44,663	\$5,859	\$ 14,768
Operating leases ⁽²⁾	12,143	1,088	2,085	2,098	6,872
Total commitments	\$80,925	\$ 4,580	\$46,748	\$7,957	\$ 21,640

- (1) We have several loan and security agreements in Taiwan and the U.S. that provide various credit facilities, including lines of credit and term loans. The amount presented in the table represents the principal portion and estimated interest expense for the obligations.
- (2) We have entered into various non-cancellable operating lease agreements for our offices in Taiwan and in the U.S.

Inflation

We believe that the relatively low rate of inflation in the U.S. over the past few years has not had a significant impact on our sales or operating results or on the prices of raw materials. To the extent we expand our operations in China and Taiwan, such actions may result in inflation having a more significant impact on our operating results in the future.

Off-Balance Sheet Arrangements

For the three months ended March 31, 2018, we did not, and we do not currently, have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

In our annual report on Form 10-K for the year ended December 31, 2017 and in the Notes to the Financial Statements herein, we identify our most critical accounting policies. In preparing the financial statements, we make assumptions, estimates and judgments that affect the amounts reported. We periodically evaluate our estimates and judgments that are most critical in nature which are related to revenue recognition, allowance for doubtful accounts, inventory reserves, impairment of long-lived assets (excluding goodwill and other indefinite-lived intangible assets), goodwill and other indefinite-lived intangible assets, purchase price allocation of acquisitions, service and product warranties, and income taxes. Our estimates are based on historical experience and on our future expectations that we believe are reasonable. The combination of these factors forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results are likely to differ from our current estimates and those differences may be material.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

For quantitative and qualitative disclosures about market risk affecting the Company, see Item 7A – Quantitative and Qualitative Disclosures about Market Risk in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. We do not believe the Company’s exposure to market risk has changed materially since December 31, 2017.

Item 4. Controls and Procedures

The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include,

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without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2018. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the three month period covered by this Quarterly Report on Form 10-Q, which were identified in connection with management's evaluation required by the Rules 13a-15(d) and 15d-15(d) under the Exchange Act that occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item 1. Legal Proceedings

From time to time, we may be subject to legal proceedings and litigation arising in the ordinary course of business, including, but not limited to, inquiries, investigations, audits and other regulatory proceedings, such as described below. Except for the lawsuit described below, we believe that there are no claims or actions pending or threatened against us, the ultimate disposition of which would have a material adverse effect on us.

On August 5, 2017, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers in *Mona Abouzied v. Applied Optoelectronics, Inc., Chih-Hsiang (Thompson) Lin, and Stefan J. Murry, et al.*, Case No. 4:17-cv-02399. The complaint in this matter seeks class action status on behalf of our shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, our chief executive officer, and our chief financial officer, arising out of our announcement on August 3, 2017 that “we see softer than expected demand for our 40G solutions with one of our large customers that will offset the sequential growth and increased demand we expect in 100G.” A second, related action was filed by Plaintiff Chad Ludwig on August 16, 2017 (Case No. 4:17-cv-02512) in the Southern District of Texas. The two cases were consolidated before Judge Vanessa D. Gilmore. On January 22, 2018, the court appointed Lawrence Rougier as Lead Plaintiff and Levi & Korinsky LLP as Lead Counsel. Lead Plaintiff filed an amended consolidated class action complaint on March 6, 2018. The amended complaint requests unspecified damages and other relief. We dispute the allegations and intend to vigorously contest the matter. We filed a motion to dismiss on April 4, 2018. Briefing on the motion to dismiss is expected to be completed on May 16, 2018.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in our Quarterly Report on Form 10-Q, including our consolidated financial statements and related notes. If any of the following risks actually occur, we may be unable to conduct our business as currently planned and our financial condition and results of operations could be seriously harmed. In addition, the trading price of our common stock could decline due to the occurrence of any of these risks and you may lose all or part of your investment.

Risks Inherent in Our Business

We are dependent on our key customers for a significant portion of our revenue and the loss of, or a significant reduction in orders from, any of our key customers would adversely impact our revenue and results of operations.

We generate much of our revenue from a limited number of customers. For each year ended 2017, 2016 and 2015 and the three months ended March 31, 2018, our top ten customers represented 94.9%, 95.5%, 88.7% and 94.3% of our revenue, respectively. In 2017, Amazon represented 35.4% of our revenue, Facebook represented 28.6% of our revenue and Microsoft represented 13.8% of our revenue. As a result, the loss of, or a significant reduction in orders from any of our key customers would materially and adversely affect our revenue and results of operations. We typically do not have long-term contracts with our customers and instead rely on recurring purchase orders. However, many of our current revenue expectations and forecasts reflect significant anticipated orders from a limited number of key customers. If our key customers do not continue to purchase our existing products or fail to purchase additional products from us, our revenue would decline and our results of operations would be adversely affected.

Adverse events affecting our key customers could also negatively affect our ability to retain their business and obtain new purchase orders, which could adversely affect our revenue and results of operations. For example, in recent years, there has been consolidation among various network equipment manufacturers and this trend is expected to continue. We are unable to predict the impact that industry consolidation would have on our existing or potential customers. We may not be able to offset any potential decline in revenue arising from the consolidation of our existing customers with revenue from new customers or additional revenue from the merged company.

Customer demand is difficult to forecast accurately and, as a result, we may be unable to match production with customer demand.

We make planning and spending decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are typically not contractually committed to buy any quantity of products beyond firm purchase orders. Furthermore, many of our customers may increase, decrease, cancel or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, cause our manufacturing to be negatively impacted by materials shortages, necessitate more onerous procurement commitments and reduce our gross margin. We may not have sufficient capacity at any given time to meet the volume demands of our customers, or one or more of our suppliers may not have sufficient capacity at any given time to meet our volume demands. If any of our major customers decrease, stop or delay purchasing our products for any reason, we will likely have excess manufacturing capacity or inventory and our business and results of operations would be harmed.

If our customers do not qualify our products for use on a timely basis, our results of operations may suffer.

Prior to the sale of new products, our customers typically require us to “qualify” our products for use in their applications. At the successful completion of this qualification process, we refer to the resulting sales opportunity as a “design win.” Additionally, new customers often audit our manufacturing facilities and perform other evaluations during this qualification process. The qualification process involves product sampling and reliability testing and collaboration with our product management and engineering teams in the design and manufacturing stages. If we are unable to accurately predict the amount of time required to qualify our products with customers, or are unable to qualify our products with certain customers at all, then our ability to generate revenue could be delayed or our revenue would be lower than expected and we may not be able to recover the costs associated with the qualification process or with our product development efforts, which would have an adverse effect on our results of operations.

In addition, due to rapid technological changes in our markets, a customer may cancel or modify a design project before we have qualified our product or begun volume manufacturing of a qualified product. It is unlikely that we would be able to recover the expenses for cancelled or unutilized custom design projects. Some of these unrecoverable expenses for cancelled or unutilized custom design projects may be significant. It is difficult to predict with any certainty whether our customers will delay or terminate product qualification or the frequency with which customers will cancel or modify their projects, but any such delay, cancellation or modification would have a negative effect on our results of operations.

Our ability to successfully qualify and scale capacity for new technologies and products is important to our ability to grow our business and market presence, and we may invest a significant amount to scale our capacity to meet potential demand from customers for our new technologies and products. If we are unable to qualify and sell any of our new products in volume, on time, or at all, our results of operations may be adversely affected.

We face intense competition which could negatively impact our results of operations and market share.

The markets into which we sell our products are highly competitive. Our competitors range from large, international companies offering a wide range of products to smaller companies specializing in niche markets. Current and potential competitors may have substantially greater name recognition, financial, marketing, research and manufacturing resources than we do, and there can be no assurance that our current and future competitors will not be more successful than us in specific product lines or markets. Some of our competitors may also have better-established relationships with our current or potential customers. Some of our competitors have more resources to develop or acquire new products and technologies and create market awareness for their products and technologies. In addition, some of our competitors have the financial resources to offer competitive products at below-market pricing levels that could prevent us from competing effectively and result in a loss of sales or market share or cause us to lower prices for our products. In recent years, there has been consolidation in our industry and we expect such consolidation to continue. Consolidation involving our competitors could result in even more intense competition. Network equipment manufacturers, who are our customers, and network service providers may decide to manufacture the optical subsystems incorporated into their

network systems in-house instead of outsourcing such products to companies such as us. We also encounter potential customers that, because of existing relationships with our competitors, are committed to the products offered by our competitors.

We must continually develop successful new products and enhance existing products, and if we fail to do so or if our release of new or enhanced products is delayed, our business may be harmed.

The markets for our products are characterized by frequent new product introductions, changes in customer requirements and evolving industry standards, all with an underlying pressure to reduce cost and meet stringent reliability and qualification requirements. Our future performance will depend on our successful development, introduction and market acceptance of new and enhanced products that address these challenges. If we are unable to make our new or enhanced products commercially available on a timely basis, we may lose existing and potential customers and our financial results would suffer.

In addition, due to the costs and length of research, development and manufacturing process cycles, we may not recognize revenue from new products until long after such expenditures, if at all, and our margins may decrease if our costs are higher than expected, adversely affecting our financial condition and results of operation.

Although the length of our product development cycle varies widely by product and customer, it may take 18 months or longer before we receive our first order. As a result, we may incur significant expenses long before customers accept and purchase our products.

Product development delays may result from numerous factors, including:

- modification of product specifications and customer requirements;
- unanticipated engineering complexities;
- difficulties in reallocating engineering resources and overcoming resource limitations; and
- rapidly changing technology or competitive product requirements.

The introduction of new products by us or our competitors could result in a slowdown in demand for our existing products and could result in a write-down in the value of our inventory. We have in the past experienced a slowdown in demand for existing products and delays in new product development, and such delays will likely occur in the future. To the extent we experience product development delays for any reason or we fail to qualify our products and obtain their approval for use, which we refer to as a design win, our competitive position would be adversely affected and our ability to grow our revenue would be impaired.

Furthermore, our ability to enter a market with new products in a timely manner can be critical to our success because it is difficult to displace an existing supplier for a particular type of product once a customer has chosen a supplier, even if a later-to-market product provides better performance or cost efficiency.

The development of new, technologically advanced products is a complex and uncertain process requiring frequent innovation, highly-skilled engineering and development personnel and significant capital, as well as the accurate anticipation of technological and market trends. We cannot assure you that we will be able to identify, develop, manufacture, market or support new or enhanced products successfully or on a timely basis. Further, we cannot assure you that our new products will gain market acceptance or that we will be able to respond effectively to product introductions by competitors, technological changes or emerging industry standards. We also may not be able to develop the underlying core technologies necessary to create new products and enhancements, license these technologies from third parties, or remain competitive in our markets.

Our revenues, growth rates and operating results are likely to fluctuate significantly as a result of factors that are outside our control, which could adversely impact our operating results.

Our revenues, growth rates and operating results are likely to fluctuate significantly in the future as a result of factors that are outside our control. We may not achieve similar revenues, growth rates or operating results in future

periods. Our revenues, growth rates and operating results for any prior quarterly or annual period should not be relied upon as any indication of our future revenues, growth rates or operating results. The timing of order placement, size of orders and satisfaction of contractual customer acceptance criteria, changes in the pricing of our products due to competitive pressures as well as order or shipment delays or deferrals, with respect to our products, may cause material fluctuations in revenues. For example, revenues for the three months ended March 31, 2018 decreased by 32 percent as compared to the three months ended March 31, 2017 due primarily to lower sales of 40Gbps data center transceivers, which includes a reduction in average selling prices for certain products as a result of price negotiations with our customers. Our lengthy sales cycle, which may extend to more than one year, may cause our revenues and operating results to vary from period to period and it may be difficult to predict the timing and amount of any variation. Delays or deferrals in purchasing decisions by our customers may increase as we develop new or enhanced products for existing and new markets, including automotive and biotechnology markets. Our current and anticipated future dependence on a small number of customers increases the revenue impact of each such customer's decision to delay or defer purchases from us, or decision not to purchase products from us. Our expense levels in the future will be based, in large part, on our expectations regarding future revenue sources and, as a result, operating results for any quarterly period in which anticipated material orders fail to occur, or are delayed or deferred, could be significantly harmed.

We are subject to the cyclical nature of the markets in which we compete and any future downturn will likely reduce demand for our products and revenue.

In each of our target markets, including the CATV market, our sales depend on the aggregate capital expenditures of service providers as they build out and upgrade their network infrastructure. These markets are highly cyclical and characterized by constant and rapid technological change, price erosion, evolving standards and wide fluctuations in product supply and demand. In the past, these markets have experienced significant downturns, often connected with, or in anticipation of, the maturation of product cycles. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Our historical results of operations have been subject to these cyclical fluctuations, and we may experience substantial period-to-period fluctuations in our future results of operations. Any future downturn in any of the markets in which we compete could significantly reduce the demand for our products and therefore may result in a significant reduction in our revenue. Our revenue and results of operations may be materially and adversely affected in the future due to changes in demand from individual customers or cyclical changes in any of the markets utilizing our products. We may not be able to accurately predict these cyclical fluctuations and the impact that these fluctuations may have on our revenue and operating results.

Increasing costs and shifts in product mix may adversely impact our gross margins.

Our gross margins on individual products and among products fluctuate over each product's life cycle. Our overall gross margins have fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices and our ability to reduce product costs, and these fluctuations are expected to continue in the future. We may not be able to accurately predict our product mix from period to period, and as a result we may not be able to forecast accurately our overall gross margins. The rate of increase in our costs and expenses may exceed the rate of increase in our revenue, either of which would materially and adversely affect our business, our results of operations and our financial condition.

If the CATV market does not continue to develop as we expect, or if there is any downturn in this market, our business would be adversely affected.

Historically, we have generated much of our revenue from the CATV market. In 2017, 2016 and 2015, the CATV market represented 15.9%, 16.7% and 28.3% of our revenue, respectively. In the CATV market, we are relying on expected increasing demand for bandwidth-intensive services and applications such as on-demand television programs, high-definition television channels, or HDTV, social media, peer-to-peer file sharing and online video creation and viewing from network service providers. Without network and bandwidth growth, the need for our products will not increase and may decline, adversely affecting our financial condition and results of operations. Although demand for broadband access is increasing, network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as telecommunications, wireless or satellite, will gain the most widespread acceptance. If the trend of outsourcing for the design and manufacture of CATV equipment does not continue, or continues at a slower pace than currently expected, our customers' demand for our design and manufacturing services

may not grow as quickly as expected. If expectations for the growth of the CATV market are not realized, our financial condition and results of operations will be adversely affected. In addition, if the CATV market is adversely impacted, whether due to competitive pressure from telecommunication service providers, regulatory changes, or otherwise, our business would be adversely affected. We may not be able to offset any potential decline in revenue from the CATV market with revenue from new customers in other markets.

We have limited operating history in the telecom and FTTH markets, and our business could be harmed if these markets do not develop as we expect.

For 2017 and 2016, respectively, we generated 3.4% and 5.0% of our revenue from the telecom market and 0.1%, and 0.6% of our revenue from the FTTH market. In the telecom market, we generally have sold products that were originally designed for other markets (such as internet data center or FTTH) or are variations of such products. As we gain experience in this market, we have begun to develop products specifically designed for telecom customers. Given our limited experience in this market, the products that we develop may prove to be unsuitable for customer use, or we may be unable to derive profit margins from this market that are similar to what we derive from our other markets. The products that we offer in the FTTH market are relatively new and have not yet gained widespread customer acceptance. For example, our WDM-PON products designed for the FTTH market, have not, and may never, gain widespread acceptance by large internet service providers. Our business in this market is dependent on the deployment of our optical components, modules and subassemblies. We are relying on increasing demand for bandwidth-intensive services and telecommunications service providers' acceptance and deployment of WDM-PON as a technology supporting 1 Gbps service to the home. Without network and bandwidth growth and adoption of our solutions by operators in these markets, we will not be able to sell our products in these markets in high volume or at our targeted margins, which would adversely affect our financial condition and results of operations. For example, WDM-PON technology may not be adopted by equipment and service providers in the FTTH market as rapidly as we expect or in the volumes we need to achieve acceptable margins. Network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as CATV, will gain the most widespread acceptance. In addition, as we enter new markets or expand our product offerings in existing markets, our margins may be adversely affected due to competition in those markets and commoditization of competing products. If our expectations for the growth of these markets are not realized, our financial condition and results of operations will be adversely affected.

If we encounter manufacturing problems, we may lose sales and damage our customer relationships.

We may experience delays, disruptions or quality control problems in our manufacturing operations. These and other factors may cause less than acceptable yields at our facility. Manufacturing yields depend on a number of factors, including the quality of available raw materials, the degradation or change in equipment calibration and the rate and timing of the introduction of new products. Changes in manufacturing processes required as a result of changes in product specifications, changing customer needs and the introduction of new product lines may significantly reduce our manufacturing yields, resulting in low or negative margins on those products. In addition, we use our Molecular Beam Epitaxy, or MBE, fabrication process to make our lasers, in addition to Metal Organic Chemical Vapor Deposition, or MOCVD, the technique most commonly used in optical manufacturing by communications optics vendors, and our MBE fabrication process relies on custom-manufactured equipment. If our MBE or MOCVD fabrication facility in Sugar Land, Texas were to be damaged or destroyed for any reason, our manufacturing process would be severely disrupted. Any such manufacturing problems would likely delay product shipments to our customers, which would negatively affect our sales, competitive position and reputation. We may also experience delays in production, typically in February, during the Chinese New Year holiday when our facilities in China and Taiwan are closed.

Given the high fixed costs associated with our vertically integrated business, a reduction in demand for our products will likely adversely impact our gross profits and our results of operations.

We have a high fixed cost base due to our vertically integrated business model, including the fact that 2,655 of our employees as of December 31, 2017 were employed in manufacturing and research and development operations. We may not be able to adjust these fixed costs quickly to adapt to rapidly changing market conditions. Our gross profit and gross margin are greatly affected by our sales volume and volatility on a quarterly basis and the corresponding absorption of fixed manufacturing overhead expenses. In addition, because we are a vertically integrated manufacturer, insufficient demand for our products may subject us to the risk of high inventory carrying costs and increased inventory obsolescence. Given our vertical integration, the rate at which we turn inventory has historically been low when

compared to our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory. We may be required to write down inventory costs in the future and our high inventory costs may have an adverse effect on our gross profits and our results of operations.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and operating results have varied in the past and will likely continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including:

- the timing, size and mix of sales of our products;
- fluctuations in demand for our products, including the increase, decrease, rescheduling or cancellation of significant customer orders;
- our ability to design, manufacture and deliver products which meet customer requirements in a timely and cost-effective manner;
- new product introductions and enhancements by us or our competitors;
- the gain or loss of key customers;
- the rate at which our present and potential customers and end users adopt our technologies;
- changes in our pricing and sales policies or the pricing and sales policies of our competitors;
- seasonality of certain of our products and manufacturing capabilities;
- quality control or yield problems in our manufacturing operations;
- supply disruption for certain raw materials and components used in our products;
- capacity constraints of our outside contract manufacturers for a portion of the manufacturing process for some of our products;
- length and variability of the sales cycles of our products;
- unanticipated increases in costs or expenses;
- the loss of key employees;
- different capital expenditure and budget cycles for our customers, affecting the timing of their spending for our products;
- political stability in the areas of the world in which we operate;
- fluctuations in foreign currency exchange rates;
- changes in accounting rules;
- the evolving and unpredictable nature of the markets for products incorporating our solutions; and
- general economic conditions and changes in such conditions specific to our target markets.

The foregoing factors are difficult to forecast, and these, as well as other factors, could materially adversely affect our quarterly and annual operating results. In addition, a significant amount of our operating expenses is relatively fixed in nature due to our internal manufacturing, research and development, sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. For these reasons, you should not rely on quarter-to-quarter comparisons of our results of operations as an indicator of future performance. Moreover, our operating results may not meet our announced guidance or the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly. There can be no assurance that we will be able to successfully address these risks.

We depend on key personnel to develop and maintain our technology and manage our business in a rapidly changing market.

The continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel is essential to our success. For example, our ability to achieve new design wins depends upon the experience and expertise of our engineers. Any of our key employees, including our Chief Executive Officer, Chief Financial Officer, Senior Vice President and North America General Manager and Senior Vice President and Asia General Manager, may resign at any time. We do not have key person life insurance policies covering any of our employees. To implement our business plan, we also intend to hire additional employees, particularly in the areas of engineering, manufacturing and sales. Our ability to continue to attract and retain highly skilled employees is a critical factor in our success. Competition for highly skilled personnel is intense. We may not be successful in attracting, assimilating or retaining qualified personnel to satisfy our current or future needs. Our ability to develop, manufacture and sell our products, and thus our financial condition and results of operations, would be adversely affected if we are unable to retain existing personnel or hire additional qualified personnel.

We depend on a limited number of suppliers and any supply interruption could have an adverse effect on our business.

We depend on a limited number of suppliers for certain raw materials and components used in our products. Some of these suppliers could disrupt our business if they stop, decrease or delay shipments or if the materials or components they ship have quality or reliability issues. Some of the raw materials and components we use in our products are available only from a sole source or have been qualified only from a single supplier. Furthermore, other than our current suppliers, there are a limited number of entities from whom we could obtain certain materials and components. We may also face shortages if we experience increased demand for materials or components beyond what our qualified suppliers can deliver. Our inability to obtain sufficient quantities of critical materials or components could adversely affect our ability to meet demand for our products, adversely affecting our financial condition and results of operations.

We typically have not entered into long-term agreements with our suppliers and, therefore, our suppliers could stop supplying materials and components to us at any time or fail to supply adequate quantities of materials or components to us on a timely basis. It is difficult, costly, time consuming and, on short notice, sometimes impossible for us to identify and qualify new suppliers. Our customers generally restrict our ability to change the components in our products. For more critical components, any changes may require repeating the entire qualification process. Our reliance on a limited number of suppliers or a single qualified vendor may result in delivery and quality problems, and reduced control over product pricing, reliability and performance.

We depend upon outside contract manufacturers for a portion of the manufacturing process for some of our products.

Almost all of our products are manufactured internally. However we also rely upon manufacturers in China, Taiwan and other Asia locations to provide back-end manufacturing and produce the finished portion of a few of our products. Our reliance on a contract manufacturer for these products makes us vulnerable to possible capacity constraints and reduced control over delivery schedules, manufacturing yields, manufacturing quality/controls and costs. If one or more of our contract manufacturers is unable to meet our customer demand in a timely fashion, this could have a material adverse effect on the revenue from our products. If one or more contract manufacturers for one of our products was unable or unwilling to manufacture such product in required volumes and at high quality levels or to continue our existing supply arrangement, we would have to identify, qualify and select an acceptable alternative contract

manufacturer or move these manufacturing operations to our internal manufacturing facilities. An alternative contract manufacturer may not be available to us when needed or may not be in a position to satisfy our quality or production requirements on commercially reasonable terms, including price. Any significant interruption in manufacturing our products would require us to reduce our supply of products to our customers, which in turn, would reduce our revenue, harm our relationships with the customer of these products and cause us to forego potential revenue opportunities.

Our products could contain defects that may cause us to incur significant costs or result in a loss of customers.

Our products are complex and undergo quality testing as well as formal qualification by our customers. Our customers' testing procedures are limited to evaluating our products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, our products may fail to perform as expected long after customer acceptance. Failures could result from faulty components or design, problems in manufacturing or other unforeseen reasons. As a result, we could incur significant costs to repair or replace defective products under warranty, particularly when such failures occur in installed systems. Our products are typically embedded in, or deployed in conjunction with, our customers' products, which incorporate a variety of components, modules and subsystems and may be expected to interoperate with modules produced by third parties. As a result, not all defects are immediately detectable and when problems occur, it may be difficult to identify the source of the problem. While we have not experienced material failures in the past, we will continue to face this risk going forward because our products are widely deployed in many demanding environments and applications worldwide. In addition, we may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty to maintain customer relationships. Any significant product failure could result in litigation, damages, repair costs and lost future sales of the affected product and other products, divert the attention of our engineering personnel from our product development efforts and cause significant customer relations problems, all of which would harm our business. Although we carry product liability insurance, this insurance may not adequately cover our costs arising from defects in our products or otherwise.

Data breaches and cyber attacks could compromise our operations, our customers' operations, or the operations of our contract manufacturers upon whom we rely, and cause significant damage to our business and reputation.

Cyber attacks have become more prevalent and much harder to detect and defend against. Companies, including companies in our industry, have been increasingly subject to a wide variety of security incidents, cyber attacks and other attempts to gain unauthorized access to their systems or to deny access and disrupt their systems and operations. These threats can come from a variety of sources, ranging in sophistication from an individual hacker to a state-sponsored attack. Cyber threats may be generic, or they may be custom-crafted against our information systems.

In the ordinary course of our business, we and our data center customers maintain sensitive data on our respective networks, including intellectual property, employee personal information and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. Despite our implementation of network security measures, our network and storage applications may be subject to computer viruses, denial of service attacks, ransomware and other forms of cyber terrorism, unauthorized access by hackers or may be breached due to operator error, malfeasance or other system disruptions. Our customers' network and storage applications may be subject to similar disruptions. It is often difficult to anticipate or immediately detect such incidents and the damage caused by such incidents. Data breaches and any unauthorized access or disclosure of our information, employee information or intellectual property could compromise our intellectual property, trade secrets and other sensitive business information, any of which could result in legal action against us, exposure of our intellectual property to our competitors, damages, fines and other adverse effects. A data security breach could also lead to public exposure of personal information of our employees, customers and others. Any such theft, loss or misuse of personal data collected, used, stored or transferred by us to run our business could result in significantly increased security costs or costs related to defending legal claims. Cyber attacks, such as computer viruses or other forms of cyber terrorism, may disrupt access to our network or storage applications. Such disruptions could result in delays or cancellations of customer orders or the production or shipment of our products. Data security breaches involving our data center customers could affect their financial condition and ability to continue to purchase our products. Further, cyber attacks may cause us to incur significant remediation costs, result in product development delays, disrupt key business operations and divert attention of management and key information technology resources. These incidents could also subject us to liability, expose us to significant expense and cause significant harm to our reputation and business.

We face a variety of risks associated with our international sales and operations.

We currently derive, and expect to continue to derive, a significant portion of our revenue from sales to international customers. In 2017, 2016 and 2015, 22.7%, 15.8% and 19.0% of our revenue was derived from sales that occurred outside of North America, respectively. In addition, a significant portion of our manufacturing operations is based in Ningbo, China and Taipei, Taiwan. Our international revenue and operations are subject to a number of material risks, including:

- difficulties in staffing, managing and supporting operations in more than one country;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems;
- fewer legal protections for intellectual property in foreign jurisdictions;
- foreign and U.S. taxation issues and international trade barriers;
- difficulties in obtaining any necessary governmental authorizations for the export of our products to certain foreign jurisdictions;
- fluctuations in foreign economies;
- fluctuations in the value of foreign currencies and interest rates;
- trade and travel restrictions;
- domestic and international economic or political changes, hostilities and other disruptions in regions where we currently operate or may operate in the future;
- difficulties and increased expenses in complying with a variety of U.S. and foreign laws, regulations and trade standards, including the Foreign Corrupt Practices Act; and
- different and changing legal and regulatory requirements in the jurisdictions in which we currently operate or may operate in the future.

Negative developments in any of these factors in China or Taiwan or other countries could result in a reduction in demand for our products, the cancellation or delay of orders already placed, difficulties in producing and delivering our products, threats to our intellectual property, difficulty in collecting receivables, and a higher cost of doing business. Although we maintain certain compliance programs throughout the Company, violations of U.S. and foreign laws and regulations may result in criminal or civil sanctions, including material monetary fines, penalties and other costs against us or our employees, and may have a material adverse effect on our business.

Our business operations conducted in China and Taiwan are important to our success. A substantial portion of our property, plant and equipment is located in China and Taiwan. We expect to make further investments in China and Taiwan in the future. Therefore, our business, financial condition, results of operations and prospects are subject to economic, political, legal, and social events and developments in China and Taiwan. Factors affecting military, political or economic conditions in China and Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common shares.

In some instances, we rely on third parties to assist in selling our products, and the failure of those parties to perform as expected could reduce our future revenue.

Although we primarily sell our products through direct sales, we also sell our products to some of our customers through third party sales representatives and distributors. Many of such third parties also market and sell products from our competitors. Our third party sales representatives and distributors may terminate their relationships with us at any time, or with short notice. Our future performance will also depend, in part, on our ability to attract additional third party sales representatives and distributors that will be able to market and support our products effectively, especially in

markets in which we have not previously distributed our products. If our current third party sales representatives and distributors fail to perform as expected, our revenue and results of operations could be harmed.

Changes in our effective tax rate may adversely affect our results of operation and our business.

We are subject to income taxes in the U.S. and other foreign jurisdictions, including China and Taiwan. In addition, we are subject to various state taxes in states where we have nexus. We base our tax position on the anticipated nature and conduct of our business and our understanding of the tax laws of the countries and states in which we have assets or conduct activities. Our tax position may be reviewed or challenged by tax authorities. Moreover, the tax laws currently in effect may change, and such changes may have retroactive effect, such as the recently enacted U.S. tax reform legislation commonly referred to as the U.S. Tax Cuts and Jobs Act of 2017 (the “Tax Act”). We have inter-company arrangements in place providing for administrative and financing services and transfer pricing, which involve a significant degree of judgment and are often subject to close review by tax authorities. The tax authorities may challenge our positions related to these agreements. If the tax authorities successfully challenge our positions, our effective tax rate may increase, adversely affecting our results of operation and our business.

The Tax Act significantly changes how the U.S. taxes corporations. The Tax Act requires complex computations to be performed that were not previously required in U.S. tax law, significant judgments to be made in interpretation of the provisions of the Tax Act and significant estimates in calculations, and the preparation and analysis of information not previously relevant or regularly produced. The U.S. Treasury Department, the IRS, and other standard-setting bodies could interpret or issue guidance on how provisions of the Tax Act will be applied or otherwise administered that is different from our interpretation. As we complete our analysis of the Tax Act, collect and prepare necessary data, and interpret any additional guidance, we may make adjustments to provisional amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are made.

Failure to manage our growth effectively may adversely affect our financial condition and results of operations.

Successful implementation of our business plan in our target markets requires effective planning and management. Our production volumes are increasing significantly and we have announced plans to increase our production capacity in response to demand for our products, adding both personnel as well as expanding our physical manufacturing facilities. We currently operate facilities in Sugar Land, Texas, Ningbo, China, Taipei, Taiwan, and Duluth, Georgia. We currently manufacture our lasers using a proprietary process and customized equipment located only in our Sugar Land, Texas facility, and it will be costly to duplicate that facility, to scale our laser manufacturing capacity or to mitigate the risks associated with operating a single facility. The challenges of managing our geographically dispersed operations have increased and will continue to increase the demand on our management systems and resources. Moreover, we are continuing to improve our financial and managerial controls, reporting systems and procedures. Any failure to manage our expansion and the resulting demands on our management systems and resources effectively may adversely affect our financial condition and results of operations.

Our loan agreements contain restrictive covenants that may adversely affect our ability to conduct our business.

We have lending arrangements with several financial institutions, including loan agreements with BB&T Bank in the U.S., and our Taiwan location has a finance lease agreement. Our loan agreements governing our long-term debt obligations in the U.S. contain certain financial and operating covenants that limit our management’s discretion with respect to certain business matters. Among other things, these covenants require us to maintain certain financial ratios and restrict our ability to incur additional debt, create liens or other encumbrances, change the nature of our business, sell or otherwise dispose of assets and merge or consolidate with other entities. These restrictions may limit our flexibility in responding to business opportunities, competitive developments and adverse economic or industry conditions. Any failure by us or our subsidiaries to comply with these agreements could harm our business, financial condition and operating results. In addition, our obligations under our loan agreements with BB&T are secured by our accounts receivable, inventory, intellectual property, and all business assets including real estate and equipment. A breach of any of covenants under our loan agreements, or a failure to pay interest or indebtedness when due under any of our credit facilities could result in a variety of adverse consequences, including the acceleration of our indebtedness.

We may not be able to obtain additional capital when desired, on favorable terms or at all.

We operate in a market that makes our prospects difficult to evaluate and, to remain competitive, we will be required to make continued investments in capital equipment, facilities and technological improvements. We expect that substantial capital will be required to expand our manufacturing capacity and fund working capital for anticipated growth. If we do not generate sufficient cash flow from operations or otherwise have the capital resources to meet our future capital needs, we may need additional financing to implement our business strategy, which includes:

- expansion of research and development;
- expansion of manufacturing capabilities;
- hiring of additional technical, sales and other personnel; and
- acquisitions of complementary businesses.

If we raise additional funds through the issuance of our common stock or convertible securities, the ownership interests of our stockholders could be significantly diluted. These newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. Additional financing may not, however, be available on terms favorable to us, or at all, if and when needed, and our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our infrastructure or respond to competitive pressures could be significantly limited. If we cannot raise required capital when needed, including under our Registration Statement filed with the SEC in October 2016, we may be unable to meet the demands of existing and prospective customers, adversely affecting our sales and market opportunities and consequently our business, financial condition and results of operations.

Future acquisitions may adversely affect our financial condition and results of operations.

As part of our business strategy, we may pursue acquisitions of companies that we believe could enhance or complement our current product portfolio, augment our technology roadmap or diversify our revenue base. Acquisitions involve numerous risks, any of which could harm our business, including:

- difficulties integrating the acquired business;
- unanticipated costs, capital expenditures or liabilities or changes related to research in progress and product development;
- diversion of financial and management resources from our existing business;
- difficulties integrating the business relationships with suppliers and customers of the acquired business with our existing business relationships;
- risks associated with entering markets in which we have little or no prior experience; and
- potential loss of key employees, particularly those of the acquired organizations.

Acquisitions may also result in the recording of goodwill and other intangible assets subject to potential impairment in the future, adversely affecting our operating results. We may not achieve the anticipated benefits of an acquisition if we fail to evaluate it properly, and we may incur costs in excess of what we anticipate. A failure to evaluate and execute an acquisition appropriately or otherwise adequately address these risks may adversely affect our financial condition and results of operations.

We may be subject to disruptions or failures in information technology systems and network infrastructures that could have a material adverse effect on our business and financial condition.

We rely on the efficient and uninterrupted operation of complex information technology systems and network infrastructures to operate our business. A disruption, infiltration or failure of our information technology systems as a result of software or hardware malfunctions, system implementations or upgrades, computer viruses, third-party security breaches, employee error, theft or misuse, malfeasance, power disruptions, natural disasters or accidents could cause a breach of data security, loss of intellectual property and critical data and the release and misappropriation of sensitive competitive information and partner, customer, and employee personal data. Any of these events could harm our competitive position, result in a loss of customer confidence, cause us to incur significant costs to remedy any damages and ultimately materially adversely affect our business and financial condition.

Our future results of operations may be subject to volatility as a result of exposure to fluctuations in currency exchange rates.

We have significant foreign currency exposure and are affected by fluctuations among the U.S. dollar, the Chinese renminbi, or RMB, and the New Taiwan dollar, or NT dollar, because a substantial portion of our business is conducted in China and Taiwan. Our sales, raw materials, components and capital expenditures are denominated in U.S. dollars, RMB and NT dollars in varying amounts.

Foreign currency fluctuations may adversely affect our revenue and our costs and expenses, and hence our results of operations. The value of the NT dollar or the RMB against the U.S. dollar and other currencies may fluctuate and be affected by, among other things, changes in political and economic conditions. The RMB currency is no longer being pegged solely to the value of the U.S. dollar. In the long term, the RMB may appreciate or depreciate significantly in value against the U.S. dollar, depending upon the fluctuation of the basket of currencies against which it is currently valued, or it may be permitted to enter into a full float, which may also result in a significant appreciation or depreciation of the RMB against the U.S. dollar. In addition, our currency exchange variations may be magnified by Chinese exchange control regulations that restrict our ability to convert RMB into foreign currency.

Our sales in Europe are denominated in U.S. dollars and fluctuations in the Euro or our customers' other local currencies relative to the U.S. dollar may impact our customers and affect our financial performance. If our customers' local currencies weaken against the U.S. dollar, we may need to lower our prices to remain competitive in our international markets which could have a material adverse effect on our margins. If our customers' local currencies strengthen against the U.S. dollar and if the local sales prices cannot be raised due to competitive pressures, we will experience a deterioration of our margins.

To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedging transactions may be limited and we may not be able to successfully hedge our exposure.

Natural disasters or other catastrophic events could harm our operations.

Our operations in the U.S., China and Taiwan could be subject to significant risk of natural disasters, including earthquakes, hurricanes, typhoons, flooding and tornadoes, as well as other catastrophic events, such as epidemics, terrorist attacks or wars. For example, our corporate headquarters and wafer fabrication facility in Sugar Land, Texas is located near the Gulf of Mexico, an area that is susceptible to hurricanes. We use a proprietary MBE laser manufacturing process that requires customized equipment, and this process is currently conducted and located solely at our wafer fabrication facility in Sugar Land, Texas, such that a natural disaster, terrorist attack or other catastrophic event that affects that facility would materially harm our operations. In addition, our manufacturing facility in Taipei, Taiwan, is susceptible to typhoons and earthquakes, and our manufacturing facility in Ningbo, China, has from time to time, suffered electrical outages. Any disruption in our manufacturing facilities arising from these and other natural disasters or other catastrophic events could cause significant delays in the production or shipment of our products until we are able to shift production to different facilities or arrange for third parties to manufacture our products. We may not be able to obtain alternate capacity on favorable terms or at all. Our property insurance coverage with respect to natural disaster is limited and is subject to deductible and coverage limits. Such coverage may not be adequate or continue to be available at commercially reasonable rates and terms. The occurrence of any of these circumstances may adversely affect our financial condition and results of operation.

Our business could be negatively impacted as a result of shareholder activism.

In recent years, shareholder activists have become involved in numerous public companies. Shareholder activists frequently propose to involve themselves in the governance, strategic direction, and operations of the Company. We may in the future become subject to such shareholder activity and demands. Such demands may disrupt our business and divert the attention of our management and employees, and any perceived uncertainties as to our future direction resulting from such a situation could result in the loss of potential business opportunities, be exploited by our competitors, cause concern to our current or potential customers, and make it more difficult to attract and retain qualified personnel and business partners, all of which could adversely affect our business. In addition, actions of activist shareholders may cause significant fluctuations in our stock price based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

The unfavorable outcome of any pending or future litigation or administrative action and expenses incurred in connection with litigation could result in financial losses or harm to our business.

We are, and in the future may be, subject to legal actions in the ordinary course of our operations, both domestically and internationally. There can be no assurances as to the favorable outcome of any litigation. In addition it can be costly to defend litigation and these costs could negatively impact our financial results. As disclosed in “Item 3. Legal Proceedings,” on August 5, 2017, a shareholder class action lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers. The complaint in this matter alleges that we made materially false and misleading statements or failed to disclose material facts and requests damages and other relief. This lawsuit and any other such litigation could result in substantial costs and divert our management’s attention from other business concerns, which could seriously harm our business.

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.

Our success depends on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, copyright, trade secret and unfair competition laws, as well as license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent registrations in the U.S. and in other foreign countries, some of which have been issued. In addition, we have registered certain trademarks in the U.S. We cannot guarantee that our pending applications will be approved by the applicable governmental authorities. Moreover, our existing and future patents and trademarks may not be sufficiently broad to protect our proprietary rights or may be held invalid or unenforceable in court. A failure to obtain patents or trademark registrations or a successful challenge to our registrations in the U.S. or other foreign countries may limit our ability to protect the intellectual property rights that these applications and registrations intended to cover.

Policing unauthorized use of our technology is difficult and we cannot be certain that the steps we have taken will prevent the misappropriation, unauthorized use or other infringement of our intellectual property rights. Further, we may not be able to effectively protect our intellectual property rights from misappropriation or other infringement in foreign countries where we have not applied for patent protections, and where effective patent, trademark, trade secret and other intellectual property laws may be unavailable, or may not protect our proprietary rights as fully as U.S. law. We may seek to secure comparable intellectual property protections in other countries. However, the level of protection afforded by patent and other laws in other countries may not be comparable to that afforded in the U.S.

We also attempt to protect our intellectual property, including our trade secrets and know-how, through the use of trade secret and other intellectual property laws, and contractual provisions. We enter into confidentiality and invention assignment agreements with our employees and independent consultants. We also use non-disclosure agreements with other third parties who may have access to our proprietary technologies and information. Such measures, however, provide only limited protection, and there can be no assurance that our confidentiality and non-disclosure agreements will not be breached, especially after our employees end their employment, and that our trade secrets will not otherwise become known by competitors or that we will have adequate remedies in the event of unauthorized use or disclosure of proprietary information. Unauthorized third parties may try to copy or reverse engineer our products or portions of our products, otherwise obtain and use our intellectual property, or may independently develop similar or equivalent trade secrets or know-how. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary rights are infringed or misappropriated, our business, results of operations or financial condition could be materially harmed.

In the future, we may need to take legal actions to prevent third parties from infringing upon or misappropriating our intellectual property or from otherwise gaining access to our technology. Protecting and enforcing our intellectual property rights and determining their validity and scope could result in significant litigation costs and require significant time and attention from our technical and management personnel, which could significantly harm our business. We may not prevail in such proceedings, and an adverse outcome may adversely impact our competitive advantage or otherwise harm our financial condition and our business.

We may be involved in intellectual property disputes in the future, which could divert management’s attention, cause us to incur significant costs and prevent us from selling or using the challenged technology.

Participants in the markets in which we sell our products have experienced frequent litigation regarding patent and other intellectual property rights. While we have a policy in place that is designed to reduce the risk of infringement of intellectual property rights of others and we have conducted a limited review of other companies’ relevant patents, there can be no assurance that third parties will not assert infringement claims against us. We cannot be certain that our products would not be found infringing on the intellectual property rights of others. Regardless of their merit, responding to such claims can be time consuming, divert management’s attention and resources and may cause us to incur significant expenses. Intellectual property claims against us could force us to do one or more of the following:

- obtain from a third party claiming infringement a license to the relevant technology, which may not be available on reasonable terms, or at all;
- stop manufacturing, selling, incorporating or using our products that use the challenged intellectual property;
- pay substantial monetary damages; or
- expend significant resources to redesign the products that use the technology and to develop non-infringing technology.

Any of these actions could result in a substantial reduction in our revenue and could result in losses over an extended period of time.

In any potential intellectual property dispute, our customers could also become the target of litigation. Because we often indemnify our customers for intellectual property claims made against them with respect to our products, any claims against our customers could trigger indemnification claims against us. These obligations could result in substantial expenses such as legal expenses, damages for past infringement or royalties for future use. Any indemnity claim could also adversely affect our relationships with our customers and result in substantial costs to us.

If we fail to obtain the right to use the intellectual property rights of others that are necessary to operate our business, and to protect their intellectual property, our business and results of operations will be adversely affected.

From time to time we may choose to or be required to license technology or intellectual property from third parties in connection with the development of our products. We cannot assure you that third party licenses will be available to us on commercially reasonable terms, if at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms could have a significant adverse impact on our results of operations. Our inability to obtain a necessary third party license required for our product offerings or to develop new products and product enhancements could require us to substitute technology of lower quality or performance standards, or of greater cost, either of which could adversely affect our business. If we are not able to obtain licenses from third parties, if necessary, then we may also be subject to litigation to defend against infringement claims from these third parties. Our competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, the accuracy and timing of our financial reporting may be adversely affected.

Preparing our consolidated financial statements involves a number of complex manual and automated processes, which are dependent upon individual data input or review and require significant management judgment. One or more of these elements may result in errors that may not be detected and could result in a material misstatement of our consolidated financial statements. The Sarbanes-Oxley Act requires, among other things, that as a publicly-traded company we disclose whether our internal control over financial reporting and disclosure controls and procedures are effective.

In addition, since we no longer qualify as an “emerging growth company” under the JOBS Act as of December 31, 2017, we have to provide an auditor’s attestation report on our internal controls in annual reports on Form 10-K as required by Section 404(b) of the Sarbanes-Oxley Act. During the course of any evaluation, documentation or attestation, we or our independent registered public accounting firm may identify weaknesses and deficiencies that we

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may not otherwise identify in a timely manner or at all as a result of the deferred implementation of this additional level of review.

We have implemented a system of disclosure and internal controls that we believe provide reasonable assurance that we will be able to timely report our financial results and avoid accounting errors or material weaknesses in future periods. However, our internal controls cannot guarantee that no accounting errors exist or that all accounting errors, no matter how immaterial, will be detected because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute assurance that the control system's objectives will be met. If we are unable to implement and maintain an effective system of disclosure controls and internal control over financial reporting, our ability to accurately and timely report our financial results could be adversely impacted. This could result in late filings of our annual and quarterly reports under the Exchange Act, restatements of our consolidated financial statements, a decline in our stock price, suspension or delisting of our common stock by NASDAQ, or other material adverse effects on our business, reputation, results of operations or financial condition.

Our ability to use our net operating losses and certain other tax attributes may be limited.

As of December 31, 2017, we had U.S. accumulated net operating losses, or NOLs, of approximately \$37.7 million, federal and state research and development credits ("R&D credits") of \$4.6 million, and foreign tax credits of \$2.0 million for U.S. federal income tax purposes. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs, tax credits and other pre-change tax attributes to offset its post-change income may be limited. An ownership change is generally defined as a greater than 50% change in equity ownership by value over a 3-year period. Based upon an analysis of our equity ownership, we believe that we have experienced ownership changes; however, we do not believe those limitations would result in a loss of tax benefits. In addition, should we experience additional ownership changes, our NOL carry forwards and tax credits may be further limited.

Our manufacturing operations are subject to environmental regulation that could limit our growth or impose substantial costs, adversely affecting our financial condition and results of operations.

Our properties, operations and products are subject to the environmental laws and regulations of the jurisdictions in which we operate and sell products. These laws and regulations govern, among other things, air emissions, wastewater discharges, the management and disposal of hazardous materials, the contamination of soil and groundwater, employee health and safety and the content, performance, packaging and disposal of products. Our failure to comply with current and future environmental laws and regulations, or the identification of contamination for which we are liable, could subject us to substantial costs, including fines, clean-up costs, third-party property damages or personal injury claims, and make significant investments to upgrade our facilities or curtail our operations. Liability under environmental, health and safety laws can be joint and several and without regard to fault or negligence. For example, pursuant to environmental laws and regulations, including but not limited to the Comprehensive Environmental Response Compensation and Liability Act, or CERCLA, we may be liable for the full amount of any remediation-related costs at properties we currently own or formerly owned, such as our currently owned Sugar Land, Texas facility, or at properties at which we previously operated, as well as at properties we will own or operate in the future, and properties to which we have sent hazardous substances, whether or not we caused the contamination. Identification of presently unidentified environmental conditions, more vigorous enforcement by a governmental authority, enactment of more stringent legal requirements or other unanticipated events could give rise to adverse publicity, restrict our operations, affect the design or marketability of our products or otherwise cause us to incur material environmental costs, adversely affecting our financial condition and results of operations.

We are exposed to increased expenses and business risk as a result of Restriction on Hazardous Substances, or RoHS directives.

Following the lead of the European Union, or EU, various governmental agencies have either already put into place or are planning to introduce regulations that regulate the permissible levels of hazardous substances in products sold in various regions of the world. For example, the RoHS directive for EU took effect on July 1, 2006. The labeling provisions of similar legislation in China went into effect on March 1, 2007. Consequently, many suppliers of products sold into the EU have required their suppliers to be compliant with the new directive. Many of our customers have adopted this approach and have required our full compliance. Though we have devoted a significant amount of resources and effort in planning and executing our RoHS program, it is possible that some of our products might be incompatible

with such regulations. In such events, we could experience the following consequences: loss of revenue, damaged reputation, diversion of resources, monetary penalties, and legal action.

Failure to comply with the U.S. Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.

We are subject to the U.S. Foreign Corrupt Practices Act which generally prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. In addition, we are required to maintain records that accurately and fairly represent our transactions and have an adequate system of internal accounting controls. Foreign companies, including some that may compete with us, may not be subject to these prohibitions, and therefore may have a competitive advantage over us. If we are not successful in implementing and maintaining adequate preventative measures, we may be responsible for acts of our employees or other agents engaging in such conduct. We could suffer severe penalties and other consequences that may have a material adverse effect on our financial condition and results of operations.

We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

We are subject to export and import control laws, trade regulations and other trade requirements that limit which products we sell and where and to whom we sell our products. Specifically, the Bureau of Industry and Security of the U.S. Department of Commerce is responsible for regulating the export of most commercial items that are so called dual-use goods that may have both commercial and military applications. A limited number of our products are exported by license under the Export Control Classification Number, or ECCN, of 5A991. Export Control Classification requirements are dependent upon an item's technical characteristics, the destination, the end-use, the end-user, and other activities of the end-user. Should the regulations applicable to our products change, or the restrictions applicable to countries to which we ship our products change, then the export of our products to such countries could be restricted. As a result, our ability to export or sell our products to certain countries could be restricted, which could adversely affect our business, financial condition and results of operations. Changes in our products or any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could result in delayed or decreased sales of our products to existing or potential customers. In such event, our business and results of operations could be adversely affected.

Rapidly changing standards and regulations could make our products obsolete, which would cause our revenue and results of operations to suffer.

We design our products to conform to regulations established by governments and to standards set by industry standards bodies worldwide, such as the American National Standards Institute, the European Telecommunications Standards Institute, the International Telecommunications Union and the Institute of Electrical and Electronics Engineers, Inc. Various industry organizations are currently considering whether and to what extent to create standards applicable to our products. Because certain of our products are designed to conform to current specific industry standards, if competing or new standards emerge that are preferred by our customers, we would have to make significant expenditures to develop new products. If our customers adopt new or competing industry standards with which our products are not compatible, or the industry groups adopt standards or governments issue regulations with which our products are not compatible, our existing products would become less desirable to our customers and our revenue and results of operations would suffer.

Compliance with regulations related to conflict minerals could increase costs and affect the manufacturing and sale of our products.

Public companies are required to disclose the use of tin, tantalum, tungsten and gold (collectively, "conflict minerals") mined from the Democratic Republic of the Congo and adjoining countries (the "covered countries") if a conflict mineral(s) is necessary to the functionality of a product manufactured, or contracted to be manufactured, by the Company. We filed our latest conflict minerals report on Form SD on May 26, 2017. We have previously determined, as part of our compliance efforts, that certain products or components we obtain from our suppliers contain conflict minerals. Based on our Reasonable Country of Origin Inquiry on the source of our conflict minerals for the year ended December 31, 2017, we had reason to believe that certain of such conflict minerals likely originated in covered countries. If we are unable to conclude in the future that all our products are free from conflict minerals originating from covered

countries, this could have a negative impact on our business, reputation and/or results of operations. We may also encounter challenges to satisfy customers who require that our products be certified as conflict free, which could place us at a competitive disadvantage if we are unable to substantiate such a claim. Compliance with these rules could also affect the sourcing and availability of some of the minerals used in the manufacture of products or components we obtain from our suppliers, including our ability to obtain products or components in sufficient quantities and/or at competitive prices. Certain of our customers are requiring additional information from us regarding the origin of our raw materials, and complying with these customer requirements may cause us to incur additional costs, such as costs related to determining the origin of any minerals used in our products. Our supply chain is complex and we may be unable to verify the origins for all metals used in our products. We may also encounter challenges with our customers and stockholders if we are unable to certify that our products are conflict free.

Some provisions of our named executive officers' agreements regarding change of control or separation of service contain obligations for us to make separation payments to them upon their termination.

Certain provisions contained in our employment agreements with our named executive officers regarding change of control or separation of service may obligate us to make lump sum severance payments and related payments upon the termination of their employment with us, other than such executive officer's resignation without good reason or our termination of their employment as a result of their disability or for cause. In the event we are required to make these separation payments, it could have a material adverse effect on our results of operations for the fiscal period in which such payments are made.

Risks Related to Our Operations in China

Our business operations conducted in China are critical to our success. A total of \$122.3 million, \$57.4 million and \$20.6 million or 32.0%, 22.0% and 11.0%, of our revenue in the years ended December 31, 2017, 2016 and 2015 was attributable to our product manufacturing plants in China, respectively. Additionally, a substantial portion of our property, plant and equipment, 29.9%, 23.0% and 22% as of December 31, 2017, 2016 and 2015, was located in China, respectively. We expect to make further investments in China in the foreseeable future. Therefore, our business, financial condition, results of operations and prospects are to a significant degree subject to economic, political, legal, and social events and developments in China.

Adverse changes in economic and political policies in China, or Chinese laws or regulations could have a material adverse effect on business conditions and the overall economic growth of China, which could adversely affect our business.

The Chinese economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. The Chinese economy has been transitioning from a planned economy to a more market-oriented economy. Despite reforms, the government continues to exercise significant control over China's economic growth by way of the allocation of resources, control over foreign currency-denominated obligations and monetary policy and provision of preferential treatment to particular industries or companies.

In addition, the laws, regulations and legal requirements in China, including the laws that apply to foreign-invested enterprises, or FIEs, are subject to frequent changes. The interpretation and enforcement of such laws is uncertain. Protections of intellectual property rights and confidentiality in China may not be as effective as in the U.S. or other countries or regions with more developed legal systems. Any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention. Any adverse changes to these laws, regulations and legal requirements or their interpretation or enforcement could have a material adverse effect on our business.

Furthermore, while China's economy has experienced rapid growth in the past 20 years, growth has been uneven across different regions, among various economic sectors and over time. China has also in the past and may in the future experience economic downturns due to, for example, government austerity measures, changes in government policies relating to capital spending, limitations placed on the ability of commercial banks to make loans, reduced levels of exports and international trade, inflation, lack of financial liquidity, stock market volatility and global economic conditions. Any of these developments could contribute to a decline in business and consumer spending in addition to other adverse market conditions, which could adversely affect our business.

The termination and expiration or unavailability of our preferential tax treatments in China may have a material adverse effect on our operating results.

Prior to January 1, 2008, entities established in China were generally subject to a 30% state and 3% local enterprise income tax rate. In accordance with the China Income Tax Law for Enterprises with Foreign Investment and Foreign Enterprises, effective through December 31, 2007, our China subsidiary enjoyed preferential income tax rates. Effective January 1, 2008, the China Enterprise Income Tax Law, or the EIT law, imposes a single uniform income tax rate of 25% on all Chinese enterprises, including FIEs, and eliminates or modifies most of the tax exemptions, reductions and preferential treatment available under the previous tax laws and regulations. As a result, our China subsidiary may be subject to the uniform income tax rate of 25% unless we are able to qualify for preferential status. Since calendar year 2012, we have qualified for a preferential 15% tax rate that is available for state-encouraged new high technology enterprises. In order to retain this preferential tax rate, we must meet certain operating conditions, satisfy certain product requirements, meet certain headcount requirements and maintain certain levels of research expenditures. In November 2017, we received approval from the Chinese government to extend this preferential tax treatment for an additional three years, ending November 2020. If we fail to continue to qualify for this preferential rate in the future, we may incur higher tax rates on our income in China. Any future increase in the enterprise income tax rate applicable to us or the expiration or other limitation of preferential tax rates available to us could increase our tax liabilities and reduce our net income.

The turnover of direct labor in manufacturing industries in China is high, which could adversely affect our production, shipments and results of operations.

Employee turnover of direct labor in the manufacturing sector in China is extremely high and retention of such personnel is a challenge to companies located in or with operations in China. Although direct labor costs do not represent a high proportion of our overall manufacturing costs, direct labor is required for the manufacture of our products. If our direct labor turnover rates are higher than we expect, or we otherwise fail to adequately manage our direct labor turnover rates, then our results of operations could be adversely affected.

Chinese regulation of loans to and direct investment by offshore holding companies in China entities may delay or prevent us from making loans or additional capital contributions to our China subsidiary.

Any loans that we wish to make to our China subsidiary are subject to Chinese regulations and approvals. For example, any loans to our China subsidiary to finance their activities cannot exceed statutory limits, must be registered with State Administration of Foreign Exchange, or SAFE, or its local counterpart, and must be approved by the relevant government authorities. Any capital contributions to our China subsidiary must be approved by the Ministry of Commerce or its local counterpart. In addition, under Circular 142, our China subsidiary, as a FIE, may not be able to convert our capital contributions to them into RMB for equity investments or acquisitions in China.

We cannot assure you that we will be able to obtain these government registrations or approvals on a timely basis, if at all, with respect to our future loans or capital contributions to our China subsidiary. If we fail to receive such registrations or approvals, our ability to capitalize our China subsidiary may be negatively affected, which could materially and adversely affect our liquidity and ability to fund and expand our business.

Our China subsidiary is subject to Chinese labor laws and regulations, and Chinese labor laws may increase our operating costs in China.

Chinese labor laws and regulations provide certain protections for our employees located in China, and changes to those labor laws and regulations may increase our costs and reduce our flexibility. The China Labor Contract Law, which went into effect in 2008, together with its implementing rules, provides increased rights to Chinese employees compared to prior employment laws in China. Under the rules under the China Labor Contract Law, the probation period varies depending on contract terms and the employment contract can only be terminated during the probation period for cause upon three days' notice. Additionally, an employer may not be able to terminate a contract during the probation period on the grounds of a material change of circumstances or a mass layoff. The law also has specific provisions on conditions when an employer has to sign an employment contract with open-ended terms. If an employer fails to enter into an open-ended contract in certain circumstances, the employer must pay the employee twice their monthly wage beginning from the time the employer should have executed an open-ended contract. Additionally, an employer must pay

severance for nearly all terminations, including when an employer decides not to renew a fixed-term contract. Any further changes to these laws may increase our costs and reduce our flexibility.

An increase in our labor costs in China may adversely affect our business and our profitability.

A significant portion of our workforce is located in China. Labor costs in China have been increasing recently due to labor unrest, strikes and changes in employment laws. If labor costs in China continue to increase, our costs will increase. If we are not able to pass these increases on to our customers, our business, profitability and results of operations may be adversely affected.

We may have difficulty establishing and maintaining adequate management and financial controls over our China operations.

Businesses in China have historically not adopted a western style of management and financial reporting concepts and practices, which includes strong corporate governance, internal controls and computer, financial and other control systems. Moreover, familiarity with U.S. GAAP principles and reporting procedures is less common in China. As a consequence, we may have difficulty finding accounting personnel experienced with U.S. GAAP, and we may have difficulty training and integrating our China-based accounting staff with our U.S.-based finance organization. As a result of these factors, we may experience difficulty in establishing and maintaining management and financial controls over our China operations. These difficulties include collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet U.S. public-company reporting requirements. We may, in turn, experience difficulties in implementing and maintaining adequate internal controls as required under Section 404 of the Sarbanes-Oxley Act.

Risks Related to Our Common Stock

Our stock price has been and is likely to be volatile.

The market price of our common stock has been and is likely to be subject to wide fluctuations in response to, among other things, the risk factors described in this section of this Quarterly Report on Form 10-Q, and other factors beyond our control, such as fluctuations in the valuation of companies perceived by investors to be comparable to us. For example, announcements made by competitors regarding factors influencing their business may cause fluctuations in the valuation of companies throughout our industry, including fluctuations in the valuation of our stock.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions, such as recessions, interest rate changes or international currency fluctuations, may negatively affect the market price of our common stock.

In the past, many companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We have been and may become the target of this type of litigation in the future. For example, on August 3, 2017 we provided guidance for the third quarter of 2017, and on August 4, 2017 the market price of our stock decreased significantly. As disclosed in “Item 3. Legal Proceedings,” on August 5, 2017, a shareholder class action lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers. The complaint in this matter alleges that we made materially false and misleading statements or failed to disclose material facts and requests damages and other relief. This lawsuit and any other such litigation could result in substantial costs and divert our management’s attention from other business concerns, which could seriously harm our business.

We have incurred and will continue to incur significant increased expenses and administrative burdens as a public company, which could have a material adverse effect on our operations and financial results.

We face increased legal, accounting, administrative and other costs and expenses as a public company that we did not incur as a private company, and greater expenditures may be necessary in the future with the advent of new laws, regulations and stock exchange listing requirements pertaining to public companies. These increased costs will require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives. The Sarbanes-Oxley Act, including the requirements of Section 404, as well as rules and regulations

subsequently implemented by the SEC, the Public Company Accounting Oversight Board and the NASDAQ Global Market, impose additional reporting and other obligations on public companies. Compliance with public company requirements has increased our costs and made some activities more time-consuming. For example, we have created board committees and adopted internal controls and disclosure controls and procedures. In addition, we have incurred and will continue to incur additional expenses associated with our SEC reporting requirements. Furthermore, if we identify any issues in complying with those requirements (for example, if we or our auditors identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs rectifying those issues, and the existence of those issues could adversely affect us, our reputation or investor perceptions of us. Advocacy efforts by stockholders and third parties may also prompt additional changes in governance and reporting requirements, which could further increase our costs. As of December 31, 2017, we became a "large accelerated filer" and, accordingly, no longer qualify as an emerging growth company and are no longer able to rely on certain exemptions that were available to us as an emerging growth company. Legal, accounting, administrative and other costs and expenses may increase in the future as we continue to incur both increased external audit fees as well as additional spending to ensure continued regulatory compliance.

We currently do not intend to pay dividends on our common stock and, consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We currently do not plan to declare or pay dividends on shares of our common stock in the foreseeable future. Consequently, your only opportunity to achieve a return on any shares of our common stock that you may acquire will be if the market price of our common stock appreciates and you sell your shares at a profit. There is no guarantee that the price of our common stock in the market will ever exceed the price that you pay.

Our charter documents, stock incentive plans and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation and our amended and restated bylaws and our stock incentive plans contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- not providing for cumulative voting in the election of directors;
- authorizing our board of directors to issue, without stockholder approval, preferred stock rights senior to those of common stock;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders;
- requiring advance notification of stockholder nominations and proposals; and
- change of control provisions in our stock incentive plans, and the individual stock option agreements, which provide that a change of control may accelerate the vesting of the stock options and equity awards issued under such plans.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporate Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding common stock, from engaging in certain business combinations without the approval of substantially all of our stockholders for a certain period of time.

These and other provisions in our amended and restated certificate of incorporation, our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

If research analysts do not publish research about our business or if they issue unfavorable commentary or downgrade our common stock, our stock price and trading volume could decline.

The trading market for our common stock depends on the research and reports that research analysts publish about us and our business. The price of our common stock could decline if one or more research analysts downgrade our common stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more of the research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

See Exhibit Index.

EXHIBIT INDEX

Number	Description
3.1*	Amended and Restated Certificate of Incorporation, as currently in effect (filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2013).
3.2*	Amended and Restated Bylaws, as currently in effect (filed as Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2013).
4.1*	Common Stock Specimen (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 15, 2015).
10.1*	Translation of Lease Agreement between Global Technology, Inc. and the People's Republic of China in Zhejiang Province, Ningbo City, Land Resources Bureau dated December 29, 2017 (filed as Exhibit 10.30 to the Registrant's Current Report on Form 10-K filed with the Securities and Exchange Commission on February 28, 2018).
10.2*	Translation of Agreement on Investment and Construction of Industrial Land in Ningbo dated December 29, 2017 (filed as Exhibit 10.30.1 to the Registrant's Current Report on Form 10-K filed with the Securities and Exchange Commission on February 28, 2018).
10.3*	Supply Agreement between Applied Optoelectronics, Inc. and Facebook, Inc. effective November 8, 2017 (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2018).
10.4*	Master Purchase Agreement between Applied Optoelectronics, Inc. and Facebook, Inc. effective January 2, 2018 (filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2018).
10.5**	Translation of Construction Agreement between Global Technology, Inc. and Zhejiang Xinyu Construction Group Co., Ltd. dated February 8, 2018.
10.6*	First Amendment to Loan Agreement, dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.7*	Addendum to the Promissory Note (\$60 million), dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.8*	Promissory Note (\$26 million), dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.9*	Addendum to the Promissory Note (\$26 million), dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.10*	Promissory Note (\$21.5 million), dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).

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10.11*	Addendum to the Promissory Note (\$21.5 million), dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.12*	Note Modification Agreement, dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.13*	Assignment of Lease and Rent, dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.14*	Texas Deed of Trust and Security Agreement, dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.9 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
10.15*	Environmental Certification and Indemnity Agreement, dated March 30, 2018, between Applied Optoelectronics, Inc. and Branch Banking and Trust Company (filed as Exhibit 10.10 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 5, 2018).
31.1**	Certification of Chief Executive Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Chief Financial Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification pursuant to 18 U.S.C. 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Chief Executive Officer and Chief Financial Officer.
101.INS**	XBRL Instance Document.
101.SCH**	XBRL Taxonomy Extension Schema Document.
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.

* Incorporated herein by reference to the indicated filing.

** Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: May 8, 2018

APPLIED OPTOELECTRONICS, INC.

By: /s/ STEFAN J. MURRY
Stefan J. Murry
Chief Financial Officer
(principal financial officer and principal accounting officer)

Project Construction Contract

GLOBAL Technology Inc.

**Production Base Project for Optical
Communication Products**

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Part I Contract Agreement

Employer (full name): GLOBAL Technology Inc.

Contractor (full name): Zhejiang Xinyu Construction Group Co., Ltd.

The following agreement is entered into by and between the Parties through negotiation on construction and relevant matters based on the principles of equality, free will, fairness and good faith and according to the *Contract Law of the People's Republic of China*, the *Construction Law of the People's Republic of China* and relevant laws and regulations:

I. Project Profile

1. Project Name: Production Base Project for Optical Communication Products
2. Construction Site: Plot V-03-1, Kechuang Road South, Wangchun Industrial Park, Yinzhou District, Ningbo City.
3. Approval Document No. of Project Initiation: .
4. Fund Resource: Self-funded.
5. Project Contents: see *Schedule of Works to be Undertaken by the Contractor* (Attachment 1) for details.
6. Project Contracting Scope: including all contents in the construction blueprint and Request for Information ("RFI") documents 1.
7. Quantities: the quantities shall be measured as per the construction blueprint, the specific materials shall be quoted as per the *Main Material Form* attached below and the items not listed in the *Main Material Form* shall be determined as per the requirements of drawings. The following parts shall be included mainly:
 - 1) Basement: mainly including basement pile, foundation, baseplate, pillar, beam, roof, wall, roof surface and other main building and installation parts (including identification marking, bumping block and pillar protection angle etc.) as well as earth excavation, outward transport and disposal of basement.
 - 2) Workshop 1: mainly including pillar, beam, plate, wall, doors and windows, roof waterproof and other main building and installation parts above the basement roof
 - 3) Workshop 2: mainly including pillar, beam, plate, wall, doors and windows, roof waterproof and other main building and installation parts above the basement roof.
 - 4) Guard Room 1 and Guard Room 2: mainly including Guard Room's foundation, pillar, beam, roof, wall, doors and windows, roof waterproof and other main building and installation parts as well as retractable doors of two gates.

- 5) Exterior Works: mainly including outdoor plumbing and other municipal pipelines, roads, various sumps and ponds etc. as well as enclosures, pond slag backfill, greening soil in greening area and other outdoor auxiliary projects.
- 6) Exterior Curtain Wall: mainly including aluminum panel curtain wall and glass curtain wall of Workshop 1 and Workshop 2 as well as Guard Room 1 and Guard Room 2.
- 7) Foundation Pit Enclosure: mainly including construction and detection of enclosure pile and slope protection as well as monitoring fees for the safety of foundation pit enclosure during the construction period.
- 8) Landscaping: including trees, shrubs, flowers and plants as well as floor decoration, landscape sketch and tree pool etc.
- 9) Weak Current Part: including outdoor monitoring system, entrance gateways of two gates for vehicles and personnel, weak current and security system in basement etc.
- 10) RFI documents 1.

8. Note:

9. Other Agreed Items:

- a) In the future, the RFI documents will not be based on the quota information price and will be unpriced. The total contracting price for the RFI documents shall be quoted based on the cost calculated according to comprehensive unit, plus tax, administrative expenses, etc.
- b) Contracting form: all the Project adopts contracting for labor and materials (excluding the condition that the Owner provides materials) with lump sum.
- c) Fees include various testing expenses required by the government in the construction process, which shall be within the scope of the total price and paid by the Contractor.
- d) Reserve funds and increased expenses for early completion are not calculated.
- e) Sand shall be river sand meeting national and regional specifications.
- f) Concrete shall be merchandise concrete (excluding blinding concrete and fine stone concrete)
- g) All expenses for creating construction conditions.
- h) The project is a Class A Industrial Construction Project.

II. Contract Construction Duration

Planned Commencement Date: March 10, 2018 (subject to the construction commencement report).

Planned Completion Date: September 1, 2019. (The completion report must be submitted before the Completion Date).

Total calendar days of the Construction Duration: 540 days. In case of inconsistency between the total calendar days (including statutory holidays) and the construction days calculated on the basis of the above Commencement Date and Completion Date, the total calendar days shall prevail.

III. Quality Standard

The quality standard shall conform to the one-time acceptance criteria.

IV Signed Contract Price and Its Form

1. Signed Contract Price:

Amount (in words): RMB One Hundred and Eighty Seven Million Eight Hundred Thousand Only (tax-inclusive)

¥: RMB 187,800,000 (tax-inclusive);

2. Contract Price Form: lump sum contract (lump sum contract for labor and materials within the scope of construction blueprint).

V. Project Manager

The Contractor's project manager: Fu Guixiang.

VI. Documents Constituting the Contract

This Agreement and the following documents shall constitute the contract documents:

- (1) Letter of Acceptance;
- (2) Bidding Letter and its attachments;
- (3) Special Terms and Conditions of the Contract and attachments thereto;
- (4) General Terms and Conditions of the Contract;
- (5) Technical Standards and Requirements;
- (6) Drawings (approved drawings provided by the Employer to the Contractor);
- (7) Priced Bill of Quantities or Budget Statement;
- (8) Production Base Project for Optical Communication Products of GLOBAL Technology

(9) RFI documents 1 of GLOBAL Technology Inc.

(10) Other Contract Documents.

Documents associated with the Contract formed during conclusion and performance of the Contract shall constitute an integral part of the contract documents.

The above contract documents include the supplements and amendments thereto made by the Contracting Parties. For documents of the same classification in contents, the latest one shall prevail. The Special Terms and Conditions of the Contract and its attachments must have signatures or seals of the Contracting Parties.

VII. Commitment

1.The Employer warrants to go through procedures for approval of the Project, raise construction funds in accordance with provisions of relevant laws and pay the Contract Price as per the payment term and method agreed in the Contract.

2.The Contractor warrants to organize and complete the construction work in accordance with laws and regulations as well as the Contract and ensure the project quality and safety without contracting out or illegal sub-contracting, and bear corresponding maintenance responsibility during the Defects Liability Period and Warranty Period.

3.If the Contract is signed by and between the Employer and the Contractor through bid, the Parties will understand and warrant that no extra agreement deviating from the substantial content of the Contract will be signed for the same project.

VIII. Word Meaning

Words in this Agreement shall have the same meanings as defined in Part II “General Terms and Conditions of the Contract”.

IX. Execution Date

The Contract is signed on February 8, 2018.

X. Location of Signing

The Contract is signed at the Conference Room of GLOBAL Technology Inc.

XI. Supplementary Agreement

A supplementary agreement shall otherwise be signed between the Contracting Parties for matters not covered in the Contract. It shall be an integral part of the Contract.

XII. Effectiveness of Contract

The Contract shall come into force after being signed and stamped by the Parties.

XIII. Copies of Contract

The Contract may be made in six copies with equal legal effect, two copies to be held by the Employer and four copies to be held by the Contractor.

The Employer (official seal):
GLOBAL Technology Inc.
Legal representative or
entrusted agent:
(Signature)

Organization code: 73947083-6
Address: No. 88, Qiushi Road, Ningbo City

Postal code: 315176
Legal representative: Lin Chih-Hsiang
Entrusted agent: Yeh Shu-Hua
Tel.: 0574-88133808
Fax: 0574-88133820
E-mail:
Bank of deposit:
Account No.:

The Contractor (official seal):
Zhejiang Xinyu Construction Group Co., Ltd.
Legal representative or
entrusted agent:
(Signature)

Organization code: 91330206144290713E
Address: No. 8, Waitang Road, Xiaogang Street,
Beilun District, Ningbo City

Postal code: 315803
Legal representative: Wang Fuhong
Entrusted agent: _____
Tel.: _____
Fax: _____
E-mail:
Bank of deposit: _____
Account No.: _____

Part II General Terms and Conditions of the Contract

1. General Agreement

1.1 Word Definition and Explanation

The following words used in the Contract Agreement, General Terms and Conditions of the Contract (GCC), and Special Terms and Conditions of the Contract (SCC) shall have the meanings as defined herein:

1.1.1 Contract

Contract: means the binding document concluded between the Contracting Parties pursuant to the laws, consisting of the Contract Agreement, the Letter of Acceptance (if any), the Bidding Letter and its attachments (if any), the Special Terms and Conditions of the Contract and attachments thereto, the General Terms and Conditions of the Contract, the Technical Standards and Requirements, the drawings, the Priced Bill of Quantities or Budget Statement as well as other contract documents.

Contract Agreement: a written document titled "Contract Agreement" signed by and between the Employer and the Contractor that constituting a part of the Contract.

Letter of Acceptance: a written document issued by the Employer to the Contractor to inform him of winning the bid.

Bidding Letter: a document titled "Bidding Letter" completed and signed by the Contractor for bidding purpose, which constitutes a part of the Contract.

Attachments to Bidding Letter: documents titled "Attachments to Bidding Letter" enclosed to the Bidding Letter, which constitutes a part of the Contract.

Technical Standards and Requirements: the technical standards and requirements at the state, industrial or local level and those specified in the Contract that shall be followed or used as the guidance during construction.

Drawings: the drawings constituting a part of the Contract, including the design documents, construction drawings, aerial views and models provided or approved by the Employer as per the Contract as well as any drawings formed during performance of the Contract. All the drawings shall be qualified through review in accordance with laws.

Priced Bill of Quantities: the bill of quantities priced and completed by the Contractor in accordance with specified form and requirements, including descriptions and forms, constituting an integral part of the Contract.

Budget Statement: project budget document prepared by the Contractor as per the form and requirements prescribed by the Employer, which is a part of the Contract.

Other Contract Documents: any binding documents or written agreements concluded by and between the Contracting Parties in connection with the construction of the Project. The Contracting Parties may make such agreements in the Special Terms and Conditions of the Contract.

1.1.2 Contracting Parties and Other Interested Parties

Contracting Parties: the Employer and (or) the Contractor.

Employer: the contracting party who signs this Contract Agreement with the Contractor and the legal successors in title to this party.

Contractor: the contracting party with relevant project construction contracting qualification who signs this Contract Agreement with the Employer and the legal successors in title to this party.

Supervisor: a legal person or other organization specified in Special Terms and Conditions of the Contract for project supervision and management in accordance with laws and regulations as entrusted by the Employer.

Designer: a legal person or other organization with relevant engineering design qualification specified in Special Terms and Conditions of the Contract for engineering design as entrusted by the Employer.

Subcontractor: legal person with relevant qualification that subcontracts part of the Project or work and signs a sub-contract with the Contractor in accordance with laws and regulations as well as provisions in the Contract.

Representative of the Employer: a person appointed by the Employer to station at the Construction Site for exercising the rights of the Employer within the scope of authorization.

Project Manager: project leader with relevant qualification as specified by law, appointed by the Contractor to station at the Construction Site for performing the Contract within the scope of authorization.

Chief Engineer: general leader appointed by the Supervisor to station at the Construction Site for supervising the Project.

1.1.3 Project and Equipment

Project: Permanent Works and (or) Temporary Works within the project contracting scope agreed in the Contract Agreement.

Permanent Works: the works (including the Engineering Equipment) to be built and handed over to the Employer in accordance with the Contract.

Temporary Works: various non-Permanent Works (excluding the Construction Equipment) necessary for completing the Permanent Works specified in the Contract.

Unit Works: Permanent Works specified in the Contract Agreement with independent construction conditions and capable of being used independently.

Engineering Equipment: electromechanical equipment, metal structures and equipment, instruments and other similar devices that constitute the Permanent Works.

Construction Equipment: various equipment, tools and other items (excluding the Engineering Equipment, Temporary Works and materials) necessary for completing the works specified in the Contract.

Construction Site: places where the engineering construction is performed and other places specified in Special Terms and Conditions of the Contract as a part of Construction Site, including Permanent and Temporary Land Occupation.

Temporary Facilities: temporary production and living facilities necessary for completing the various works specified in the Contract.

Permanent Land Occupation: permanently occupied land necessary for project construction specified in Special Terms and Conditions of the Contract.

Temporary Land Occupation: temporarily occupied land necessary for project construction specified in

Special Terms and Conditions of the Contract.

Date and Duration

Commencement Date: including Planned Commencement Date and Actual Commencement Date. “Planned Commencement Date” means the date as agreed in the Contract Agreement; “Actual Commencement Date” means the date expressly written in the Notice to Proceed issued by the Supervisor in accordance with the Notice to Proceed complying with the law.

Completion Date: including the Planned Completion Date and the Actual Completion Date. “Planned Completion Date” means the date as agreed in the Contract Agreement; “Actual Completion Date” means the date as determined in accordance with Completion Date.

Construction Duration: the period necessary for the Contractor to complete the Project specified in the Contract Agreement, including any amendments thereto made in accordance with the Contract.

Defects Liability Period: the period during which the Contractor should assume defects repair liability in accordance with the Contract and the Employer retains the quality guarantee deposit. It shall be calculated as of the Actual Completion Date.

Warranty Period: the period during which the Contractor should assume warranty liability of the Project in accordance with the Contract. It shall be calculated as of the date when the Project is completed and accepted to be qualified.

Base Date: the date 28 days before the closing date for submission of the Bid in the contracting project through bidding, or the date 28 days before the date when the Contract is signed in the direct contracting project.

Day: unless otherwise specified, “Day” means the calendar day. Where the time in the Contract is calculated by day, the period shall be calculated starting from the next day instead of the date when the period starts and the ending time of the last day of the period shall be 24:00 of that day.

Contract Price and Cost

Signed Contract Price: the total amount confirmed in the Contract Agreement by the Contractor and Employer, including safe and civilized construction fees, Provisional Estimate and Provisional Sum.

Contract Price: the amount paid by the Employer to the Contractor for completion of all works within the contracting scope as per the Contract, including price changes in accordance with the Contract during the performance of the Contract.

Cost: necessary expenditures incurred or to be incurred for the performance of the Contract, including administrative fees and other unamortized expense, but excluding the profits.

Provisional Estimate: the amount provided by the Employer in the Bill of Quantities or Budget Statement for paying the expenses of materials and Engineering Equipment and for professional engineering and services which are inevitable but temporarily cannot be confirmed.

Provisional Sum: a sum included in the Contract Price and a provisional sum in the Bill of Quantities or Budget Statement by the Employer for procurement of materials, Engineering Equipment or services which are undetermined or unforeseeable when the Contract is signed, and for paying the expenses arising from potential engineering changes during construction, adjustment in Contract Price when adjustment factors

specified in the Contract occur, claim for compensation and on-site visa confirmation.

Day-work: a method of pricing in accordance with the unit price specified in the Contract for odd jobs required by the Employer or changed tasks to be priced on the basis of day-work that are finished by the Contractor during performance of the Contract.

Quality Guarantee Deposit: the guarantee provided by the Contractor to ensure that it will fulfill the defect repair obligations during the Defects Liability Period as per the agreement.

Lump-sum Contracting Project: project valued on a total price or rate basis in the Priced Bill of Quantities or Budget Statement because there are no calculation rules for quantities in existing national, industrial and local measurement rules.

Written Form: the form in which the described contents are showed visibly, such as contract documents, correspondences, telegrams and faxes.

1.1.2 Contracting Parties and Supervisor of Other Interested Parties

For the works being supervised, the Employer and the Contractor shall clarify the supervising contents and authorities of the Supervisor in the Special Terms and Conditions of the Contract. The Supervisor shall, based on the authorization by the Employer and relevant laws and regulations, be responsible for inspecting, examining, reviewing, accepting relevant items in project construction and issuing relevant instructions on behalf of the Employer. However, the Supervisor has no right to modify the Contract and alleviate or exempt the Contractor from any responsibilities or obligations under the Contract.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Supervisor's office and living area at the Construction Site shall be provided by the Contractor and the costs incurred shall be borne by the Employer.

The Supervisor's right to supervise the works are authorized by the Employer and it shall be exercised by the supervision engineers appointed by the Supervisor to station at the Construction Site. The supervision engineers include the Chief Engineer and the Engineer. The Supervisor shall inform the Contractor of the name and scope of authority of the authorized Chief Engineer and the Engineer in written form in advance. The Supervisor shall inform the Contractor of replacement of the Chief Engineer in written form 7 days in advance; the Supervisor shall inform the Contractor of replacement of other supervision engineers in written form 48 hours in advance.

The Supervisor shall give the supervision instructions based on the authorization by the Employer. The instructions of the Supervisor shall be in written form and signed by the authorized supervision engineer. In case of an emergency, to guarantee the safety of construction personnel or avoid the damage to the construction works, the supervision engineers can give instructions orally which shall have the same legal effect as that of instructions in written form. Nevertheless, the written supervision instructions must be issued within 24 hours after the oral instructions are given and the issued written supervision instructions shall be consistent with the oral instructions.

The instructions of the Supervisor shall be sent to the Project Manager of the Contractor or the personnel authorized by the Project Manager. In case of increased costs and (or) the delay of Construction Duration of the Contractor due to failure or delay of issuing instructions or wrong instructions by the Supervisor

under the Contract, the Employer shall assume corresponding responsibilities. Unless otherwise agreed in the Special Terms and Conditions of the Contract, the Chief Engineer shall not authorize or entrust the Chief Engineer's right to make agreement of [Negotiation or Determination] to other supervision engineers.

In case of any doubts about the instructions issued by the Contractor to the Supervisor, a written objection shall be submitted to the Supervisor who shall confirm, correct or cancel the instructions within 48 hours. If the Supervisor fails to give response within the time limit, the Contractor has right to refuse to execute the above instructions.

If the Supervisor fails to give advice to the Contractor's any work, works or materials and Engineering Equipment within the agreed or reasonable period of time, they shall be deemed to be approved, but this shall not alleviate or exempt the Contractor from any responsibilities and obligations for work, works, materials and Engineering Equipment.

The Chief Engineer shall negotiate with the Contracting Parties to reach an agreement during the negotiation or determination of the Contracting Parties. In case of any disagreement, the Chief Engineer shall deliberately make just determinations under the Contract.

The Chief Engineer shall inform the Employer and the Contractor of the determinations in written form and attach them with supporting details. If the Contracting Parties have no objection to the determinations made by the Chief Engineer, the determinations shall be executed. Any objection of any Contracting Party shall be handled under Clause 20 [Dispute Settlement]. Before the dispute settlement, the Contracting Parties shall be subject to the determinations made by the Chief Engineer temporarily; after the dispute settlement, if the results are inconsistent with the determinations made by the Chief Engineer, the former shall prevail and the loss arising therefrom shall be borne by the responsible person.

1.2 Laws

Laws referred to in the Contract includes laws, administrative regulations and departmental rules of the People's Republic of China and local regulations, autonomous regulations and specific regulations at the Construction Site as well as local government rules.

The Contracting Parties may make additional agreements in the Special Terms and Conditions of the Contract for other normative documents applicable to the Contract.

The Contract is prepared, interpreted and explained in simplified Chinese. In the event that more than two languages are used as agreed by the Contracting Parties in Special Terms and Conditions of the Contract, the Chinese language shall prevail in interpreting and explaining.

1.3 Standards and Specifications

1.3.1 Applicable national and industrial standards, local standards at the Construction Site, and corresponding specifications and procedures. Any special requirements of the Contracting Parties shall be specified in Special Terms and Conditions of the Contract.

If the Employer requires to use foreign standards and specifications, the Employer shall provide original

version and Chinese translation thereof and indicate the name, copy number and release date of the standards and specifications.

Where the Employer's technical standards and functional requirements for the Project are higher or stricter than existing national, industrial or local standards, the Employer shall expressly specify such standards and requirements in the Special Terms and Conditions of the Contract. Unless otherwise agreed in Special Terms and Conditions of the Contract, it shall be deemed that the Contractor has adequately foreseen the complexity of the above technical standards and functional requirements before signing this Contract and the expenses arising therefrom have been included in the Contract Price.

1.4 Priority of Contract Documents

Various documents forming parts of the Contract shall be mutually explanatory and descriptive. Unless otherwise specified in the Special Terms and Conditions of the Contract, the documents constituting the Contract shall be interpreted in the following sequence:

- (1) Contract Agreement;
- (2) Letter of Acceptance (if any);
- (3) Bidding Letter and attachments thereto (if any);
- (4) Special Terms and Conditions of the Contract and attachments thereto;
- (5) General Terms and Conditions of the Contract;
- (6) Technical Standards and Requirements;
- (7) Drawings;
- (8) Priced Bill of Quantities or Budget Statement;
- (9) Other contract documents.

The above contract documents include the supplements and amendments thereto made by the Contracting Parties. For documents of the same classification in contents, the latest one shall prevail.

Documents associated with the Contract formed during conclusion and performance of the Contract shall constitute an integral part of the contract documents; the interpretation priority of the documents shall be determined by the properties.

1.5 Drawings and the Contractor's Documents

1.5.1 Provision and Disclosure of Drawings

The Employer shall provide drawings to the Contractor for free according to the deadline, quantity and content agreed in Special Terms and Conditions of the Contract, and organize the Contractor, Supervisor and Designer to conduct joint review of the drawings and design clarification. The Employer shall provide drawings to the Contractor at latest 14 days before the Commencement Date indicated in the Notice to Proceed.

Where the Contractor's cost increase and (or) delay of Construction Duration is/are caused by the failure of providing drawings by the Employer as per the Contract, the delay of Construction Duration Due to the Reasons of the Employer shall apply.

Errors in Drawings

In case of any errors, omissions or defects of the drawings found after receiving the drawings provided by the Employer, the Contractor shall timely inform the Supervisor. Upon receipt of such notice, the Supervisor shall immediately report to the Employer together with relevant comments. The Employer shall make decisions on the issue within reasonable time limit after receiving the report from the Supervisor. Reasonable time limit means the time necessary for the Employer to make efforts to modify and supplement the drawings without delay after receiving the report from the Supervisor.

Supplements and Amendments to Drawings

Amendments and supplements to drawings shall be subject to prior consent of the Drawing Designer and the Approval Department. The Supervisor shall submit the amended or supplemented drawings to the Contractor before commencement of corresponding works of the Project. The Contractor shall perform construction as per the amended or supplemented drawings.

Contractor's Documents

The Contractor shall provide documents associated with project construction which should be prepared by the Contractor as per Special Terms and Conditions of the Contract and submit them to the Supervisor in accordance with the deadline, quantity and form specified in Special Terms and Conditions of the Contract, and the Supervisor shall report them to the Employer.

Unless otherwise specified in Special Terms and Conditions of the Contract, the Supervisor shall review the documents provided by the Contractor within 7 days upon receipt. If the Supervisor has any objection to contents of the Contractor's documents, the Contractor shall amend the documents and re-submit to the Supervisor. Reviewing by the Supervisor will not alleviate or exempt the Contractor from his obligations specified in the Contract.

Storage of Drawings and Contractor's Documents

Unless otherwise specified in Special Terms and Conditions of the Contract, the Contractor shall reserve another complete package of drawings and the Contractor's documents at the Construction Site for project inspection by the Employer, Supervisor and relevant personnel.

1.6 Contact

1.6.1 Notices, approvals, proofs, certificates, instructions, orders, requirements, requests, consents, comments, determinations and decisions related to the Contract shall all be in written form and shall be delivered to designated recipients and addresses within specified deadline.

1.6.2 The Employer and the Contractor shall specify their respective recipients and addresses in Special Terms and Conditions of the Contract. In case of changes in recipients or addresses specified by either Contracting Party, the other Party shall be informed in written form 3 days in advance.

The Employer and the Contractor shall timely sign for receiving the correspondences between them send by the opposite party to the designated recipients and addresses. The Party refusing to sign for receiving shall be liable to the increased costs and (or) the delay of Construction Duration arising therefrom.

Fossils and Cultural Relics

All cultural relics, historical sites and remains, fossils, ancient coins, and articles of geological study or

archaeological significance discovered at the Construction Site shall belong to the state. Once the above relics are found, the Contractor shall take reasonable and effective protective measures to prevent any person from moving or damaging them, and immediately report to relevant governmental and administrative departments and also inform the Supervisor.

The Employer, Supervisor and Contractor shall take appropriate protective measures in accordance with the requirements of relevant governmental and administrative departments. The Employer shall be liable to the increased costs and (or) the delay of Construction Duration.

The Contractor shall compensate and assume corresponding legal liabilities for losses of and damages to the cultural relics caused by his delayed reporting or non-reporting of these cultural relics once discovered.

1.7 Transportation

1.7.1 Right to Enter and Leave the Site

Unless otherwise stipulated in the Special Terms and Conditions of the Contract, the Contractor shall investigate the Construction Site before signing the Contract and reasonably foresee the mode, means and route of entering and leaving the Construction Site according to the project scale and technical parameters. The Contractor shall be liable to the increased cost and (or) the delay of Construction Duration caused by the Contractor's failure to reasonably foresee.

1.7.2 On-site Transportation

The Employer shall provide technical parameters and detailed conditions of the on-site traffic facilities, and provide on-site access road and traffic facilities for free to the Contractor as per the Special Terms and Conditions of the Contract. In case of any damage to the above road and traffic facilities caused by the Contractor, the Contractor shall be responsible for repairing and bearing the increased cost arising therefrom.

Except for the on-site roads and traffic facilities provided by the Employer as per the Contract, the Contractor shall be responsible for other on-site temporary roads and traffic facilities necessary for building, repairing, maintaining and managing the construction. The Employer and Supervisor can utilize the temporary roads and traffic facilities at the site built by the Contractor for the purpose of performing the Contract.

The border between on-site and off-site transportation areas shall be specified by the Contracting Parties in the Special Terms and Conditions of the Contract.

1.7.3 Transportation of Extra-Large and Extra-Heavy Objects

For extra-large or extra-heavy objects transported by the Contractor, the Contractor shall be responsible for handling application procedures from traffic management department with assistance from the Employer. Unless otherwise specified in the Special Terms and Conditions of the Contract, the temporary reinforcement and renovation costs of roads and bridges needed for transporting extra-large or extra-heavy objects shall be borne by the Contractor.

For damages to the public roads and bridges in and out of Construction Site due to transportation activities of the Contractor, the Contractor shall be responsible for all the costs of repairing such damage and any possible compensation claims.

1.8 Intellectual Property

Unless otherwise agreed in Special Terms and Conditions of the Contract, the copyrights to drawings provided by the Employer to the Contractor, technical specifications prepared by the Employer or by others as entrusted by the Employer for implementation of the Project, and documents reflecting the requirements of the Employer and those of similar nature, belong to the Employer. The Contractor is allowed to reproduce and use these documents for the execution of the Contract purpose only. The Contractor shall not reproduce, use and supply the above documents to any third parties for purposes other than those intended in the Contract without prior written consent of the Employer.

Unless otherwise agreed in Special Terms and Conditions of the Contract, the copyrights (excluding the right of signature) to documents prepared by the Contractor for project construction purpose belong to the Employer. The Contractor can reproduce and use these documents for operation, commissioning, maintenance, and renovation instead of purposes irrelevant to the Contract. The Contractor shall not reproduce, use and supply the above documents to any third parties for purposes other than those intended in the Contract without prior written consent of the Employer.

The Contracting Parties warrant not to infringe the intellectual property right of the other party or the third party during the performance of the Contract. The Contractor shall be liable to his infringement of patent right or other intellectual rights of others when the Contractor uses materials, Construction Equipment, Engineering Equipment and construction technology.

Unless otherwise specified in Special Terms and Conditions of the Contract, the Contractor confirms that the fees for utilizing any patent, proprietary technology and technology secret have been included in the Signed Contract Price before and when the Contract is signed.

Unless otherwise specified in laws and the Contract, the Contractor shall not disclose such business secret as drawings, documents and data information which are required to be confidential to any third party without consent of the Employer.

Unless otherwise specified in laws or the Contract, the Employer shall not disclose such business secret as technical secrets and data information which are required to be confidential to any third party without consent of the Contractor.

1.9 Correction of Errors in Bill of Quantities

Unless otherwise agreed in Special Terms and Conditions of the Contract, the Bill of Quantities provided by the Employer shall be considered as accurate and complete. Amendments to the Bill of Quantities and corresponding adjustment of the Contract Price shall be made by the Employer in case of any of the following:

- (1) Missing items and omissions in the Bill of Quantities;
- (2) Deviation of Bill of Quantities out of the deviation range specified in Special Terms and Conditions of the Contract;
- (3) Quantities that are not measured in accordance with compulsory rules in current national measurement specifications.

2. The Employer

2.1 Employer's Representative

The Employer shall expressly specify in the Special Terms and Conditions of the Contract the name, title, contact information, and scope of authority of the Employer's Representative dispatched by the Employer to the Construction Site. The Employer's Representative is responsible, within scope of authority, for handling specific matters related to the Employer during the performance of the Contract. The Employer shall undertake the legal responsibility of the behaviors of the Employer's Representative within scope of authority. The Employer shall notify the Contractor in written form 7 days in advance of the replacement of the Employer's Representative.

Where the Employer's Representative fails to fulfill his duties and obligations in accordance with the Contract, leading to impossibility to perform the Contract as normal, the Contractor may request the Employer to replace the Employer's Representative.

2.2 Engineer Designated by the Employer

For projects for which the supervision is not compulsory by law, the function and power of the Supervisor can be exercised by the Employer's Representative or other personnel designated by the Employer.

The Employer shall require its on-site personnel to obey laws and relevant provisions about safety, quality, environmental protection and civilized construction, and guarantee that the Contractor will not bear losses or liabilities caused by nonobservance of the above provisions by the Employer's personnel.

The Employer's personnel include the Employer's Representative and other personnel designated by the Employer to station at the Construction Site.

2.3 Provision of Construction Site, Construction Conditions and Basic Data

2.3.1 Provision of Construction Site

Unless otherwise agreed in Special Terms and Conditions of the Contract, the Employer shall hand over the Construction Site to the Contractor at least 7 days before the Commencement Date.

2.3.2 Provision of Construction Conditions

Unless otherwise agreed in Special Terms and Conditions of the Contract, the Employer shall provide necessary conditions for construction, including:

- (1) Make available the construction water, electricity and communication lines necessary for construction at the Construction Site;
- (2) Provide transportation conditions to the Contractor for entering the Construction Site to perform normal construction;
- (3) Coordinate to protect the underground pipelines around the Construction Site and adjacent buildings, structures, old and rare trees, and bear corresponding costs.
- (4) Other facilities and conditions to be provided in accordance with Special Terms and Conditions of the Contract.

3. The Contractor

3.1 Contractor's General Obligations

The Contractor shall, during the performance of the Contract, abide by laws and standard specifications for engineering construction and fulfill the following obligations:

- (1) Obtain permits and approvals which should be obtained by the Contractor required by laws and regulations, and send the written results to the Employer for reservation.
- (2) Complete the Project according to laws and regulations as well as the Contract Agreement and assume warranty obligations during the Warranty Period;
- (3) Take construction safety measures and environmental protection measures, transact employment injury insurance, and guarantee the safety of the Project, personnel, materials, equipment and facilities as per laws and regulations as well as the Contract Agreement;
- (4) Prepare construction organization design and construction measure plan according to work contents and construction progress agreed in the Contract and be liable to the completeness, safety and reliability of all construction work and methods;
- (5) Do not infringe the rights of the Employer and others to use such public utilities as public roads, water sources and municipal pipes and avoid disturbing the adjacent public utilities when implementing various work as agreed in the Contract. The Contractor shall assume corresponding responsibilities for affecting others' operations or livelihood due to occupation or use of others' Construction Sites;
- (6) Be responsible for protecting the Construction Site and surrounding environment and ecology according to the Environmental Protection;
- (7) Take measures for construction safety to guarantee the safety of the Project, personnel, materials, equipment and facilities and avoid any personal injury or property loss due to engineering construction according to the Safe and Civilized Construction;
- (8) Exclusively apply various funds paid by the Employer as agreed in the Contract in the Contract Project and pay the corresponding wages to its personnel and the Contract Price to the Subcontractor timely;
- (9) Prepare completion data and file the completion data according to relevant laws and regulations as well as the Contract and also hand over to the Employer as per the package number, contents and time of the completion data agreed in the Special Terms and Conditions of the Contract;
- (10) Fulfill other obligations.

Contractor's Personnel

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall submit a report on arrangement of the Contractor's project management organization and personnel at Construction Site to the Supervisor within 7 days upon receipt of the notice of commencement. The report shall include the list of names, posts and registered qualifications of main construction management personnel such as contract management personnel, construction management personnel, technical management personnel, material management personnel, quality management personnel, safety management personnel and financial management personnel as well as the arrangement of all technical workers. In addition, effective

certifications on labor relation between main construction management personnel and the Contractor and social insurance of main construction management personnel paid by the Contractor shall be submitted.

Main construction management personnel assigned to the Construction Site by the Contractor shall be relatively stable. In case of any change during the construction, the Contractor shall submit a report on the change of personnel at the Construction Site to the Supervisor timely. If the Contractor needs to replace the main construction management personnel, the Contractor shall obtain a written approval from the Employer and give a written notice to the Supervisor 7 days in advance. The notice shall specify the registered qualification, managerial experience and other related information of the new management personnel.

The personnel engaged in special trades of work shall have corresponding qualification certificates which shall be checked by the Supervisor at any time.

If the Employer has any objection to the qualification or competence of the Contractor's main construction management personnel, the Contractor shall provide information to prove that the questioned personnel have the ability to finish relevant work or the situations questioned by the Employer do not exist. If the Employer requires to replace the main construction management personnel who fail to fulfill their duties and obligations under the Contract, the Contractor shall replace the personnel concerned. The Contractor shall assume the default responsibilities under the Special Terms and Conditions of the Contract if the Contractor refuses to replace the main construction management personnel without justified reasons.

Unless otherwise specified in the Special Terms and Conditions of the Contract, if the main construction management personnel of the Contractor leave the Construction Site for no more than 5 days accumulatively every month, the main construction management personnel shall report to the Supervisor for approval; for a leave over 5 days every month, the main construction management personnel shall inform the Supervisor and get the approval from the Employer in written form. The main construction management personnel shall assign an experienced person to fulfill their duties temporarily on behalf before leaving the Construction Site. The person shall have the qualification and competence to fulfill corresponding duties and obtain the approval from the Supervisor or the Employer.

Where the Contractor has replaced the main construction management personnel without approval from the Employer or the above-mentioned personnel have left the Construction Site without approval from the Supervisor or the Employer, the Contractor shall assume default responsibilities.

On-site Survey by the Contractor

The Contractor shall make a survey on the Construction Site and Construction Conditions and fully understand the meteorological conditions, traffic conditions, customs and other information related to completion of contract work in the place where the Project is located. In case of consequences generated from the Contractor's failure to fully survey the site, understand these conditions or estimate above conditions, the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

3.2 Project Manager

The Project Manager shall be the person determined by the Contracting Parties and the Project Manager's

name, title, registered certificate No., contact information and scope of authority, etc. shall be indicated in the Special Terms and Conditions of the Contract clearly. The Project Manager shall perform the Contract with authorization by the Contractor on behalf of the Contractor. The Project Manager shall be the employee who is formally employed by the Contractor and the Contractor shall submit the labor contract between the Project Manager and the Contractor as well as effective certifications on social insurance of the Project Manager paid by the Contractor to the Employer. Where the Contractor fails to submit the above-mentioned documents, the Project Manager has no right to fulfill duties and the Employer has the right to request to replace the Project Manager with the increased costs and (or) the delay of Construction Duration arising thereof being borne by the Contractor.

The Project Manager shall reside in the Construction Site for a time period not less than the days specified in the Special Terms and Conditions of the Contract every month. The Project Manager shall not serve as the project manager of any other project at the same time. The Project Manager shall give prior notice to the Supervisor and obtain a written approval from the Employer when the Project Manager has to leave the Construction Site. The notice of the Project Manager shall specify the registered qualification, managerial experience and other related information of the temporary personnel acting on behalf the Project Manager and the personnel shall have the competence to fulfill relevant duties.

The Contractor who violates the above-mentioned agreements shall assume the default responsibilities under the Special Terms and Conditions of the Contract.

The Project Manager shall organize the construction of the Project under the Contract. To guarantee the safety of construction and personnel in case of an emergency when the Project Manager cannot timely contact with the Employer's Representative and the Chief Engineer, the Project Manager has the right to take necessary measures to guarantee the safety of relevant personnel, property and project, but the Project Manager shall submit a written report to the Employer's Representative and the Chief Engineer within 48 hours.

Where the Contractor needs to replace the Project Manager, the Contractor shall give a written notice to the Employer and the Supervisor 14 days in advance and obtain a written approval from the Employer. The notice shall specify the registered qualification, managerial experience and other related information of the new Project Manager who shall continue to fulfill the duties agreed in Subclause 3.2.1. The Contractor shall not replace the Project Manager without the written approval from the Employer. The Contractor shall assume the default responsibilities under the Special Terms and Conditions of the Contract if the Contractor has replaced the Project Manager without written approval from the Employer.

The Employer shall have the right to give a written notice to the Contractor to change the Project Manager deemed to be incompetent with reasons noted in the notice. The Contractor shall submit an improvement report in written form to the Employer within 14 days after receiving the notice. If the Employer still requires to replace the Project Manager after receiving the improvement notice, the Contractor shall make the replacement within 28 days after receiving the second notice and submit a written notice on the registered qualification, management experience and other related information of the new Project Manager to the Employer. The new Project Manager shall continue to fulfill the agreed duties. The Contractor shall

assume the default responsibilities under the Special Terms and Conditions of the Contract if the Contractor refuses to replace the Project Manager without justified reasons.

If the Project Manager authorizes his/her subordinate to fulfill certain duties due to special circumstances, the subordinate shall have the competence to fulfill relevant duties, and the Project Manager shall give a 7-day advance written notice on the subordinate's name and scope of authority to the Supervisor and obtain written approval from the Employer.

3.3 Subcontracting

3.3.1 General Agreement on Subcontracting

The Contractor shall not contract out all of the contracted works to the third party or divide the contracted works into several parts and contract them out to the third party in the name of subcontract. The Contractor shall not subcontract main structures, key work and special works forbidden to be subcontracted under the Special Terms and Conditions of the Contract to a third party. The scope of main structures and key work shall be defined by the Contracting Parties in the Special Terms and Conditions of the Contract according to relevant laws and regulations.

The Contractor shall not contract out in the name of subcontract or illegally subcontract any works.

3.3.2 Determination of Subcontract

The Contractor shall subcontract the Project under the Special Terms and Conditions of the Contract and determine the Subcontractor. For special works with Provisional Estimate in the Priced Bill of Quantities or Budget Statement, the Subcontractor shall be determined as per the Provisional Estimate. The Contractor shall guarantee that the Subcontractor has relevant qualifications and competence for subcontracting under the Contract. The project subcontract shall not alleviate or exempt the responsibilities and obligations of the Contractor. The Contractor and the Subcontractor shall be jointly and severally liable to the subcontracted works to the Employer. Unless otherwise specified in the Contract, the Contractor shall submit copies of the Subcontract, the Subcontractor's business license and qualification documents to the Employer and the Supervisor within 7 days after the Subcontract is signed.

Subcontract Management

The Contractor shall submit the list of the Subcontractor's main construction management personnel to the Supervisor and implement the real-name management system for the Subcontractor's construction personnel, including but not limited to access management, register and transaction of various licenses.

Subcontract Price

If the Employer is required to pay Subcontract Price to the Subcontractor as stipulated in effective legal documents, the Employer has the right to deduct this part of payment from the Project Payment payable to the Contractor.

Transfer of Rights and Interests of Subcontract

If the Subcontractor's obligations under the Subcontract continue until the expiration of the Defects Liability Period, the Employer, before the expiration of the Defects Liability Period, shall have the right to request the Contractor to transfer the rights and interests under the Subcontract to the Employer and the Contractor shall transfer them. Unless otherwise specified in the Transfer Contract, the Subcontractor shall

perform the duties for the Employer after the Transfer Contract comes into effect.

Where the Employer, the Contractor or the Subcontractor has objection to relevant rights and obligations, the Employer has the right to deduct this part of payment from the Project Payment payable to the Contractor until the objection disappears.

3.4 Custody of the Project and Protection of Finished Products and Semi-finished Products

(1) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall be responsible for taking charge of the Project and materials and equipment related to the Project from the date when the Construction Site is handed over from the Employer to the Contractor to the date when the Project Acceptance Certificate is issued.

(2) In case of any damage to the Project, materials and Engineering Equipment for the reason of the Contractor during the period when the Contractor takes charge of the Project, the Contractor shall be responsible for repairing or replacement and be liable to the increased costs and (or) the delay of Construction Duration arising therefrom.

(3) Finished products and semi-finished products manufactured by stages under the Contract shall be protected by the Contractor before the Project Acceptance Certificate is issued. In case of any damage to the finished products or semi-finished products for the reason of the Contractor, the Contractor shall be responsible for repairing or replacement and be liable to the increased costs and (or) the delay of Construction Duration arising therefrom.

3.5 Performance Guarantee

Where the Employer requires the performance guarantee from the Contractor, the Contracting Parties shall provide the method, amount and period of performance guarantee in the Special Terms and Conditions of the Contract. The performance guarantee can be the bank guarantee or bonding company guarantee which shall be agreed by the Contracting Parties in the Special Terms and Conditions of the Contract.

Where the delay of Construction Duration is caused by the Contractor, the Contractor shall bear the increased costs for continuing to provide the performance guarantee.

4. Project Quality

4.1 Quality Requirements

Project quality standards must comply with current national acceptance specifications and standards for project construction quality. Any special standards or requirements for the project quality shall be agreed by the Contracting Parties in the Special Terms and Conditions of the Contract.

Where any incompliance of project quality with the standards agreed in the Contract is caused by the Contractor, the Employer has the right to request the Contractor to rework until the project quality complies with the standards agreed in the Contract. The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration arising therefrom.

Quality Management by the Contractor

The Contractor shall, in accordance with the Construction Organization Design, submit the documents

about the project quality assurance system and measures to the Employer and the Supervisor, establish a sound quality inspection system and submit the corresponding project quality documents. The Contractor has the right to refuse executing wrong instructions against relevant laws and regulations as well as the Contract issued by the Employer and the Supervisor.

The Contractor shall carry out the quality education and technical training for construction personnel, assess the labor skills of the construction personnel regularly and execute the construction specifications and operating instructions strictly.

The Contractor shall, in accordance with relevant laws and regulations as well as requirements of the Employer, carry out the whole-process quality inspection and test for materials, Engineering Equipment and all parts of the Project as well as construction processes, make detailed records, and prepare the construction quality report and submit it to the Supervisor for review. In addition, the Contractor shall, in accordance with relevant laws and regulations as well as the requirements of the Employer, conduct the sampling test at the Construction Site, the Project's check survey and equipment performance test, provide the test samples, and submit the test reports and measurement results, and carry out other work.

Quality Inspection and Test by the Supervisor

The Supervisor shall, in accordance with relevant laws and regulations as well as authorization by the Employer, carry out the inspection and test on all parts of the Project, construction processes, materials and Engineering Equipment. The Contractor shall provide conveniences to the inspection and test by the Supervisor, including for that the Supervisor goes to the Construction Site or manufacturing and processing places or other places agreed in the Contract to observe and review the original construction records. The inspection and test performed by the Supervisor for this purpose shall not alleviate or exempt the Contractor from the obligations specified in the Contract.

The inspection and test performed by the Supervisor shall not affect the normal construction. If the inspection and test performed by the Supervisor affect the normal construction and the construction is unacceptable through the inspection and test, the Contractor shall bear the costs generated from the impact on the normal construction and the Construction Duration shall not be extended. If the construction is acceptable through the inspection and test, the Employer shall be liable to the increased costs and (or) the delay of Construction Duration.

4.2 Inspection for Concealed Works

Self-inspection by the Contractor

The Contractor shall carry out the self-inspection for concealed parts of the Project to confirm whether these parts have covering conditions.

Inspection Procedures

Unless otherwise specified in the Special Terms and Conditions of the Contract, when the concealed parts of the Project have covering conditions after the self-inspection by the Contractor, the Contractor shall notify the Supervisor to carry out the inspection in written form 48 hours before joint inspection by the Parties. The notice shall clearly indicate the inspection contents, time and place of concealed works with self-inspection records and necessary inspection data attached.

The Supervisor shall arrive at the site on time to carry out the inspection on the concealed works, construction processes, materials and Engineering Equipment. After the Supervisor has confirmed the compliance of quality with the concealing requirements through inspection and signed on the acceptance records, the Contractor shall carry out the covering works. If the quality is unacceptable through the inspection by the Supervisor, the Contractor shall complete the repair within the period of time determined by the Supervisor and the Supervisor shall carry out the re-inspection. The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

Unless otherwise specified in the Special Terms and Conditions of the Contract, if the Supervisor cannot carry out the inspection on time, the Supervisor shall request for an extension in written form to the Contractor 24 hours before the inspection, however, the extension shall not exceed 48 hours. If the Project is delayed due to this, the Construction Duration shall be extended. If the Supervisor fails to carry out the inspection on time and does not make a request for an extension, the concealed works shall be deemed to be acceptable through the inspection and the Contractor can complete the covering work on its own, make corresponding records and submit them to the Supervisor for signing and confirmation. If the Supervisor has any doubt about the inspection records afterwards, Supervisor can carry out re-inspection as per Subclause 5.3.3 [Re-inspection].

Re-inspection

If the Employer or the Supervisor has any doubt about the quality after the concealed parts of the Project have been covered by the Contractor, the Employer or the Supervisor can require the Contractor to carry out the drilling detection on the covered parts or open the covered parts for re-inspection, and the Contractor shall conduct it in strict accordance with the requirements and re-cover the parts required to be concealed to their original conditions after the inspection. If the inspection results prove that the project quality conforms to the requirements of the Contract, the Employer shall be liable to the increased costs and (or) the delay of Construction Duration and pay reasonable profits to the Contractor; if the inspection results prove that the project quality does not conform to the requirements of the Contract, the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

Covering by the Contractor without Permission

If the Contractor fails to notify the Supervisor to arrive at the site for inspection and cover the concealed parts without permission, the Supervisor has the right to direct the Contractor to carry out the drilling detection or open the covering parts for re-inspection. The Contractor shall be liable to the increased costs and the delay of Construction Duration no matter the quality of the concealed works of the Project is qualified.

4.3 Concealed Works and Intermediate Acceptance

The concealed works and intermediate acceptance shall be handled as per the agreement of the Parties under the Special Terms and Conditions of the Contract. If the incompliance of project quality with the standards is caused for the reason of the Contractor, the Employer has the right to request the Contractor to take remedial measures at any time until the project quality complies with the quality standards specified in the Contract. The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

The parts that cannot be remedied shall be handled as per Refusal of Acceptance for All or Part of the Project.

Quality Test for Project with Dispute

Any dispute between the Contracting Parties on the project quality shall be subject to verification by the engineering quality testing institution agreed by the Parties through negotiation. The costs and losses arising therefrom shall be borne by the Responsible Party. Where the Parties cannot determine a testing institution through negotiation, the Contractor or the Subcontractor can authorize the Employer to directly entrust a competent testing institution to conduction testing and the Contractor or the Subcontractor shall not propose any objection.

If the Contracting Parties are responsible for these costs and losses, each party shall bear such costs and losses to the extent of its own responsibilities.

5. Safe and Civilized Construction and Environmental Protection

Requirements on Production Safety

During the performance of the Contract, the Contracting Parties shall comply with the requirements on production safety in the country and place where the Project is located. If the Contracting Parties have any special requirements, the Contracting Parties shall specify the standardized compliance objectives for production safety of construction project and relevant items in the Special Terms and Conditions of the Contract. The Contractor has the right to refuse any instructions issued by the Employer and the Supervisor for operation against rules and construction with risks.

During construction, in case of emergencies such as sudden geological changes and unknown underground construction obstacles that affect the construction safety, the Contractor shall report them to the Supervisor and the Employer timely and the Employer shall order to stop the construction and report it to relevant administrative departments to take emergency measures in a timely manner.

The suspension of construction due to the need of production safety shall be performed as per the Suspension of Construction.

Production Safety Guarantee Measures

The Contractor shall prepare the technical safety measures or special construction schemes, establish a safe production responsibility system, security system and education and training system for production safety in accordance with relevant provisions and shall fulfill the security duties, prepare the records on production safety of the Project truthfully and accept the inspection and supervision by the Employer, the Supervisor and the safety supervision department according to laws and regulations on production safety and the Contract.

Special Production Safety Items

The Contractor shall carry out the construction, complete the technical clarification on the safety before commencement and take various safety protection measures during construction in accordance with relevant laws and regulations. The personnel engaged in special types of work and employed by the

Contractor for the performance of the Contract shall have accepted special training and obtained the job certificate issued by relevant management organizations.

The Contractor shall propose the safety protection measures to the Employer and the Supervisor before commencement of the construction in sections with power equipment, transmission lines, underground pipelines, sealed quakeproof workshops and explosive and inflammable substances as well as in the vicinity of main street roads. Such measures shall not be taken until the approval has been obtained from the Employer.

In blasting operation, for construction in radioactive and toxic environment (including storage, transportation and usage) and construction using toxic and corrosive articles, the Contractor shall inform the Employer and the Supervisor in written form 7 days before such construction and report with corresponding safety protection measures. Such measures shall not be implemented until the approval has been obtained from the Employer.

The Contractor shall prepare and organize the argumentation in a timely manner for risky partial works and specific works requiring individual construction plans and those exceeding certain scale and needing expert argumentation.

Civilized Construction

During the construction period, the Contractor shall take measures to keep the Construction Site smooth and materials in order. If relevant government administrative departments in the place where the Project is located have any special requirements, the construction shall be carried out according to the special requirements. Any other requirements for civilized construction by the Contracting Parties shall be specified in the Special Terms and Conditions of the Contract.

Before handover of the Project, the Contractor shall remove all Engineering Equipment, excess materials, rubbish and Temporary Works from the Construction Site, and keep the Construction Site clean and in order. With the written consent of the Employer, the Contractor shall keep materials, Construction Equipment and Temporary Works required by the Contractor for fulfilling the obligations during the Warranty Period at the place specified by the Employer.

Safe and Civilized Construction Cost

Safe and civilized construction cost shall be borne by the Employer and included in the Total Contract Price. The Contractor shall use the fees for safe and civilized construction for a specified purpose and record them in the financial account separately for future reference and shall not use them for other purposes, or else, the Employer has the right to order the Contractor to correct it within the specified time limit; if the Contractor fails to correct it within the specified time limit, the Employer shall have the right to order the Contractor to suspend the construction and the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

Emergency Treatment

Where the events that jeopardize the project safety occur during the execution of the Project or the Defects Liability Period, the Supervisor shall notify the Contractor to carry out the emergency rescue. The Employer has the right to employ other personnel to perform the rescue if the Contractor claims to be unable or

reluctant to carry out the rescue. The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration if the rescue belongs to the Contractor's obligations.

Accident Treatment

Any accident occurring during the project construction shall be reported immediately by the Contractor to the Supervisor who shall immediately inform the Employer of the accident. The Employer and the Contractor shall organize personnel and equipment to conduct emergency rescue and repair to decrease casualties and property loss and prevent accidents from expanding and protect the accident scene. Any articles requiring moving out of the site shall be marked and recorded in written form and relevant evidences shall be kept properly. The Employer and the Contractor shall, in accordance with relevant national regulations, report the accident and emergency measures being taken to relevant departments in a truthful manner.

Where the Contractor and the Subcontract are slack to handle the accident, the Employer has the right to directly handle the accident. The Contractor and the Subcontractor shall suffer all consequences arising therefrom.

Safety Responsibilities of the Contractor

The Contractor shall be responsible for the compensation for the casualties and property losses of the Employer, the Supervisor and the third party caused by the Contractor at the Construction Site and its adjacent areas.

Labor Protection

The Contractor shall arrange the labor and rest time of construction personnel at site in accordance with laws and regulations to ensure the rest time of workers and pay reasonable remunerations and costs to them. The Contractor shall handle necessary certificates, permits, insurances and registration for all personnel employed to perform the Contract according to the laws, and the Contractor shall urge the Subcontractor to handle necessary certificates, permits, insurances and registrations for all personnel employed by the Subcontractor.

The Contractor shall ensure the labor safety of construct personnel at site in accordance with laws, provide relevant labor protection and take effective labor protection measures including prevention of dust, reduction of noise, control of harmful gas and safety guarantee for working under high-temperature, high-cold environment and working at heights according to the national regulations on labor protection. If the Contractor's employees have any injuries during construction, the Contractor shall take effective measures for rescue and treatment immediately.

The Contractor shall arrange the working time in accordance with laws to ensure that the employees can have the right of rest and vacation. If the vacation is taken up or the working time is delayed due to special requirements for the project construction, they shall not exceed the limit specified by laws and relevant vacation shall be added or salaries shall be paid according to laws.

Living Conditions

The Contractor shall provide necessary accommodation conditions and living conditions for all personnel employed to perform the Contract. The Contractor shall take effective measures to prevent the infectious

disease, to ensure the health of construction personnel, and shall regularly carry out professional inspection and treatment on epidemic prevention and sanitation of the Construction Site, living base of construction personnel and the Project. For the Construction Site that is far away from town, all necessary medical personnel and facilities for injury prevention and control and emergency treatment shall be provided.

Environmental Protection

The Contractor shall list the specific measures for environmental protection in the construction organization design. During the performance of the Contract, the Contractor shall take reasonable measures to protect the environment of the Construction Site. For any atmosphere, water, noise and solid waste pollution possibly caused during the construction, all feasible and specific preventive measures shall be taken.

The Contractor shall be responsible for infringement damage compensation of environmental pollution due to its own reasons. If the construction is suspended due to disputes caused by the above-mentioned environmental pollution, the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

6. Construction Duration and Progress

6.1 Construction Organization Design

6.1.1 Contents of Construction Organization Design

The construction organization design shall include the following contents:

- (1) Construction Scheme;
- (2) Layout Plan of the Construction Site;
- (3) Construction Schedule and Guarantee Measures;
- (4) Labor and Material Supply Plan;
- (5) Selection of Construction Machines;
- (6) Quality Assurance Systems and Measures;
- (7) Measures for Safe Production and Civilized Construction;
- (8) Measures for Environmental Protection and Cost Control;
- (9) Other matters agreed by the Contracting Parties.

6.1.2 Submittal and Modification of Construction Organization Design

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall submit the detailed construction organization design to the Supervisor and the Supervisor shall report it to the Employer within 14 days after the signing of the Contract but not later than the date 7 days before the Commencement Date as noted in Subclause 7.3.2 [Notice to Proceed]. Unless otherwise specified in the Special Terms and Conditions of the Contract, the Employer and the Supervisor shall confirm or propose the recommendations of modification within 7 days after the Supervisor receives the construction organization design. The Contractor shall at its own costs modify and improve the reasonable recommendations and requirements proposed by the Employer and the Supervisor. If the construction organization design is to be modified based on the actual conditions of the Project, the Contractor shall submit the modified construction organization design to the Employer and the Supervisor.

The Construction Schedule shall be prepared and modified in accordance with [Construction Schedule].

6.2 Commencement

6.2.1 Preparation for Commencement

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall submit the application form of project commencement to the Supervisor within the period agreed in Construction Organization Design and the application form shall be implemented after the Supervisor submits it to the Employer for approval. The application form of commencement shall describe the implementation conditions of construction roads, Temporary Facilities, materials, Engineering Equipment, Construction Equipment and personnel necessary for normal construction based on the Construction Schedule as well as the project progress arrangement in details.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contracting Parties shall complete the preparation work for commencement according to the agreements.

6.2.2 Notice to Proceed

The Employer shall obtain the permits necessary for the project construction according to the law. With the consent of the Employer, the Notice to Proceed issued by the Supervisor shall comply with the law. The Supervisor shall give the Notice to Proceed to the Contractor 7 days before the Planned Commencement Date. The Construction Duration shall be from the Commencement Date specified in the Notice to Proceed.

Unless otherwise agreed in the Special Terms and Conditions of the Contract, if the Supervisor fails to give the Notice to Proceed within 90 days from the Planned Commencement Date for the reason of the Employer, the Contractor shall have the right to make a request for price adjustment or termination of the Contract. The Employer shall be liable to the increased costs and (or) the delay of Construction Duration and pay reasonable profits to the Contractor.

Surveying and Setting Out

Unless otherwise agreed in the Special Terms and Conditions of the Contract, the Contractor shall be responsible for carrying out all the surveying and setting out during construction and providing personnel with relevant qualifications, qualified instruments, devices and other articles. The Contractor shall correct the Construction Site, elevation, size or any error of benchmark, and shall be responsible for positioning of each part of the Project.

The Contractor shall be responsible for the protection of surveying markers including benchmarks at the Construction Site during construction.

6.3 Delay of Construction Duration

If the delay of Construction Duration is caused by the Contractor, the method for calculating the liquidated damages for overdue completion and the upper limit of liquidated damages for overdue completion can be specified in the Special Terms and Conditions of the Contract. After the Contractor pays the liquidated damages for overdue completion, this will not exempt the Contractor from the obligations to continue to complete the Project and repair the defects.

When the Contractor meets any adverse material conditions or abnormal extreme weather conditions, the Contractor shall take reasonable measures to overcome the adverse material conditions or abnormal extreme weather conditions for purpose of continuous construction, and inform the Employer and the Supervisor of these measures timely. The Supervisor shall timely give an instruction with the consent of the Employer; in case of any change, the changed instruction shall prevail.

Suspension of Construction for the Reason of the Contractor

If the suspension of construction is caused by the Contractor, the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration. If the Contractor does not resume the construction within 84 days after receiving the instruction for resuming the construction from the Supervisor, it shall be deemed that the Contractor cannot continue to perform the Contract.

Instruction for Suspension of Construction

Where the Supervisor considers that it is necessary, after obtaining the approval from the Employer, the Supervisor can give the instruction of suspension of construction to the Contractor and the Contractor shall suspend the construction based on the instruction of the Supervisor.

Suspension of Construction in Emergency

If the suspension of construction is required due to the emergency conditions, the Contractor shall inform the Supervisor and Employer timely. The Supervisor shall give the instruction within 24 hours after receiving the notice.

Resuming after Suspension of Construction

After the suspension of construction, the Employer and the Contractor shall take effective measures to actively eliminate the effect of suspension of construction. Before resuming the construction, the Supervisor shall determine the loss caused by the suspension of construction with the Employer and the Contractor and determine the resuming conditions of the Project. Where the Project meets the resuming conditions, the Supervisor shall give the notice of resuming the construction to the Contractor after obtaining the approval of the Employer and the Contractor shall resume the construction according to the requirements of notice of resuming the construction.

If the Contractor delays and refuses resuming the construction for no reason, the Contractor shall be liable to the increased costs and delay of Construction Duration arising therefrom.

Custody of the Project during Suspension of Construction

During the suspension of construction, the Contractor shall be responsible for properly taking charge of the Project and providing the safety guarantee and the increased costs shall be borne by the Responsible Party.

Measures for Suspension of Construction

During the suspension of construction, the Employer and the Contractor shall take necessary measures to ensure the quality and safety of the Project and prevent losses from expanding due to suspension of construction.

7. Materials and Equipment

7.1 Materials and Engineering Equipment Supplied by the Employer

If the Employer provides the materials and Engineering Equipment by itself, the Employer shall, at the time of signing the Contract, specify the type, specification, model, quantity, unit price, quality grade and delivery place of materials and Engineering Equipment in Attachment *List for Materials and Equipment Supplied by the Employer* to the Special Terms and Conditions of the Contract.

The Contractor shall inform the Employer of the mobilization of materials and Engineering Equipment supplied by the Employer in written form 30 days in advance through the Supervisor.

Materials and Engineering Equipment Purchased by the Contractor

Where the Contractor is responsible for purchasing materials and Engineering Equipment, the Contractor shall purchase them in accordance with the design requirements and relevant standards. The Contractor shall also provide the certificate of product qualification and ex-factory certificate to ensure the quality of materials and Engineering Equipment.

Acceptance and Rejection of Materials and Engineering Equipment

The quality of materials and Engineering Equipment purchased by the Contractor shall be qualified. The Contractor shall inform the Supervisor to inspect the materials and Engineering Equipment 24 hours before arrival. The permanent equipment and materials shall be manufactured and produced by the Contractor in accordance with relevant quality standards. The Contractor shall submit samples of materials and relevant data to the Supervisor and shall obtain the consent of the Supervisor before using the materials or Engineering Equipment.

Where the materials and Engineering Equipment purchased by the Contractor do not conform to the design or relevant standard requirements, the Contractor shall transport the materials and Engineering Equipment that do not conform to the design or relevant standard requirements out of the Construction Site within a reasonable time required by the Supervisor and shall repurchase the materials and Engineering Equipment conforming to the requirements. The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

Storage and Use of Materials and Engineering Equipment Purchased by the Contractor

The Contractor shall properly store the purchased materials and Engineering Equipment and the Contractor shall bear relevant storage costs. Where the materials and Engineering Equipment must be inspected or tested before use according to the law, the Contractor shall carry out the inspection or test according to the requirements of the Supervisor. The Contractor shall bear the inspection or test expenses and do not use the unqualified ones.

When the Employer or the Supervisor finds that the Contractor uses the materials and Engineering Equipment that do not conform to the design or relevant standards and requirements, the Employer or the Supervisor has the right to require the Contractor to repair, remove or repurchase the materials and Engineering Equipment. The Contractor shall be liable to the increased costs and (or) the delay of the

Construction Duration.

Prohibition of Use of Unqualified Materials and Engineering Equipment

The Supervisor has the right to reject the unqualified materials or Engineering Equipment provided by the Contractor and require the Contractor to replace such materials or equipment without delay. The Supervisor shall carry out the inspection and test again after replacement and the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration.

If the Supervisor finds that the Contractor uses unqualified materials and Engineering Equipment, the Contractor shall immediately make correction as per the Supervisor's instruction and shall prohibit using unqualified materials and Engineering Equipment in the Project.

Sample

Submission and Sealing of Samples

The type, name, specification and quantity of materials or Engineering Equipment samples required to be submitted by the Contractor shall be specified in the Special Terms and Conditions of the Contract. The submission procedures of samples are as follows:

- (1) The Contractor shall submit the samples to the Supervisor 28 days before the scheduled procurement. The samples submitted by the Contractor shall come from the actual production places of supplied materials. The specification and quantity of provided samples can sufficiently indicate that the quality, model, color, surface treatment, texture, error and other required characteristics of materials or Engineering Equipment.
- (2) During each submission of samples, the Contractor shall attach it with the declaration form, clearly specifying the relevant data and documents of the submitted samples and indicating the drawing number corresponding to each sample. An opinion column shall be reserved for the reply of the Supervisor. The Supervisor shall reply the approval opinions on the samples confirmed and signed by the Employer to the Contractor within 7 days after receiving the samples submitted by the Contractor.
- (3) The samples approved and confirmed by the Employer and the Supervisor shall be sealed as per the agreed method and the sealed samples shall be one of the standard sample for testing relevant parts of the Project. The Contractor shall not use any materials or Engineering Equipment inconsistent with the samples in the course of the construction.
- (4) The approval and confirmation of samples by the Employer and the Supervisor shall be only used for confirming the characteristics or applications of relevant materials or Engineering Equipment and shall not be understood as the modification or change of the Contract nor alleviate or exempt the Contractor from any responsibilities and obligations. If the sealed samples modify or change the provisions of the Contract, the Contracting Parties shall confirm it in the form of a written agreement.

Storage of Samples

The approved samples shall be sealed and stored on site by the Supervisor. The Contractor shall provide a suitable and fixed place on site for storage of samples and keep them in good and suitable storage conditions.

Replacement of Materials and Engineering Equipment

If the substitute materials and Engineering Equipment are used in the following occasions, the Contractor shall replace them according to the procedures agreed in Subclause 8.7.2:

- (1) If they are prohibited by law which comes into effect after the Base Date;
- (2) If the Employer requires to use the substitutes;
- (3) If the substitutes must be used due to other reasons.

The Contractor shall inform the Supervisor in written form 28 days before the use of the substitute materials and Engineering Equipment and attach the following documents:

- (1) The name, quantity, specification, model, brand, performance, price and other relevant data of the replaced materials and Engineering Equipment;
- (2) The name, quantity, specification, model, brand, performance, price and other relevant data of the substitutes;
- (3) Difference between the substitutes and the replaced ones and impact of the substitutes on the Project;
- (4) Price difference between the substitutes and the replaced ones;
- (5) Reasons and causes for the use of the substitutes;
- (6) Other documents required by the Supervisor.

The Supervisor shall give a written instruction confirmed and signed by the Employer to the Contractor within 14 days after receiving the notice. If the Supervisor gives the written instruction after that time, it is deemed that the Employer and the Supervisor agree to use the substitutes.

If the Employer agrees to use the substitute materials and Engineering Equipment, the price of substitute materials and Engineering Equipment shall be confirmed based on the price of the same item in Priced Bill of Quantities or Budget Statement. If there is no same item, the price shall be confirmed by reference to the price of similar item. If there are no same and similar items, according to the principle of reasonable composition between cost and profit, the price shall be confirmed by the Contracting Parties under [Negotiation or Determination].

Construction Equipment and Temporary Facilities

Construction Equipment and Temporary Facilities Provided by the Contractor

The Contractor shall timely provide the Construction Equipment and build Temporary Facilities according to the requirements in Contract Schedule. The Contractor's Equipment entering the Construction Site can be used only after being inspected by the Supervisor. If the Contractor replaces the Contractor's Equipment as agreed in the Contract, the Contractor shall report it to the Supervisor for approval.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall bear the costs for building the Temporary Facilities on its own. If temporary land occupation is required, the Employer shall handle the application formalities and bear corresponding costs.

Construction Equipment and Temporary Facilities Provided by the Employer

The Construction Equipment or Temporary Facilities provided by the Employer shall be specified in the Special Terms and Conditions of the Contract.

Increase or Replacement of Construction Equipment Required by the Contractor

When the Construction Equipment used by the Contractor cannot meet the Contract Schedule and (or) the quality requirements, the Supervisor has the right to ask the Contractor to increase or replace the Construction Equipment. The Contractor shall increase or replace them timely and be liable to the increased costs and (or) the delay of Construction Duration.

Special Requirements on Materials and Equipment

The materials, Engineering Equipment and Construction Equipment transported by the Contractor to the Construction Site as well as the Temporary Facilities built at the Construction Site must be used for the Project only, including spare parts, installation tools and data. Without the approval of the Employer, the Contractor shall not transport them out of the Construction Site or use them for other purposes. After the approval of the Employer, the Contractor can remove idle Construction Equipment and other items as per the Construction Schedule.

Test Equipment and Testers

The Contractor shall carry out the on-site material test in accordance with the Contract or the Supervisor's instructions and the Contractor shall provide the test site, testers, test equipment and other necessary test conditions. If necessary, the Supervisor can use the test site, test equipment and other test conditions provided by the Contractor to carry out the material review test for the purpose of project quality inspection and the Contractor shall give relevant assistance.

The Contractor shall provide test equipment, sampling device, test site and test conditions according to the Special Condition of Contract and submit relevant Mobilization Schedule to the Supervisor.

The test equipment provided by the Contractor shall conform to the requirements of corresponding test procedures and shall be inspected by the competent testing institution. Before the test equipment are used formally, the equipment shall be calibrated jointly by the Supervisor and the Contractor.

The Contractor shall submit the list of testers, their positions, qualification certificates and other certification materials to the Supervisor, and the testers shall be familiar with relevant inspection and test. The Contractor shall be responsible for correctness of the test procedures of the testers and test results.

Sampling

If the test is a self-test, the Contractor can carry out the sampling separately. If the test is a spot check by the Supervisor, the sampling can be carried out by the Supervisor or by the testers of the Contractor under the supervision of the Supervisor.

Test and Inspection of Materials, Engineering Equipment and Works

The Contractor shall carry out the test and inspection on materials, Engineering Equipment and works as agreed in the Contract and provide necessary test data and original records about quality inspection of the above-mentioned materials, Engineering Equipment and works for the Supervisor. Where the test and inspection are jointly carried out by the Supervisor and the Contractor as specified in the Contract, necessary test data and original records shall be provided by the Contractor.

Where the test is a self-test, the Contractor can carry out the test separately. Where the test is a spot check by the Supervisor, the Supervisor can carry out the test separately or the Contractor and the Supervisor jointly carry out the test. Where the Contractor disagrees with the results of test carried out by the Supervisor separately, the Contractor can apply for carrying out the test jointly again. Where it is agreed to carry out the test jointly and the Supervisor fails to participate in the test as agreed, the Contractor can carry out the test on its own and submit the test results to the Supervisor and the Supervisor shall accept the test results.

Where the Supervisor has any objection to the test and test results of the Contractor or asks the Contractor to carry out the test and inspection again to ascertain the reliability of the Contractor's test and inspection results, the test can be carried out by the Supervisor and the Contractor jointly. Where the retest and re-inspection results prove that the quality of such materials, Engineering Equipment or the works do not conform to the requirements of the Contract, the Contractor shall be liable to the increased costs and (or) the delay of Construction Duration. Where the retest and re-inspection results prove that the quality of such materials, Engineering Equipment or the works conforms to the requirements of the Contract, the Employer shall be liable to the increased costs and (or) the delay of Construction Duration.

Site Process Test

The Contractor shall conduct site process test according to the Contract or the Supervisor's instructions. For large site process test, if the Supervisor considers it necessary, the Contractor shall prepare the process test plan according to the process test requirements proposed by the Supervisor, and submit it to the Supervisor for review.

8. Changes

8.1 Scope of Changes

Unless otherwise specified in Special Terms and Conditions of the Contract, changes shall be made in accordance with this Clause in case of the following occasions in the performance of the Contract:

- (1) Increase or decrease any work in the Contract or supplement extra work;
- (2) Cancel any work in the Contract excluding the work shifted to others for implementation;
- (3) Change the quality standards or other character of any the work in the Contract;
- (4) Change the base line, elevation, position and size of the works;
- (5) Change the time arrangement or implementation sequence of the works.

Changing Right

Both the Employer and the Supervisor can propose changes. Change instructions shall be issued by the Supervisor after being approved by the Employer. The Contractor can implement the changes only after receiving the change order signed and confirmed by the Employer. The Contractor shall not change any part of the works without permission.

In case of design change, the Designer shall provide the changed drawings and descriptions. Where the change is beyond the scope of original design standard or approved construction scale, the Employer shall timely handling the planning, design changes and other approval procedures.

Changing Procedures

Changes Proposed by the Employer

For changes proposed by the Employer, the Supervisor shall issue a change order to the Contractor, describing the planned changed scope of works and changed contents.

Changes Suggestion Proposed by the Supervisor

Where the Supervisor proposes the change suggestion, the Supervisor shall deliver a change plan in written form to the Employer, describing the planned changed scope of work and changed contents and reasons as well as the impact on Contract Price and Construction Duration after change. Where the Employer agrees with these changes, the Supervisor shall issue the change order to the Contractor. Otherwise, the Supervisor has no right to issue the change order without permission.

Change Implementation

After receiving the change order issued by the Supervisor, where the Contractor considers that it is unfeasible, the Contractor shall immediately give reasons. Where the Contractor considers that it is feasible, the Contractor shall give written instructions to the impact of change implementation on the Contract Price and Construction Duration and the valuation of change shall be determined by Contracting Parties in accordance with Valuation of Change.

9. Contract Price, Measurement and Payment

9.1 Form of Contract Price

The Employer and Contractor shall select one of the following forms of Contract price from the Contract Agreement:

1. Unit Price Contract

The Unit Price Contract is a construction contract for construction works, under which the Contracting Parties agree that the Contract Price shall be calculated, adjusted and determined based on the Bill of Quantities and the Comprehensive Unit Price. The Contract Unit Price shall be not adjusted within the agreed scope. The risk range included in the comprehensive unit price and the calculation method for risk costs shall be agreed by the Contracting Parties in Special Terms and Conditions of the Contract. Besides, the adjustment method for the Contract Price beyond the risk range shall also be agreed. The adjustment arising from market price fluctuation shall be conducted as per [Adjustment due to Market Price Fluctuation].

2. Lump Sum Contract

The Lump Sum Contract is a construction contract for construction works, under which the Contracting Parties agree that the Contract Price shall be calculated, adjusted and determined based on the Construction Drawing, Priced Bill of Quantities or Budget Statement and relevant conditions. The contract lump sum shall be not adjusted within the agreed scope. The risk range included in the lump sum and the calculation method for risk costs shall be agreed by the Contracting Parties in Special Terms and Conditions of the Contract. Besides, the adjustment method for the Contract Price beyond the risk range shall also be agreed. The adjustment arising from market price fluctuation shall be conducted as per [Adjustment due to Market

Price Fluctuation]. The adjustment arising from change in laws shall be conducted as per [Adjustment due to Change in Laws].

3. Other Price Forms

The Contracting Parties can agree on other forms of Contract Price in Special Terms and Conditions of the Contract.

9.2 Payment of Progress Payment

Payment Term

Unless otherwise specified in Special Terms and Conditions of the Contract, payment term shall be consistent with the measurement cycle as per [Measurement Cycle].

Preparation of Progress Payment Application Form

Unless otherwise specified in Special Terms and Conditions of the Contract, Progress Payment Application Form shall include the following contents:

- (1) The amount corresponding to completed work up to this payment term;
- (2) Increased and deducted change amount as per [Change];
- (3) Payable advance payment and deductible returned advance as per [Advance];
- (4) Quality Guarantee Deposit that shall be deducted as per [Quality Guarantee Deposit];
- (5) Claim amount to be increased and deducted as per [Claim];
- (6) Modification for the errors in the issued Payment Certificate for Progress Payment and the amount to be paid or deducted from this Progress Payment;
- (7) Other amount to be increased and deducted as agreed in the Contract.

Submission of Progress Payment Application Form

Review and Payment of Progress Payment

(1) Unless otherwise specified in Special Terms and Conditions of the Contract, the Supervisor shall review and report it to the Employer within 7 days after receiving Progress Payment Application Form and relevant data from the Contractor and the Employer shall finish the approval and issuance of the Payment Certificate for Progress Payment within 7 days after receiving the application form.

In case of any objection to the Progress Payment Application Form submitted by the Contractor, the Employer and Supervisor have the right to require the Contractor to correct such form and provide supplementary data. Afterwards, the Contractor shall submit the corrected Progress Payment Application Form. The Supervisor shall review and report it to the Employer within 7 days after receiving Progress Payment Application Form corrected by the Contractor and relevant data and the Employer shall issue a temporary Payment Certificate for Progress Payment for part without objection within 7 days after receiving the Progress Payment Application Form and relevant data reported by the Supervisor.

(2) Unless otherwise specified in Special Terms and Conditions of the Contract, the Employer shall make the payment with 14 days after signing and issuing Payment Certificate for Progress Payment or temporary Payment Certificate for Progress Payment. If the Employer fails to pay it within due date, the Employer shall pay the liquidated damages according to the benchmark interest rate for the loan of the same kind and in the same period issued by People's Bank of China.

(3) Issuing the Payment Certificate for Progress Payment or temporary Payment Certificate for Progress Payment by the Employer doesn't mean that the Employer agrees, approves or accepts corresponding work completed by the Contractor.

Correction of Progress Payment

In case of any error, omission or repetition in the issued Payment Certificate for Progress Payment through staged summary and review, both the Employer and the Contractor have the right to propose any correction application. The corrected price approved by the Employer and the Contractor shall be paid or deducted from the next payment of the Progress Payment.

10. Acceptance and Project Commissioning

10.1 Completion Acceptance

10.1.1 Completion Acceptance Conditions

The Contractor can apply for the completion acceptance for the works conforming to the following conditions:

(1) Except for the punch-list items and defect repair works agreed by the Employer, all the works within the scope of the Contract and relevant work, including the tests, commissioning and inspections required by the Contract are completed and they conform to the requirements of the Contract;

(2) The punch list, the list of defect repair work and corresponding construction plan have been prepared according to the Contract;

(3) The completion data has been prepared according to the contents and the number of copies agreed in the Contract.

Completion Acceptance Procedures

Unless otherwise specified in the Special Terms and Conditions of the Contract, the completion acceptance applied by the Contractor shall be carried out according to the following procedures:

(1) The Contractor submits an application report for completion acceptance to the Supervisor and the Supervisor shall finish the review of the application report within 14 days after receiving it and submit it to the Employer. After review, if the Supervisor considers that the works fail to meet the acceptance conditions, the Supervisor shall notify the Contractor of the work contents to be finished by the Contractor before the completion acceptance. After finishing all the work notified by the Supervisor, the Contractor shall submit the application report for completion acceptance again.

(2) After review, if the Supervisor considers that the works meet the completion acceptance conditions, the Supervisor shall submit the application report for completion acceptance to the Employer. The Employer shall finish the approval within 28 days after receiving the application report for completion acceptance reviewed by the Supervisor and organize the related personnel such as the Supervisor, the Contractor and the Designer to finish the completion acceptance.

(3) If the completion acceptance is qualified, the Employer shall issue the Project Acceptance Certificate to the Contractor within 14 days after the completion acceptance is qualified. In the event that the Employer

fails to issue the Project Acceptance Certificate within the specified period without justified reasons, the Project Acceptance Certificate shall be deemed as being issued since the 15th day after the completion acceptance is qualified.

(4) In the event that the completion acceptance is not qualified, the Supervisor shall give instructions as per the acceptance opinions to require the Contractor to re-work, repair the unqualified works or to take other remedial measures. The Contractor shall be liable to the increased costs and (or) the delay of the Construction Duration. After the re-work and repair for the unqualified works are completed or other remedial measures are taken by the Contractor, the application report for completion acceptance shall be re-submitted and the completion acceptance shall be carried out again as per the procedures herein.

(5) If the Project has not been accepted or fails to pass the acceptance, but the Employer puts it into operation without permission, the Project Acceptance Certificate shall be issued to the Contractor within 7 days after the occupied works are transferred. If the Employer fails to issue the Project Acceptance Certificate within the above mentioned period without justified reasons, the Project Acceptance Certificate shall be deemed as being issued since the 15th day after the occupied works are transferred.

Unless otherwise specified in the Special Terms and Conditions of the Contract, if the Employer fails to organize the completion acceptance and issue the Project Acceptance Certificate in accordance with the provisions in this clause, the Employer shall pay the liquidated damages according to the benchmark interest rate for the loan of the same kind in the same period issued by People's Bank of China based on the signed Contract Price as the cardinal number for each overdue day.

Completion Date

If the Works pass the completion acceptance, the Actual Completion Date should be the date when the Contractor submits the application report for completion acceptance, and the date shall be clearly indicated on the Project Acceptance Certificate. If the completion acceptance fails to be finished within 42 days after the date when the Supervisor receives the application report for completion acceptance for the reason of the Employer, or the Employer does not issue the Project Acceptance Certificate after the completion acceptance, the Actual Completion Date should be the date when the application report for completion acceptance is submitted. If the completion acceptance is not carried out for the Works and the Employer puts it into operation without permission, the Actual Completion Date should be the date when the occupied works are transferred.

Refuse to Accept All or Part of the Works

For the works failing to pass the completion acceptance, the Contractor shall conduct the completion acceptance again after rectification. If the works are still unqualified after the second completion acceptance and no remedial measure is applicable, the Employer can refuse to accept the unqualified works. If any other works cannot be normally used due to the unqualified works, the Contractor shall take measures to guarantee the normal usage of the relevant works, and the Contractor shall be liable to the increased costs and (or) the delay of the Construction Duration arising therefrom.

10.1.2 Handover and Acceptance of All and Part of the Works

Unless otherwise specified in Special Terms and Conditions of the Contract, the Contracting Parties shall finish the handover of the works within 7 days after the issuance of the Project Acceptance Certificate.

If the Contractor refuses to handover the works without justified reasons, the Contractor shall bear various expenses related to taking charge of the Project, finished product protection and storage. The Contracting Parties can otherwise specify the default responsibilities of the Contractor for the refusal of the works handover in the Special Terms and Conditions of the Contract.

10.2 Demobilization

Demobilization

After the Project Acceptance Certificate is issued, the Contractor shall clean the Construction Site according to the following requirements:

- (1) All the wastes left have been removed out of the Construction Site;
- (2) The Temporary Works have been dismantled and the site has been cleaned, leveled or recovered;
- (3) The personnel, Contractor's Construction Equipment and residual materials, including the waste Construction Equipment and materials, which should be demobilized and removed according to the Contract, have been demobilized and removed from the Construction Site as planned;
- (4) The construction debris in surrounding area of the Construction Site and on the nearby road and river has been completely removed;
- (5) Other Construction Site clearing work has been finished completely.

The demobilization cost at the Construction Site shall be borne by the Contractor. The Contractor shall finish the demobilization work within the time limit agreed in the Special Terms and Conditions of the Contract. If the demobilization is not completed within the time limit, the Employer has the right to sell or treat the items left by the Contractor at the Employer's own will, and the expenses incurred therefrom shall be borne by the Contractor. The Employer's gains generated from selling the items left by the Contractor shall be returned to the Contractor after necessary expenses being deducted.

Ground Surface Recovery

The Contractor shall recover the temporarily occupied land and clean the site according to the requirements of the Employer. If the Contractor fails to recover the temporarily occupied land according to the requirements of the Employer, or the site cleaning fails to meet the requirements of the Contract, the Employer has the right to entrust other personnel to recover or clean the site, and the expenses incurred therefrom shall be borne by the Contractor.

11. Completion Settlement

11.1 Completion Settlement Application

Unless otherwise specified in the Special Terms and Conditions of the Contract, within 28 days after project completion acceptance is qualified, the Contractor shall submit the Completion Settlement Application Form and the complete settlement data to the Employer and the Supervisor. The data list and the number of copies together with other requirements related to Completion Settlement Application Form shall be agreed by the Contracting Parties in the Special Terms and Conditions of the Contract.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Completion Settlement Application Form shall include the following contents:

- (1) Contract Price in completion settlement;
- (2) The amount the Employer has paid to the Contractor;
- (3) Detained Quality Guarantee Deposit;
- (4) The Contract Price the Employer shall pay to the Contractor.

11.2 Completion Settlement Verification

(1) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Supervisor shall complete the verification and submit it to the Employer within 14 days after receiving the Completion Settlement Application Form. The Employer shall finish review and approval within 14 days after receiving the Completion Settlement Application Form verified and submitted by the Supervisor and the Supervisor shall sign and issue the Completion Payment Certificate signed and confirmed by the Employer to the Contractor. In the event that the Supervisor or the Employer has any objection to the Completion Settlement Application Form, the Supervisor or the Employer has the right to ask the Contractor to correct it and provide supplementary data and the Contractor shall submit the corrected Completion Settlement Application Form.

In the event that the Employer fails to finish the review and approval and raises no objection within 28 days after receiving the Completion Settlement Application Form submitted by the Contractor, it shall be deemed that the Employer has approved the Completion Settlement Application Form submitted by the Contractor and that the Employer has signed and issued the Completion Payment Certificate since the 29th day after receiving the Completion Settlement Application Form submitted by the Contractor.

(2) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Employer shall make the completion payment to the Contractor within 14 days after signing and issuing the Completion Payment Certificate. In the event that the Employer fails to make the payment within the time limit, the Employer shall pay liquidated damages according to the benchmark interest rate issued by the People's Bank of China for the loan of the same kind in the same period. In the event that the Employer delays in making the payment for more than 56 days, the Employer shall pay liquidated damages according to the interest rate twice as much as the benchmark interest rate issued by the People's Bank of China for the loan of the same kind in the same period.

(3) Where the Contractor has any objection to the Completion Payment Certificate signed and confirmed by the Employer, the Contractor shall raise the objection within 7 days after receiving the Completion Payment Certificate signed and confirmed by the Employer and the Contracting Parties shall review according to the methods and procedures specified in the Special Terms and Conditions of the Contract or handle the objection according to [Dispute Settlement]. For the part without objections, the Employer shall sign and issue temporary Completion Payment Certificate and make the payment according to Subclause (2). Where the Contractor raises no objections within the time limit, it shall be deemed that the Contractor accepts the approval results of the Employer.

11.3 Final Settlement

11.3.1 Final Settlement Application Form

(1) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall submit the Final Settlement Application Form in the number of copies specified in the Special Terms and Conditions of the Contract and relevant supporting evidence to the Employer within 7 days after the Termination Certificate for Defects Liability Period is issued.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Final Settlement Application Form shall clearly list the Quality Guarantee Deposit, deductible Quality Guarantee Deposit and the increased and reduced expenses during the Defects Liability Period.

(2) In the event that the Employer has any objection to the Final Settlement Application Form, the Employer has the right to require the Contractor to make correction and provide supplementary data and the Contractor shall submit the corrected Final Settlement Application Form to the Employer.

11.3.2 Final Settlement Certificate and Payment

(1) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Employer shall finish review and approval and issue Final Settlement Certificate to the Contractor within 14 days after receiving the Final Settlement Application Form submitted by the Contractor. In the event that the Employer fails to finish the review and approval and raises no objection within the time limit, it shall be deemed that the Employer agrees with the Final Settlement Application Form submitted by the Contractor and that the Final Settlement Application Form submitted by the Contractor is deemed to be issued since the 15th day after the Employer receives the Final Settlement Application Form submitted by the Contractor.

(2) Unless otherwise specified in the Special Terms and Conditions of the Contract, the Employer shall make the payment within 7 days after the Final Settlement Certificate is issued. In the event that the Employer fails to make the payment within the time limit, the Employer shall pay liquidated damages according to the benchmark interest rate issued by the People's Bank of China for the loan of the same kind in the same period. In the event that the Employer delays in making the payment for more than 56 days, the Employer shall pay liquidated damages according to the interest rate twice as much as the benchmark interest rate issued by the People's Bank of China for the loan of the same kind in the same period.

(3) In the event that the Contractor has any objection to the Final Settlement Certificate issued by the Employer, the objection shall be handled according to [Dispute Settlement].

12. Breach of Contract

12.1 Breach by the Employer

12.1.1 Cases of Breach by the Employer

The following cases during the performance of the Contract are the defaults by the Employer:

- (1) The Contract Price is not paid according to the Contract for the reason of the Employer;
- (2) The Employer fails to fulfill other obligations as specified in the Contract.

12.1.2 Where the Employer requires to terminate or rescind the Contract for its own reason, the Employer shall notify the Contractor and the Contract terminates or rescinds since the Contractor receives the notice. However, the Employer shall pay the work which has been completed by the Contractor as well as the amount for materials, Engineering Equipment and other items purchased and paid by the

Contractor for the project construction within 28 days upon the termination of the Contract.

12.2 Breach by the Contractor

12.2.1 Cases of Breach by the Contractor

The following cases during the performance of the Contract are the defaults by the Contractor:

- (1) The Contractor contracts out not in accordance with the Contract or subcontracts illegally;
- (2) The Contractor purchases and uses unqualified materials and Engineering Equipment not in accordance with the Contract;
- (3) The quality of the Construction Works fails to meet the requirements of the Contract for the reason of the Contractor;
- (4) The Contractor removes the materials or equipment entering the Construction Site as agreed in the Contract out of the Construction Site without permission, not in accordance with [Special Requirements for Materials and Equipment];
- (5) The Contractor fails to finish the works specified in the Contract on time according to the Construction Schedule, leading to delay in the Construction Duration;
- (6) During the Defects Liability Period and Warranty Period, the Contractor fails to repair the defects of the works within reasonable time limit, or refuses to repair according to the requirements of the Employer;
- (7) The Contractor clearly states or does action to show that it will not fulfill the main obligations agreed in the Contract;
- (8) The Contractor fails to fulfill other obligations as agreed in the Contract.

Except for other defaults agreed in Paragraph (7) under this Subclause, the Supervisor can send a rectification notice to the Contractor to require the Contractor to rectify within the time limit.

12.2.2 The Contractor's Liabilities for Breach

The Contractor shall be liable to the increased costs and (or) the delay of Construction Duration due to its breaches. In addition, the Contracting Parties can specify the methods of bearing liability and calculation method for the Contractor's liabilities for breach in Special Terms and Conditions of the Contract.

12.2.3 Termination of the Contract Due to Breach of the Contractor

Unless otherwise specified in the Special Terms and Conditions of the Contract, when the defaults agreed in [Cases of Breach by the Contractor] occur or after the Supervisor has sent the rectification notice, the Contractor fails to correct its breaches within the specified reasonable time limit, causing that the contract purposes cannot be achieved, the Employer has the right to terminate the Contract. After the termination of the Contract, for the needs to continue completing the works, the Employer has the right to use the Contractor's materials, equipment and Temporary Works, documents and other documents prepared by the Contractor or in the Contractor's name at the Construction Site. The Contracting Parties shall specify the methods of bearing corresponding expenses in the Special Terms and Conditions of the Contract. The continuous use by the Employer shall not exempt or alleviate the Contractor from the Contractor's liabilities for breaches.

Treatment after the Termination of the Contract Due to Default of the Contractor

Where the Contract is terminated for the reason of the Contractor, the Contracting Parties shall finish valuation, payment and settlement within 28 days after the termination of the Contract as per the following agreement:

- (1) After the termination of the Contract, discuss or determine the Contract Price corresponding to the works actually completed by the Contractor, as well as the values of the materials, Engineering Equipment, Construction Equipment and Temporary Works provided by the Contractor, according to [Negotiation or Determination];
- (2) The liquidated damages to be paid by the Contractor after the termination of the Contract;
- (3) Losses to the Employer due to the termination of the Contract;
- (4) After the termination of the Contract, the Contractor shall clean the site and demobilize according to the requirements of the Employer and the instructions from the Supervisor;
- (5) After the termination of the Contract, the Employer and the Contractor shall make settlement, issue the Final Settlement Payment Certificate and settle all payments.

Where the Contract is terminated due to the Contractor's breaches, the Employer has the right to suspend the payments to the Contractor and ascertain all payments and the deducted amount. Where the Employer and the Contractor fail to reach an agreement on the settlement and payments after the termination of the Contract, it shall be handled according to [Dispute Settlement].

Assignment of Procurement Contract Rights and Interests

Where the Contract is terminated due to the Contractor's breaches, the Employer has the right to require the Contractor to assign the rights and interests of the Procurement Contract for the materials and equipment, which is signed for the performance of the Contract, to the Employer and the Contractor shall assist the Employer in reaching relevant assignment agreements with the suppliers for such Procurement Contract within 14 days after receiving the notice about the termination of the Contract.

12.2.4 For the compensation for damages, liquidated damages, fines and related expenses the Employer requires the Contractor to pay as agreed in the Contract, the Employer can deduct from the Project Payment payable to the Contractor. The amount exceeding the Project Payment shall be paid by the Contractor separately.

13. Force Majeure

13.1 Affirmation of Force Majeure

The Force Majeure refers to natural hazards and social sudden events such as earthquake, tsunami, plague, riot, curfew, rebellion, war, and other conditions agreed in Special Terms and Conditions of the Contract that are unforeseeable by the Contracting Parties when signing the Contract and unavoidable as well as insurmountable during the performance of the Contract.

After the Force Majeure happens, the Employer and the Contractor shall collect evidence proving the occurrence of such force majeure and the losses caused by it and calculate such losses timely and carefully. Any disagreement between the Contracting Parties on the confirmation of force majeure or the losses arising therefrom shall be handled by the Supervisor according to [Negotiation or Determination]. Any dispute

thereof shall be handled according to [Dispute Settlement].

Notice of Force Majeure

Where the force majeure event prevents one contracting party from performing obligations under the Contract, this party shall notify the other contracting party and the Supervisor immediately in written form about detailed conditions of such force majeure and about influences on the performance of the Contract and provide necessary evidences.

Where the force majeure continues, one contracting party shall timely submit interim reports to the other contracting party and the Supervisor so as to describe the force majeure and influences on the performance of the Contract and submit a final report and relevant data within 28 days after such force majeure ends.

Undertaking Consequences of Force Majeure

The Contracting Parties shall respectively undertake the consequences and damages caused by the Force Majeure according to the laws and regulations and the Contract. The works completed prior to the occurrence of the force majeure shall be measured and paid as per the Contract.

13.2 Termination of the Contract Due to Force Majeure

Where the Contract cannot be performed for consecutive 84 days or for accumulative 140 days due to force majeure, the Employer and the Contractor both have the right to terminate the Contract. After the termination of the Contract, both Contracting Parties shall negotiate or determine the payments which shall be made by the Employer.

14. Insurance

14.1 Engineering Insurance

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall purchase the contractors' all risks and erection all risks.

Employment Injury Insurance

The Employer shall purchase the employment injury insurance for himself in accordance with laws and regulations. In addition, the Employer shall also purchase the employment injury insurance for the Employer's employees at the Construction Site and pay all relevant fees for that and require the Supervisor and the third party hired by the Employer for the performance of the Contract to purchase the employment injury insurance by law.

The Contractor shall purchase the employment injury insurance for himself in accordance with laws and regulations. In addition, the Contractor shall also purchase the employment injury insurance for its staff and pay all relevant fees for this and require the Subcontractor and the third party hired by the Contractor for the performance of the Contract to purchase the employment injury insurance by law.

Other Insurances

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall

purchase the life accident insurance for its staff at the Construction Site and pay premiums for this, including their staff and persons of the third party hired for the performance of the Contract.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall purchase the property insurance for its Construction Equipment.

On-going Term Insurance

The Contracting Parties shall keep in touch with the insurer so that the insurer can be aware of any changes in the construction at any time and guarantee the on-going term insurance according to the insurance contract clauses.

Insurance Certificate

The Contracting Parties shall timely provide the other party with the insurance certificate and copies of the insurance policies for all insurances it has purchased.

Where the Contractor fails to purchase insurance according to the Contract, or fails to maintain the effectiveness of the insurance, the Employer can purchase the insurance on behalf of the Contractor at the expense of the Contractor. In case of inadequate compensation caused by the Contractor's failure to purchase insurance according to the Contract, the Contractor shall be responsible for complementing the amount of compensation.

15. Dispute Settlement

Reconciliation

The Contracting Parties can reconcile their disputes by themselves. The agreement made through such reconciliation shall be regarded as a supplementary document to the Contract after being signed and sealed by the Contracting Parties. The Contracting Parties shall comply with such agreement.

Mediation

The Contracting Parties can request the construction administrative authority, industrial association or other third parties to mediate disputes. Any agreement made through such mediation shall be regarded as a supplementary document to the Contract after being signed and sealed by the Contracting Parties. The Contracting Parties shall comply with such agreement.

Arbitration or Litigation

For disputes arising from the Contract or matters related to the Contract, the Contracting Parties can stipulate one of the following methods in the Special Terms and Conditions of the Contract to settle such disputes:

- (1) Apply for arbitration to the agreed arbitration committee;
- (2) File a lawsuit to the people's court having jurisdiction.

16. Other Agreed Defects Liability and Warranty

Warranty Principles

After the works are handed over to the Employer, for the quality defects caused by the Contractor, the Contractor shall assume the quality defect liability and warranty obligations. When the Defects Liability Period expires, the Contractor shall still assume the obligation of warranty according to the Warranty Period of each part of works agreed in the Contract.

Defects Liability Period

The Defects Liability Period shall be calculated from the actual project Completion Date and the Contracting Parties shall specify the specific period of the Defects Liability Period in the Special Terms and Conditions of the Contract.

Where the acceptance of Unit Works is prior to that of the Project, the Defects Liability Period of the Unit Works, which is qualified through acceptance and delivered for service, shall begin from the date when Unit Works are qualified through acceptance. Where the completion acceptance for the construction works cannot be carried out according to the time limit as specified in the Contract due to the Contractor, the Defects Liability Period shall begin from the date when the completion acceptance is actually passed.

After the completion acceptance of works is qualified, the Contractor shall be responsible for repair the defects caused by the Contractor and bear corresponding identification and maintenance expenses. Where the Contractor doesn't repair nor bear expenses, the Employer can deduct such expensed from the guarantee deposit or bank guarantee. The Employer can claim compensation against the Contractor for the amount exceeding the guarantee deposit. The Contractor's repair and bearing of corresponding expenses will not exempt the Contractor from the liability for damages to the works.

After any defect or damage is repaired, where it is checked and proved that such defect or damage has affected the service and performance of the construction works or Engineering Equipment, the Contractor shall re-conduct the tests and commissioning as agreed in the Contract. And all the expenses arising therefrom shall be borne by the Responsible Party.

Unless otherwise specified in the Special Terms and Conditions of the Contract, the Contractor shall issue a notice on expiration of Defects Liability Period to the Employer within 7 days upon the expiration of the Defects Liability Period. The Employer shall verify whether the Contractor has fulfilled the defect repair obligations within 14 days upon receipt of the notice on expiration of Defects Liability Period. Where the Contractor fails to fulfill its defect repair obligations, the Employer has the right to deduct the amount corresponding to the maintenance costs. The Employer shall issue the Termination Certificate for Defects Liability Period to the Contractor within 14 days after receiving the notice on expiration of Defects Liability Period.

Quality Guarantee Deposit

The Quality Guarantee Deposit deducted through negotiation between the Contracting Parties shall be defined in the Special Terms and Conditions of the Contract.

Warranty

Warranty Liability

The Construction Works Warranty Period shall begin from the date when the construction works are qualified through acceptance. The Warranty Period for specific divisional works and sub-divisional works shall be specified by the Contracting Parties in the Special Terms and Conditions of the Contract. However, the Warranty Period shall be not less than the minimum legal Warranty Period. During the Construction Works Warranty Period, the Contractor shall assume the warranty liabilities according to relevant laws and regulations as well as the Contract.

Repair Expenses

During the Warranty Period, the repair expenses shall comply with the following agreements:

(1) During the Warranty Period, the Contractor shall be responsible for repairing the defects and damages of the works caused by the Contractor and bearing the repair costs as well as assuming the liabilities for personal injury and property damages caused by such defects and damages of the construction works;

(3) The Contractor may be entrusted to repair the defects and damages of the works caused for other reasons, while the Employer shall bear the repair costs and pay reasonable profits to the Contractor. The Responsible Party shall assume the liabilities for personal injury and property damages caused by such defects and damages of the construction works.

Repair Notice

During the Warranty Period, where the Employer finds defects or damages in the accepted works in service, the Employer shall notify the Contractor in written form to repair. However, where it is urgent to repair such defects or damages immediately, the Employer may inform the Contractor orally and shall confirm the contents in written form within 48 hours after the oral notice, and the Contractor shall arrive at the Construction Site and repair such defects or damages within the reasonable time limit specified in the Special Terms and Conditions of the Contract.

Repair Failure

For the defects or damages of the construction works caused by the Contractor, where the Contractor refuses to repair or fails to repair such defects or damages within the reasonable time limit, and fails to repair even after receiving the written exhortation from the Employer, the Employer has the right to repair by itself or entrust a third party to repair, while the expenses generated therefrom shall be borne by the Contractor. However, where the repair exceeds the scope of defects or damages, the repair expenses for parts exceeding such scope shall be borne by the Employer.

Contractor's Access Right

During the Warranty Period, to repair defects or damages, the Contractor has the right to access and leave the Construction Site. Except the emergencies where it is urgent to repair defects or damages immediately, the Contractor shall inform the Employer of the access time for repair 24 hours in advance. The Contractor shall enter the Construction Site with the prior consent of the Employer and shall not affect the normal production and operation of the Employer. The Contractor shall observe relevant security and confidentiality regulations of the Employer.

Part III Special Terms and Conditions of the Contract

1 General Agreement

1.1 Definitions

1.1.1 Composition of the Contract Documents:

- (1) The Contract Agreement;
- (2) Special Terms and Conditions of the Contract;
- (3) General Terms and Conditions of the Contract;
- (4) Letter of Acceptance;
- (5) Standards, specifications and relevant technical documents;
- (6) Drawings (approved drawings provided by the Employer to the Contractor);
- (7) The bid, project budget statement and the attachments thereof;
- (8) Production Base Project for Optical Communication Products of GLOBAL Technology Inc.— Competitive Business Negotiation;
- (9) RFI documents 1 of GLOBAL Technology Inc.;
- (10) The negotiation, change/modification and other written agreements or documents between the Parties regarding the Project shall be deemed as the constituent parts of the Contract.

1.1.2 Contracting Parties and Other Interested Parties

Designer:

Name: Beijing Zhongyuan Engineering Design Consulting Co., Ltd.;

Qualification category and class: Building Industry Grade A;

Contact number: 87247967;

E-mail: _____

Correspondence address: _____

1.1.3 Project and Equipment

1.1.3.1 Other places which are constituent parts of the construction site include:

1.1.3.2 Temporarily occupied land includes: _____.

1.2 Laws

Other normative documents applicable to the Contract: per the applicable national, provincial, municipal and local laws, regulations, rules, standards and mandatory standard

provisions currently in force.

1.3 Standards and Specifications

1.3.1 Specifications and standards applicable to the Project: Quality assessment and acceptance of the Project shall be performed according to such national and local construction and acceptance specifications formulated by the state as *Specification for Construction and Acceptance of Building Decoration Projects (JGJ73-91)* and *Unified Standards for Quality Inspection and Assessment of Architectural Installation Work (GBJ300-88)*.

1.4 Priority of Contract Documents

1. Contract Agreement;
2. Special Terms and Conditions of the Contract;
3. General Terms and Conditions of the Contract;
4. Letter of acceptance;
5. Standards, specifications and relevant technical documents;
6. Drawings (approved drawings provided by the Employer to the Contractor);
7. The bid, project budget statement and the attachments thereof;
8. Production Base Project for Optical Communication Products of GLOBAL Technology Inc.— Competitive Business Negotiation;
9. RFI documents 1 of GLOBAL Technology Inc.;
10. The negotiation, change/modification and other written agreements or documents between the Parties regarding the Project shall be deemed as the constituent parts of the Contract.

1.5 Drawings and the Contractor's Documents

1.5.1 Provision of Drawings

Deadline for the Employer to provide drawings to the Contractor: February 10, 2018;

Quantity of the drawings provided by the Employer to the Contractor: 6 sets;

Confidentiality of the Drawings required by the Employer: no disclosure.

1.6 Liaison

1.6.1 Notices, approvals, proofs, certifications, instructions, orders, requirements, requests, consents, comments, confirmations and decisions related to the Contract, all in written form, shall

be delivered to the other party within / days.

1.6.2 The place for the Employer to receive documents: GLOBAL Technology Inc.

The receiver designated by the Employer is: Zhang Lili.

The place for the Contractor to receive documents: GLOBAL Technology Inc.

The receiver designated by the Contractor is: _____ .

1.7. Transportation

1.7.1 Right to access to the site. It is agreed that construction personnel shall not access to the site without identification cards.

1.7.2 On-site Transportation

It is agreed that the construction access shall be the boundary between off-site and on-site transportation.

1.7.3 Transportation of Extra Large and Extra Heavy Objects

The temporary reinforcement and reformation costs of road and bridge necessary for transporting extra-large or extra heavy objects and other relevant costs shall be borne by the Contractor.

1.8 IP rights: The copyright of the Drawings provided to the Contractor by the Employer, the technical specifications prepared by the Employer or prepared under the entrustment of the Employer for implementing the Project, and the documents which reflect the requirements of the Employer for the contract or of other similar natures shall belong to the Employer.

1.9 Correction of Errors in Bill of Quantities

Contract Price adjustment due to errors in Bill of Quantities: no adjustment.

Deviation range of quantities that allow Contract Price adjustment: none.

2. The Employer

2.1 The Employer's Representative

Name: _____;

ID number: _____;

Title: _____;

Contact number: _____;

E-mail: _____;

Correspondence address: _____

The scope of authority by the Employer to the Employer's representative is as follows:____\.

2.2 Engineer Designated by the Employer

Name:

Title: Employer's Representative

Authorities: Designate a contract performance representative to the construction site to manage the project progress and project quality, inspect project materials, conduct recheck, participate in project acceptance, supervise and execute payment of the Project Payment, manage construction and safety, issue cease work order, resumption order and acceleration order, and determination subcontractors.

2.3 Provision of Construction Site, Construction Conditions and Basic Data

2.3.1 Provision of Construction Site

Time limit requirements for the Employer to hand over the construction site: The construction party shall be responsible for construction and the Employer shall be responsible for coordination so that the construction site can be completed before the commencement date as specified in the Contract.

2.3.2 Provision of Construction Conditions

Necessary conditions required for construction provided by the Employer include:

(1) Connecting the required water and electricity lines to the construction site as per the time, location and supply requirements;

(2) Organizing relevant project departments to conduct joint checkup of drawings and design clarification before commencement;

(3) Coordinating in protection of underground pipelines, adjoining buildings, structures (including preserved cultural relics), and ancient and precious trees surrounding the construction site. If such items are discovered before construction, the Employer shall be responsible for the coordination.

Other work agreed by the Parties to be done by the Employer shall be resolved through negotiation by the Parties when occurred;

Work of the Contractor entrusted by the Employer shall be otherwise negotiated during the construction period.

3. The Contractor

3.1 The Contractor's General Obligations

Content of completion materials submitted by the Contractor: Completion Report.

Quantity of completion materials that the Contractor needs to submit: 1 set.

Expenses of completion materials submitted by the Contractor: none.

Handover time for completion materials submitted by the Contractor: within 15 days upon completion.

Requirements for form of completion materials submitted by the Contractor: written form.

Other obligations of the Contractor:

(A) Names of the plans and statements to be provided and the time to finish the provision: Before construction, the Contractor shall provide the master progress plan of the Project for the Employer to check, and shall provide the Employer with one copy of corresponding project progress plan before the 25th day of each month.

(B) Responsibilities and requirements for safeguarding construction and undertaking lighting for construction not at night: The Contractor shall assume such responsibilities and requirements from the commencement date to the date when the Project passes completion acceptance and is formally delivered to the Employer. (Formal handover and take-over procedures shall be handled)

(C) Management procedures relevant to the traffic, environmental sanitation and construction noise on construction site to be handled by the Contractor: Such procedures shall be handled in accordance with requirements.

(D) Special requirements and undertaking of costs for protection of completed works: The Contractor shall protect the completed works before delivery of the Project, and the Employer shall protect such works after delivery of the Project. If the Employer proposes special protection requirements, it shall undertake to pay the costs incurred therefrom and shall include such costs in the project settlement in the form of RFI documents.

(E) Requirements and undertaking of costs for protection of underground pipelines, adjoining buildings, structures (including preserved cultural relics), and ancient and precious trees surrounding the construction site: The Employer and the Contractor shall jointly protect such items. If such items affect the Project construction, or if the Employer fails to provide accurate and

complete data, the losses incurred therefrom shall be assumed by the Employer. During the construction, the structure and all equipment pipelines of the original buildings are NOT allowed to be removed or changed without consent of the Employer or approval of relevant departments.

(F) Requirements for construction site cleanness and sanitation: The requirements and standards of the relevant local departments and industrial competent authorities shall be executed. The Contractor shall ensure the following: the temporary roads are smooth, materials are stacked neatly, rubbish and sundries are piled in a centralized manner, the requirements of “material use-up and site clearing upon completion of works” are achieved, the management regulations of relevant governmental departments on construction site traffic, construction noise and environmental protection and safe production are observed, relevant procedures are handled as per regulations, and written notices are given to the Employer. The Contractor shall assume the costs incurred therefrom.

(F) Other work to be done by the Contractor as agreed by the Parties: It is required to wear safety helmets before entering the construction site. Two copies of complete technical data shall be provided within 15 days upon completion, two sets of as-built drawings shall be provided within 10 days upon completion, and other data required during the construction period shall be provided subject to negotiation between the Parties.

(G) Before the completed Project is delivered to the Employer, the Contractor shall protect all the facilities and completed works on the site, including the original works, facilities and equipment delivered by the Employer to the Contractor.

3.2 Project Manager

Name: Fu Guixiang;

ID number: 512223197607154698;

Title: Project Manager;

Qualification Grade of Constructor: Grade I;

Certified Constructor Certificate No.: _____;

Tel: 13906694930;

3.3 Subcontracting

3.3.1 General Agreement on Subcontracting

All the parts of the Project shall not be contracted out.

3.3.2 Determination of Subcontracting

The special works that can be subcontracted are as follows. If the Contractor cannot meet the Employer's requirements for construction duration and quality due to such reasons as personnel, machines and tools, the Employer may allow the Contractor to subcontract the divisional works (e.g., curtain walls, water protection for roofs, air conditioning and greening) of the Project to the subcontractors with corresponding qualifications. However, the major works shall not be subcontracted. The Project shall not be contracted out. The Contractor shall assume the joint responsibilities for the subcontracted works.

3.4 Custody of the Project and Protection of Finished Products and Semi-finished Products

The Contractor shall be responsible for taking custody of the Project and relevant materials and engineering equipment during the construction period (according to Clause 3.4 of the General Terms and Conditions).

3.5. Performance Guarantee

The Contractor undertakes to the Employer as follows: To ensure successful performance of the Project, the Contractor undertakes to make the Project pass acceptance at a time; The Contractor undertakes to make all the works pass acceptance at a time, and if there is any unacceptable work, the Employer may terminate the Contract immediately and the Contractor shall have no objections; If there are any construction operations in a stage failing to pass acceptance, the Contractor undertake to waive the payments for the operations in that stage, the Employer may confiscate the performance bond provided by the Contractor and contract out to the third party, the Contractor shall have no objections.

4. Project Quality

4.1. Quality Requirements

Special quality standards and requirements: The Project shall pass acceptance at a time.

4.2 Inspection for Concealed Works

The Employer shall submit a written application for extension 48 hours in advance if it is unable

to conduct the acceptance work on time.

The extended period shall not exceed 24 hours.

4.3. Concealed Works and Interim Acceptance

4.3.1 Quality assessment and acceptance of the Project shall be performed according to construction drawings, instructions, design changes and such construction and acceptance specifications formulated by the state as *Specification for Construction and Acceptance of Building Decoration Projects* (JGJ73-91) and *Unified Standards for Quality Inspection and Assessment of Architectural Installation Work* (GBJ300-88).

4.3.2 The parts subject to interim acceptance shall be agreed by the Parties. The Contractor must give a 2 days' notice to the quality supervision department, the design institute and the Employer for acceptance and approval before proceeding with the next construction procedure, otherwise the Employer may require the Contractor to open all or part of the concealed works for inspection and the repair costs incurred therefrom shall be assumed by the Contractor. If the Employer requires re-inspection, the Contractor shall conduct the re-inspection as required.

4.3.3 Quality of the Project shall meet the national quality assessment standards. If the Employer requires part of or all project items to meet the excellent standards, it shall not pay the Contractor for the additional costs thereof.

4.3.4 If the Project quality is affected due to the unqualified materials or equipment provided by the Employer, the Employer shall bear the cost for rework and the construction duration shall be extended accordingly.

4.3.5 If a quality accident happened on account of the Contractor, the Contractor shall bear the cost for rework, and the construction duration shall not be extended.

4.3.6 After completion, the Contractor shall inform the Employer to conduct acceptance. The Employer shall organize acceptance and handle the procedures for acceptance and delivery within 3 workdays upon receipt of the acceptance notice. If the Employer fails to organize the acceptance within the specified time, it shall promptly inform Party B and determine another date for the acceptance. If the Project passes the acceptance at a time, Party A shall accept the completion date.

5. Safe and Civilized Construction and Environmental Protection

The Contractor shall abide by management regulations concerning safe production in project

construction, organize construction fully in accordance with safety standards, be subject to supervision and inspection legally conducted by safety inspectors of this industry at any time and take necessary protection measures, to clear risks of accidents. The Contractor shall be responsible for and pay for the accidents resulting from the Contractor's inadequate safety measures. The Employer shall provide safety education to its staff on the construction site and be responsible for their dangerous behaviors. The Employer shall not require the Contractor of construction against the safety management regulations. The Contractor shall be fully responsible for the work injury accidents of the employees of the Contractor and the injuries to other persons incurred during the construction period.

In addition, the Contractor shall execute relevant matters as per the applicable provisions of "5.1 Safe and Civilized Construction" in the General Terms and Conditions.

6. Construction Duration and Progress

6.1 Construction Organization Design

6.1.1 Other contents that shall be included in the construction organization design agreed by the Parties hereto: ∟

6.1.2 Submittal and Modification of Construction Organization Design

Agreement on submittal time of a detailed construction organization design by the Contractor: Construction organization design and progress schedule shall be submitted within 3 days prior to commencement.

Time for approval by the Engineer: within 3 days.

6.2 Commencement

6.2.1 Preparation for Commencement

Period for the Contractor to submit the application form of project commencement: 3 days prior to commencement.

Other preparation for commencement that shall be done by the Employer and the period: the execution date of the Contract.

Other preparation for commencement that shall be done by the Contractor and the period: within 7 days after the execution date of the Contract.

6.2.2 Notice to Proceed

If the Notice to Proceed is not issued within 1 day after the planned commencement date on account of the Employer, the Contractor has the right to require adjustment of the price or cancel the Contract.

6.3. Delay of Construction Duration

6.3.1 If the Employer requires the Project to be completed ahead of the time agreed herein, consent of the Contractor shall be obtained.

6.3.2 The construction duration shall be extended accordingly if it is affected due to the Employer's failure to complete the work as agreed; the construction duration shall be extended accordingly if the Employer fails to pay the project progress payment on time.

6.3.3 If the Project was not started on time or was suspended without reasons on account of the Contractor, the construction duration will not be extended.

6.3.4 If the construction is suspended for more than 8 hours (counted in accumulation within one week) due to design changes, force majeure and electricity, water or gas suspension not on account of the Contractor, the construction duration shall be extended accordingly.

6.3.5 Other conditions of delay of construction duration as agreed between the Parties: The construction duration shall not be extended unless being approved and confirmed by the Employer. If the Contractor fails to complete the Project as scheduled (contract construction duration + signed construction duration), liquidated damages will not be charged if the delay does not exceed 5 days (including statutory holidays); if the delay exceeds 5 days, a liquidated damage of RMB 10,000 per day shall be paid (i.e., the liquidated damage shall be calculated from the first day of delay (including statutory holidays)), and in addition, the liquidated damages shall be paid on the rate of RMB20,000 per day from the 6th day. The liquidated damages may be deducted from the settlement payment for the Project.

7. Materials and Equipment

7.1 Storage and Usage of Engineering Materials and Equipment

7.1.1 Storage costs of the materials and equipment supplied by the Employer: None.

7.1.2 Storage costs of the materials and equipment supplied by the Contractor: None.

7.1.3 Other agreements on procurement of materials and equipment by the Contractor:

A (1). No mix cement shall be used; (2). Materials shall be procured according to the “List of Major Materials” as described in the bidding documents, and those materials not included in that list shall be procured from the manufacturers and as per the brands and specifications as specified in the project budget statement; (3). The Contractor shall not change the manufacturers, brands and specifications without written consent of the Employer. (4). The materials and equipment procured by the Contractor must be accompanied with the ex-factory certificate and must be checked by the Employer, and shall not be used unless they pass inspection by the inspection organizations; and (5). The Contractor shall send samples of unpriced materials to the Employer for approval before procurement. The brands, models, quality and prices of bulky materials and decorative materials must be approved by the Employer.

B. In case the materials supplied by the Contractor are not compliant with the requirements, the Contractor shall take the following responsibilities: (1). The Contractor shall replace the materials and meet the requirements; and (2). The Contractor shall assume all the costs incurred therefrom.

C. Before entering the construction site, materials shall be subject to relevant material inspection and copper mix proportion assay, and they shall not be used unless passing the inspection. If the materials fail to pass the inspection, they shall be labeled and isolated, and shall be removed from the site within 7 days; if they are not removed within the specified time, the Employer has the right to deal with such materials on behalf of the Contractor, and the losses incurred therefrom shall be borne by the Contractor.

D. If the Contractor fails to handle the procedures for mobilization of the materials within the specified time or if the materials fail to pass inspection, the resulted project delay and losses shall be borne by the Contractor.

E. If the Contractor uses the materials in construction without inspecting the materials or uses unacceptable materials, the Employer's representative shall give the punishment of suspension to the Contractor.

8. Changes

Agreement on scope of changes:

(1) During the construction period, the Employer has the right to change or increase or decrease

the Project. In this case, the Project shall be priced based on the RFI documents, all the costs will not be based on the quota information price and will be unpriced. The total contracting price shall be quoted based on the cost calculated according to comprehensive unit, plus tax, administrative expenses, etc. During construction, the Employer has the right to change or add material brands and specifications, and the list of materials and construction drawings signed and confirmed by the Parties shall be the basis for completion acceptance and payment request.

(2) If the design drawings need revising or if the publication of revised drawings lags behind the construction progress, the Contractor may propose the specific construction methods which shall be implemented after being approved by the designer's representative and the Employer's representative.

9. Contract Price

9.1. Lump Sum Contract

The contract price is determined in the principle that all the works within the scope of the Contract shall be valued by the lump sum manner, and that labor and materials shall be contracted on a lump sum basis.

Scope of risks covered in the lump sum: (A). If the Contractor contracts labor and materials in lump sum, the quantities and project costs shall be settled based on the project price as per the construction drawings, the provisions of the agreement and the contract between the Employer and the Contractor. (B). During construction, if there is design changes and addition of work quantities, a RFI documents shall be issued as per the design change drawings, and after the Employer signs and confirms the RFI documents, the RFI documents will not be based on the quota information price and will be unpriced. The total contracting price for a single work shall be quoted based on the cost calculated according to comprehensive unit, plus tax, administrative expenses, etc. (C). The quantities and price of the Project shall be calculated as per the design drawings, the contract price is deemed by the Parties as the construction cost of the Project, and the Contractor shall not add any project costs for such reasons as calculation errors, unclear drawings or other reasons (except for the RFI documents agreed by the Parties).

Calculation method of risk cost: \.

Adjustment methods for the contract price beyond the risk scope: Such methods shall take effect

upon signature of the Contract, and the Contractor shall not require the Employer to negotiate about the price irrespective of rise of material prices and wages, or change of exchange rate or taxes in the future, otherwise the Contractor shall be deemed to breach the Contract deliberately.

9.2 Payment of Progress Payment

Agreement on payment period:

a) The Employer may ask the Contractor to submit the payment request and pricing documents on the 5th and the 20th day of each month. After the Employer receives the payment request and pricing documents from the Contractor and confirms the documents in written form, the Employer shall, in principle, pay the project progress payment to the Contractor's account via transfer check on the 10th and 25th of each month (the Employer shall require the Contractor to conduct project test and acceptance).

b) The details of payment request are as follows:

Appropriate the amount in _ times	Appropriated payment (%)	Amount (in RMB 0'000)	Estimated time for payment
Within 10 days after the date of the Contract	15	RMB 28,17	
Within 10 days after the pile foundations are completed and pass tests	15	RMB 28,17	2018.6.10
Within 10 days after basement ceilings are poured	15	RMB 28,17	2018.8.10
Within 10 days after Workshop 1 is poured to Floor 2 and Workshop 2 is poured to Floor 4	15	RMB 28,17	2018.10.10
Within 10 days after capping of all the monomer works	20	RMB 37,56	2018.12.25
2 weeks after completion acceptance	15	RMB 28,17	2019.6.10
1 year after passing the completion acceptance	3	RMB 5,63.4	
2 years after passing the completion acceptance	1.5	RMB 2,81.7	
3 years after passing the completion acceptance	0.5	RMB 93.9	

c) If inspection shows the payment request and pricing documents of the Contractor are not complete, the Employer shall delay the pricing and payment request.

d) After the Project passes completion acceptance, the Contractor is entitled to apply for payment of 95% of the project payment by showing the project settlement audit report. The Employer shall appropriate the payment to the Contractor's account within 2 weeks when finishing the review.

e) After the Project passes the completion acceptance, the Contractor shall allot 5% of the total contract price of the Project as the quality warranty amount.

f) In the third year after the Project passes the completion acceptance, the Contractor shall apply to the Employer for settlement of the remaining 5% of the project payment (quality warranty amount), and the Employer shall refund the remaining amount (quality warranty amount) in installments as follows: 3% in the first year, 1.5% in the second year and 0.5% in the third year.

10. Acceptance and Project Commissioning

10.1 Completion Acceptance

10.1.1 Completion Acceptance Procedures

Agreement on completion acceptance procedures:

(1) Agreement on the as-built drawings provided by the Contractor: The Contractor shall provide 2 sets of as-built drawings within 15 days upon completion.

(2) After the Project passes the completion acceptance, the Contractor shall submit a project settlement statement in quintuplicate to the Employer, and the Employer shall review the statement within 30 days upon receipt. The remaining project payment shall be settled according to the project settlement review report.

(3) Before the completion acceptance is completed, the Contractor must clear the site (including doors, windows, glasses, grounds and sundries) immediately, and shall evacuate from the construction site within 10 days after the Project passes the completion acceptance.

10.1.2 Handover and Acceptance of All and Part of the Works

Time limit for the Contractor to handover the Project to the Employer: on the date of completion acceptance.

10.2 Demobilization upon Completion

Time limit for demobilization upon completion by the Contractor: within 2 days after completion acceptance.

11. Completion Settlement

11.1 Application for Completion Payment

Time limit for the Contractor to submit application sheet of completion payment: within 3 days upon completion acceptance.

The application sheet of completion payment shall contain the completion acceptance report, application sheet of project payment, data for final settlement of project payment and invoices.

11.2 Completion Settlement Verification

Time limit for the Employer to approve the application sheet of completion payment: within 2 weeks upon completion acceptance.

Time limit for the Employer to complete completion payment: within 2 weeks upon completion acceptance.

The method and procedure for re-checking of the disputed part of the completion payment certificate: strictly subject to the lump sum, except for the RFI documents.

11.3 Final Settlement

11.3.1 Final Settlement Application Form

Number of the final settlement application forms submitted by the Contractor: 1.

Time limit for the Contractor to submit the final settlement application form: within 3 days upon completion acceptance.

11.3.2 Final Settlement Certificate and Payment

(1) Time limit for the Employer to complete the approval of the final settlement application forms and to issue the final settlement certificate: within 2 weeks upon completion acceptance.

(2) Time limit for the Employer to complete payment: within 2 weeks upon completion acceptance.

12. Breach the Contract

12.1 Breach by the Employer

The Employer's liabilities for breach of the Contract due to failure to pay the contract price as agreed in the Contract on account of the Employer: If the Employer fails to pay the project payment on time, the Contractor may suspend construction 7 days after issuing a notice, the Employer shall

pay the Contractor the benchmark interest on the bank loan for the same period from the agreed payment date and shall assume the liabilities for breach of the Contract; If the Employer fails to pay the project payment on time such as to affect the Project construction, the Employer shall be responsible for the project losses and extend the construction duration accordingly.

12.2 Breach by the Contractor

12.2.1 Cases of Breach by the Contractor

Other circumstances that the Contractor breaches the Contract: If the Project quality fails to meet the design requirements, the Contractor shall be responsible for repair unconditionally until the Project quality meets the requirements, and shall bear the losses incurred therefrom and assume the liabilities for breach of the Contract

12.2.2 The Contractor's Liabilities for Breach

Assumption ways and calculation methods regarding the Contractor's liabilities for breach of the Contract: The construction period shall not be extended unless being approved and confirmed by the Employer; If the Contractor fails to complete the Project as scheduled (contract construction duration + signed construction duration), liquidated damages will not be charged if the delay does not exceed 5 days (including statutory holidays); if the delay exceeds 5 days (including statutory holidays), a liquidated damage of RMB 10,000 per day shall be paid (i.e., the liquidated damage shall be calculated from the first day of delay (including statutory holidays)), and in addition, the liquidated damages shall be deducted from the project payment on the rate of RMB20,000 per day from the 6th day.

12.2.3 Termination of the Contract Due to Breach of the Contractor

Special agreements on termination of the Contract due to the Contractor's breach of the Contract: To ensure successful performance of the Project, the Contractor undertakes to make the Project pass acceptance at a time; The Contractor undertakes to make all the works pass acceptance at a time, and if there is any unacceptable work, the Employer may terminate the Contract immediately and the Contractor shall have no objections; If there are any construction operations in a stage failing to pass acceptance, the Contractor undertake to waive the payments for the operations in that stage, the Employer may confiscate the performance bond provided by the Contractor and contract out to the third party, the Contractor shall have no objections.

13. Force Majeure

13.1 Affirmation of Force Majeure

Other conditions deemed to be force majeure in addition to the force majeure events specified in General Terms and Conditions of the Contract: Typhoon, torrential flood, earthquake and other natural disasters.

13.2 Termination of the Contract Due to Force Majeure

After termination of the Contract, the Employer shall finish paying the payments within 30 days after the agreements or determinations for such payment have been made.

14. Insurance

During the construction period, the Contractor must keep the construction site safe. The Contractor shall effect insurance as per applicable laws, regulations and the provisions of Ningbo Municipality, effect all risks insurance for construction engineering (in full amount) and provide the proof of insurance by the Employer. All the costs and losses from the safety-related accidents on the construction site caused by the Contractor's failure to effect insurance or improper management shall be borne by the Contractor and the Employer will not bear any liabilities.

15. Dispute Settlement

Any disputes arising during the performance of the Contract shall be settled by the Parties through negotiation; if negotiation fails, the disputes may be settled with the following Method (2):

- (1) Apply to Ningbo Arbitration Committee for arbitration; or
- (2) File a lawsuit to the people's court in the place where the Project is located.

16. Other Agreements

16.1 Early Termination

If any of the following issues happens to the Contractor, the Employer can terminate the Contract and confiscate the quality guarantee deposit of construction period unconditionally:

- ✧ The Contractor subcontracts the work.
- ✧ The whole project is suspended for 15 days without any reason before being completed by the

Contractor.

- ✧ The Contractor is unable to perform its responsibility due to suspense of business, close down, bankruptcy or other factors.
- ✧ The Contractor does not obtain any required qualifications, licenses or permits within the scope of fulfilling the obligations in the Contract, or the Contractor has not completed legal documents for construction on time.
- ✧ The Contractor unusually owes construction costs or wages to material manufacturers, subcontractors or workers accumulatively, and such case has not been properly solved though reminders have been lodged by the Employer over two times.
- ✧ During the construction, the actual progress severely falls behind the estimated process over one month due to the Contractor.
- ✧ Unqualified acceptance (one-time acceptance promised by the Contractor).
- ✧ Major safety accident occurs on the construction site and causes a significant loss to the Employer.
- ✧ The Contractor provides false information, and such information causes failure to report for construction within ten days after signing the Contract and failure to perform the contract.
- ✧ The Contractor shall immediately submit complete qualification certificates to the Contractor within 10 days after signing the contract, or otherwise, the Employer can terminate the Contract and confiscate the quality guarantee deposit of construction period unconditionally.
- ✧ If the Employer terminates or releases the Contract due to one of the circumstances listed above, the Contractor shall stop the work immediately, and the Employer has the right to decide on the new contractor to carry out the construction, and the Contractor shall be obliged to provide assistance and bear losses to the Employer arising therefrom.

16.2. Other Supplementary Terms and Conditions

- ✧ The Project Manager shall clear the responsibility and exclusive use, and shall, during the construction period, be resident on the construction site and shall not leave it at will. If the Project Manager is required to leave, he must apply for a leave of absence to the Employer and designate a deputy project manager to represent him in the job.
- ✧ The Contractor shall cooperate with the Employer to make reserved holes for the mechanical foundation by reference to attachments of the shop floor plans. The expenses in labor, materials

and machinery incurred by the Contractor shall be borne by the Employer.

- ✧ Temporary expenses for water and electricity and other expenses during the construction period are all borne by the Contractor.
- ✧ In order to ensure the quality of the project and construction safety, if the project is investigated and ordered to be shut down by authorities due to the Contractor (which is confirmed by the Employer), the Employer is entitled to impose fines of RMB 5,000/time to the Contractor. In case of suspension of work for more than ten working days, the Employer has the right to terminate or release the Contract, and decide on the new contractor to carry out the construction, and the Contractor shall be obliged to provide assistance and bear losses arising therefrom.
- ✧ The Contractor must strictly supervise the behavior of construction personnel and subcontractors. It is forbidden for all construction personnel or subcontractors of the contractor to have rude or rogue behavior. In case of offenders, the Employer has the right to refuse the entry of the offenders and impose fines of RMB 5000/time to the Contractor.
- ✧ In case of work changes due to errors in design by the Design Institute, the cost incurred must be borne by the Employer, and relevant construction shall be carried out in accordance with engineering change regulations. During construction, if there are design changes and addition of work quantities, a contact sheet shall be issued as per the design change drawings, and after the Employer signs and confirms the contact sheet, the contact sheet shall not include quota information price and no expenses will be charged. The cost will be calculated as per the comprehensive unit price. The total contract price for the contact sheet shall be quoted together with the tax administration expenses.
- ✧ The installation unit of the project or equipment directly subcontracted by the Employer must share the temporary water and electricity expenses, and the proportion of its share shall be negotiated between the Contractor and the subcontractor according to project funds and characteristics of the project.
- ✧ The Contractor will promise to properly handle wages of the hired personnel and shall make a full compensation on losses caused to the Employer due to violation of the commitment.

16.3 Quality Control

- ✧ During the construction, if there is no representative of the Employer, the Contractor shall be solely responsible for any quality problems of the construction; in case of offenders, the

representative of the Employer has the right to require demolition and rework or not to make the payment.

- ✧ Bricks shall be mixed according to the mix ratio; in case of failure to follow regulations and written rectification put forward by the Employer, the Employer has the right to issue a stop work order.
- ✧ Reinforcement shall be produced according to drawings and specifications; in case of failure to follow regulations and written rectification put forward by the Employer, the Employer has the right to issue a stop work order.
- ✧ The construction site must be kept clean and tidy. It is forbidden to throw litters around. Environmental responsibility system shall be implemented on the site so as to achieve a civilized and qualified construction site. If the Contractor cannot meet the requirements of a civilized construction site or is overdue for improvement, the Employer has the right to handle it on behalf of the Contractor, and expenses incurred thereof shall be borne by the Contractor.
- ✧ During the construction, if any unsafe quality is found, and the Contractor fails to follow drawings and specifications, the representative of the Employer can expose such case and require a rectification within a prescribed time limit; in the case of failure to make rectification within the time limit, the Employer has the right to handle it on behalf of the Contractor, and expenses incurred thereof shall be borne by the Contractor. And no payment will be made under serious cases.

16.4. Other Agreements

In order to clarify rights and obligations of both parties, both Parties shall, on the basis of the project construction contract, further conclude the following terms:

16.4.1 Construction Management

16.4.1.1 The Contractor shall comply with the construction laws or regulations in the place where the project is located and shall apply to the local project supervisor for all necessary permits.

16.4.1.2 During the construction, the Contractor shall set a warning sign at the working place during the day and hang a red light or protective equipment at night. The Contractor should take precautions to protect the safety of people and livestock and public and private property nearby. During the construction, the Contractor shall be responsible to compensate for damages (if any) to public and private buildings, roads and trenches or the water pipes above and below the street or

private forests and human life and property. Vehicles entering and leaving the site must be cleaned and kept clean.

16.4.1.3 The implementation of this project shall be in accordance with terms of the Contract, design drawings, construction instructions, and the instruction of the supervisor of the Employer.

16.4.1.4 If the materials used for this project are not qualified, the Contractor shall remove them from the site immediately. Workers employed by the Contractor must have work skills. If they do not work well and fail to obey orders, the Contractor shall dismiss and replace them within 24 hours after being informed by the architect or the supervisor of the Employer, and shall not require compensation from the Employer for the reason of worker dismissal.

16.4.1.5 All machines and tools must be examined by architect or supervisor of the Employer, and only qualified ones can be used. Unqualified ones shall be removed from the site.

16.4.1.6 The Contractor shall assign the responsible representative with engineering experience to supervise the construction on the construction site. The construction personnel organization shall have one project manager and several construction workers. If the Employer believes that such organization shall be strengthened and improved, the Contractor shall immediately handle it and shall not excuse refusing and claiming compensations.

16.4.1.7 The Contractor is responsible for the management and supply of all workers. The Contractor shall be fully responsible for any disputes arising from extraterritorial activities and violations of local magistrates' regulations by workers, if any. If a worker runs into an accident or is injured or dead, the Contractor shall handle it on its own, without the Employer being involved.

16.4.1.8 The contract price includes the site safety and health equipment fees, personal insurance premiums, all construction building liability insurance and the Employer's liability insurance premiums. The Contractor shall handle them according to related provisions.

16.4.1.9 Whenever the Contractor is required to extend the employment of workers suitable for the work during the construction period, the number of workers shall be deemed by the architect or the Employer to be able to complete the work within the contract period. If the construction process is slow, the Employer must notify the Contractor to increase the number of workers or carry out night shifts to meet the deadline for completion, the Contractor may not excuse refusing or claiming compensations.

16.4.1.10 If any important part of this project is found by the architect or the Employer to be

inconsistent with the design requirements or to be altered without authorization, the Contractor shall be ordered to dismantle that immediately, and rebuild according to required specifications or materials until the architect or the Employer is satisfied with. All the time and monetary losses incurred shall be borne by the Contractor.

16.4.1.11 The Contractor shall suspend all or part of the work in accordance with the instructions of the architect or the supervisor of the Employer when encountering unsuitable days for work, and shall seek to protect the work already completed from damage.

16.4.1.12 All work already been carried out and machines and tools stored on the construction site before being accepted by the Employer without formal acceptance shall be maintained and protected by the Contractor. The Contractor shall be fully responsible for any manual handful or accidental damages.

16.4.1.13 Construction shall be carried out in strict accordance with specified quality and applicable standards and the safety of the project shall be ensured. Any violation of the rights of others during the construction period shall be covered by the Contractor, except for those being under responsibility of architect in charge of design and building in accordance with provisions of the construction law and the architect law. The Contractor shall be responsible for repairs and maintenance within the warranty period after the acceptance of the building.

16.4.1.14 During construction, environmental protection should be strengthened to prevent pollution. The removal of waste shall be in accordance with the regulations of the local authorities and shall not be arbitrarily set aside.

16.4.1.15 During the construction period, the Employer may request the Contractor to install and test as required. The Contractor shall not refuse to provide the necessary power, and all costs shall be borne by the Employer.

16.4.1.16 The Contractor shall ensure that no violent incidents will happen on the construction site, in case of similar incidents, the Employer shall have the right to require the Contractor to submit the results within 24 hours.

16.4.1.17 The Contractor shall not, at any time, impose violence or coercive measures on the representative of the Owner, and shall not bribe the representative of the Owner in money and other valuable ways, in case of similar incidents, the Contractor shall be held fully legally responsible. Party A has the right to release the Contract and Party B shall bear all losses after the

termination of the Contract.

16.4.2 Inspection and Acceptance

16.4.2.1 Inspection and rework: The Contractor shall carry out construction in strict accordance with applicable standards, specifications, design requirements and the instructions issued by the Employer's representative as per the Contract, be ready to accept the inspection of the Employer's representative and the entrusted persons at any time, provide convenience for the inspection, carry out rework and modification as required by the Employer's representative and the entrusted persons, and bear the costs for rework and modification on its own account.

16.4.2.2 Concealed works and interim acceptance: If the Project is ready for covering and concealing or reaches the interim acceptance conditions as agreed in the agreement, the Contractor shall notify the Employer's representative to participate in the acceptance after the self-inspection is acceptable and 48 hours before concealing and interim acceptance. The notice shall include the contents of the Contractor's self-inspection record, the concealed works and interim acceptance, together with the time and place of acceptance. The Contractor shall prepare the acceptance record. Upon qualified acceptance, the Employer's representative shall sign the acceptance record before concealed works are performed. In any unacceptable case, acceptance shall be conducted again after the Contractor makes modification in the specified time.

16.4.2.3 Completion acceptance: When the Project meets the conditions for completion acceptance, the Contractor shall provide complete as-built data and completion acceptance report to the Employer in accordance with relevant national regulations on the acceptance upon project completion. The Contractor shall provide the Employer with the as-built drawings in the copies and on the date as agreed. After the Employer's representative receives and agrees on the completion acceptance report from the Contractor, the Contractor shall organize relevant departments to conduct acceptance within the time specified in the agreement, and shall give approval or put forward modification opinions within 5 days upon acceptance. The Contractor shall make such modification as required at his own cost if such modification is attributed to the Contractor.

16.4.3 Payment Method

16.4.3.1 The contract price shall be paid stage by stage as per Clause 9 of the Special Terms and Conditions of the Contract.

16.4.3.2 Once the Employer finds the Contractor has the following conditions, the Employer shall suspend payment to the Contractor until the Contractor eliminates the causes for suspension of the payment:

1. Where the Contractor fails to improve or delays the improvement upon receipt of the improvement notice when there are significant deficiencies of the Project construction or when the Contractor breaches the Contract obviously.
2. Where the overall project progress lags behind the scheduled overall progress by more than 10%.
3. Where disputes arises in the Project due to the Contractor's failure to pay the subcontractors or material providers or other reasons.
4. Where there are causes for compensation during the construction and the responsible party fails to settle the matters properly after the Employer sends an instruction.
5. Where lawsuits or arbitrations regarding the Project (including the lawsuits or arbitrations between the Contractor and any third person) occur not on account of the Employer.

16.4.3.3 Without consent of the Employer, the project payment requested by the Contractor shall not be paid in advance, assigned, or requisitioned by the person entrusted by the Contractor and shall not be pledged to others.

16.4.3.4 The seal used by the Contractor for the payment and requisition of the project payment must be consistent with that attached herein.

16.4.3.5 Addition or decrease of works due to the engineering design change by the Employer shall be implemented as per the Contract.

16.4.4 Construction Plan

16.4.4.1 Prior to official commencement, the Contractor shall summarize or draft a construction plan and the Contractor shall not carry out construction unless the plan is approved by the Employer. The construction plan shall at least cover:

1. Construction site organization chart, which shall contain names, qualifications and scope of responsibilities of important personnel;
2. Project implementation plan, describing the implementation plans for each work and how to coordinate and cooperate;
3. Mobilization plan, describing the construction site, camp configuration plan, and the date to

mobilize personnel, tools and equipment to the construction site for construction; and

4. Project progress schedule, describing the commencement and completion dates of each unit works and the Project, the construction sequences, and the construction periods and dates to complete key works.

16.4.5 Contracting-out and Subcontracting

16.4.5.1 Unless permitted by the Employer, the Project shall not be contracted out in any forms.

16.4.5.2 Unless permitted by the Employer, the Project shall not be subcontracted.

16.4.5.3 If the Employer agrees subcontracting, it has the right to review the qualifications of the subcontractors, and such subcontractors shall not be the Contractor's subcontractors without written permission of the Employer. The subcontractors agree to be subject to commanding and supervision by the Employer during the performance of the Project.

16.4.5.4 Subcontracting of the Project does not relieve the Contractor from any responsibilities and obligations, and the Contractor shall jointly bear civil liabilities for any default or negligence of the subcontractors. The subcontractors must observe all the provisions of the Contract and the attachments thereof. For this purpose, the Contractor shall inform the subcontractors of all the provisions of the Contract and the attachments thereof and incorporate such provisions into the Contract. The Contractor shall be responsible for the losses of the Employer incurred by failure to fulfill such obligations.

16.4.5.5 Where the Employer finds the subcontractors cheat on workmanship and materials, carry out construction against the drawings, regulations, standards, contracts and the Contract, or do other things against laws, regulations and rules, the Contractor shall, if the Employer considers it necessary to remove such subcontractors, do the same immediately and resolutely.

16.4.5.6 If a subcontractor damages the legal rights of others during performance of the Project, the Employer will not take any legal responsibilities and obligations.

16.4.5.7 The Contractor shall not subcontract the Project to unqualified construction companies. The subcontractors shall not subcontract the works contracted by it. The Contractor shall be solely responsible for all the liabilities incurred by subcontracting the Project to the subcontractors without corresponding qualifications, and the Employer may deduct or recover its losses incurred therefrom from the project payment. The Contractor shall take joint indemnification responsibilities for the sub-subcontracting behavior of the subcontractors.

16.4.6 Partial Completion

16.4.6.1 Before the Project is not completed in whole, the Employer shall accept the completed parts and then take such parts over for use.

16.4.6.2 Without prejudice to the construction principles of the Contractor, the Employer shall also inform the Contractor of the use of the parts of the Project completed by the Contractor. The Parties shall negotiate on whether the use disturbs construction. If the use by the Employer causes loss to the Contractor, the Employer shall indemnify the Contractor and the amount of indemnification and the extension of the construction duration shall be negotiated between the Parties.

16.4.7 Site Clearance

16.4.7.1 During the construction period, the Contractor shall clear all the waste materials, rubbish, or materials, tools and other equipment that are unnecessary or fail to pass inspection from the construction site, the roads near the construction site and the buildings, to ensure a safe construction site safety and clean construction environment. When the Project is completed, the Contractor shall clear all waste materials and sundries from the construction site and the roads near the construction site, and clean and tidy all the structures at the cost of the Contractor. In addition, the Contractor shall remove all the construction equipment left on the construction site and the excessive unused materials for temporary works within the reasonable time limit upon completion of the Project.

16.4.7.2 The Contractor shall unconditionally repair the Employer's roads or other equipment damaged by access of the Contractor's labor and materials vehicles or construction on site. Before the Contractor completes the above work, the Employer shall not sign on the certificate for the Contractor to collect the balance payment.

16.4.7.3 Construction of the Project shall not pollute the environment outside the construction base; otherwise, the construction base shall be cleared at the cost of the responsible party.

16.4.7.4 The Contractor and the subcontractors shall indemnify the Employer against the losses caused by failure to fulfill the obligation of site clearance.

16.4.8 Design Change

16.4.8.1 The Employer has the right to change, add or decrease the Project at any time, with the costs calculated separately; however, such costs must be estimated by the Contractor and shall not take effect unless being confirmed by the Employer.

16.4.8.2 The Contractor may propose for change of the design if it encounters unpredictable conditions or if the reality differs greatly from the design drawings.

16.4.8.3 If the Employer considers it necessary to change the Project, it shall inform the Contractor in writing and the Contractor shall do as required and shall not refuse with other excuses or have objections.

16.4.8.4 Where change of the Project involves increase or decrease of work quantities, the amount of increase or decrease of the works payment shall be calculated based on the increased or decreased work quantities confirmed by the Employer and the unit price attached in the Contract. The reasonable unit price of any increased work shall be negotiated by the Parties.

16.4.8.5 If the change of the Project involves extension or reduction of the construction duration, the Contractor shall file an application as specified and the Employer shall verify the days of the construction duration to be extended or reduced based on the particular conditions.

16.4.8.6 The decision on increase or decrease of project payment and construction duration due to change of the Project shall be incorporated as effective attachments in writing into the Contract after the Parties agree.

16.4.8.7 For the increased works beyond the scope of drawings, if the Contractor refuses to execute such works or if the quotation is not acceptable to the Employer, the Employer has the right to entrust the execution of such works to other contractors. However, the Contractor shall still handle the procedures for completion acceptance and shall not shirk the relevant responsibilities.

16.4.9 Completion Acceptance

16.4.9.1 Upon completion of the Project, the Contractor shall clear all the waste materials, sundries and temporary equipment from the construction site, and relocate all the remaining materials and equipment from the construction site. Then, the Contractor can submit a written report for acceptance, and submit complete Project data to the Employer. After the Employer checks that there are no uncompleted works, the Contractor can submit for initial acceptance.

16.4.9.2 When the project progress meets the standards for completion acceptance or staged acceptance, the Contractor shall inform the Employer to conduct acceptance, and the Employer shall inform the engineering quality supervision station and other relevant governmental authorities to conduct acceptance as per national regulations on project acceptance. The cost of acceptance of each stage shall be borne by the Contractor. If correction is made due to non-

compliance with the project standard at each stage, the correction costs and the re-surveying costs of the quality supervision station and other relevant governmental departments shall be borne by the Contractor. During acceptance, the Contractor shall send personnel to conduct the acceptance together with the Employer. If the Contractor is not present, the Employer shall also conduct acceptance, and the Contractor shall have objections to the acceptance results.

16.4.9.3 The Contractor shall inform the Employer to inspect the concealed works to be covered. In case the Contractor fails to inform the Employer to conduct such inspection such as to result in re-work and delay the construction duration, the Contractor shall take all the responsibilities and the Employer will not consider to extend the construction duration and pay additional costs.

16.4.9.4 If the initial acceptance shows there are deficiencies in the Project or the work of the Contractor is not consistent with the Contract, the Contractor shall be responsible for rectification free of charge within the specified time limit. If the Contractor fails to repair within the specified time limit or refuses to repair, the costs of the labors and materials required and the losses of the Employer shall be borne by the Contractor.

16.4.9.5 Before application for completion acceptance, the Contractor shall complete firefighting works (depending on the contents of the Project) and pass acceptance by the firefighting department and other relevant departments. If the firefighting works fail to pass the acceptance by the firefighting department at a time, the Employer shall grant a rectification period which shall not exceed 7 days. If not all of the firefighting equipment still fails to pass acceptance within 7 days upon expiration of the rectification period, the Contractor shall pay the Employer liquidated damages which are 1% of the total contract value, and the Employer has the right to select a third party to make rectification at the cost of the Contractor.

16.4.9.6 While applying for completion acceptance, the Contractor shall provide the Employer with the full completion data and completion acceptance reports on the works (including the data on such works as firefighting works and water and electricity works) in the charge of the Contractor. The Employer shall conduct acceptance within 15 days upon receipt of the completion documents from the Contractor, and shall inform the quality supervision station and other relevant governmental departments to conduct official completion acceptance after the rectification passes inspection.

16.4.9.7 After the Project passes the official acceptance by relevant governmental departments,

the Employer shall issue the completion certificate to the Contractor, settle project payment after the Contractor handles the warranty procedures for the Project and then approve the payment of balance payment for the Project.

16.4.9.8 The works completed by the Contractor and the subcontractors shall meet the quality standards as specified by the state and the attachments hereto; if any work fails to meet the standards, the Contractor and the subcontractors shall bear the liabilities for breach of the Contract and shall be responsible for repair, rework or indemnification against the losses.

16.5 Special Agreements:

16.5.1 The Contractor shall pay full wages to the workers in time. In case of labor arbitration caused by arrears of wages, the Employer has the right to fine the Contractor for the money which is three times of the arbitration amount.

16.5.2 In case of work injuries or accidents of the workers of the Contractor or the subcontractors, the Contractor shall handle the accidents properly and timely; In case the Employer suffers losses due to disturbance by the workers or arbitration or lawsuit, the Contractor shall bear all the responsibilities and indemnify against the losses.

16.5.3 The Contractor shall pay the materials suppliers of the Project in full amount in time; In case the materials suppliers create disturbance because of arrears of payment to the materials suppliers, the Employer has the right to fine the Contractor for the money which is three times of the materials payment amount.

16.5.4 The Contractor shall dispose of the transported earthworks and rubbish according laws and regulations. If the Contractor is found by governmental departments to have dumped the earthworks and rubbish against laws and regulations, the Employer has the right to fine the Contractor for the money which is three times of the payment amount for disposal of transported earthworks.

16.5.5 The General Manager of the Contractor shall go to the construction site in person to inspect construction at least once every month.

16.5.6 Prevailing Efficiency

Other agreements as provided in Clause 16 are integral parts of the Contract, and they have the prevailing efficiency.

Attachments

Attachments to Agreement:

Attachment 1: Schedule of Works to Be Undertaken by the Contractor

Attachment to Special Terms and Conditions of the Contract: none

Attachment 3: Project Quality Warranty

Attachment 4: Contents of Main Construction Projects Documents

Attachment 5: Table of the Contractor's Mechanical Equipment for the Construction of the Project

Attachment 6: List of Major Construction Management Personnel of the Contractor

Attachment 1:

Schedule of Works to Be Undertaken by the Contractor

Name of unit works	Construction scale	Floor area (m ²)	Structural style	Number of floors	Production capacity	Equipment installation content	Contract price (RMB)	Commencement date	Completion Date

Project Quality Warranty

Employer (full name): GLOBAL Technology Inc.

Contractor (full name): Zhejiang Xinyu Construction Group Co., Ltd.

The Employer and the Contractor hereby have entered into the project quality warranty for Production Base Project for Optical Communication Products of GLOBAL Technology Inc. (full name of project) upon mutual agreement according to *Construction Law of the People's Republic of China* and *Regulations on the Quality Management of Construction Project*.

Scope and Content of Project Quality Warranty

- (1) The Contractor shall shoulder the responsibilities of the project quality warranty within the quality warranty period according to the relevant management regulations of relevant laws, regulations and rules, as well as stipulations by the Parties.
- (2) The quality warranty covers all the works contracted.
- (3) The period of waterproof quality warranty for unexposed water supply and drainage pipes is 8 years (except for structural pull cracks caused by building settlement); the quality warranty period for exposed common accessories is one year (except for purposeful man-made damages). The quality warranty period shall be calculated from the date when the Project passes the completion acceptance.
- (4) As long as the items are within the scope and content of the warranty, the Contractor shall send repairmen within 2 days upon receiving the repair notice. Where the Contractor fails to send repairmen within the agreed time limit, the Employer may entrust others for repair. The costs incurred therefrom shall be deducted first from the quality warranty amount, and where the quality warranty amount is not sufficient, the

exceeded part shall be borne by the Contractor.

- (5) For urgent accidents, the Contractor shall go to the accident site immediately (within 12 hours) to conduct repairing once receiving accident notice.
- (6) Quality issues related to structure safety shall be reported to local construction administration department in charge in a timely manner as per *Methods for Quality Warranty of Building Construction Projects*, while safety measure shall be taken. The Contractor shall conduct the quality warranty according to the warranty scheme proposed by the original designer or the designer with equal qualification grade approved by the Employer.
- (7) After the expiry of quality warranty, the Employer shall carry out the acceptance.
- (8) Warranty expenses shall be borne by the party who is responsible for the quality defect.
- (9) Miscellaneous

Other Project warranty matters agreed by the Parties: **The project quality problems not on account of the Contractor under the warranty period are beyond the scope of the warranty. Warranty amount and refund: The agreed warranty amount is 5% of the total project price, and it shall be refunded by batches from the date when completion is accepted (3% shall be refunded in the first year, 1.5% in the second year and 0.5% in the third year).**

The project quality warranty is jointly signed by the Employer and the Contractor prior to completion acceptance and shall be made as an attachment to the construction contract. It shall expire upon expiry date of the quality warranty period.

The Employer (official seal):
GLOBAL Technology Inc.
Legal representative or entrusted agent:
(Signature)

The Contractor (official seal):
Zhejiang Xinyu Construction Group Co., Ltd.
Legal representative or entrusted agent:
(Signature)

Organization code: 73947083-6
Address: No. 88, Qiushi Road, Ningbo City
Beilun District, Ningbo City
Postal code: 315176
Legal representative: Lin Chih-Hsiang
Entrusted agent: Yeh Shu-Hua
Tel.: 0574-88133808
Fax: 0574-88133820
E-mail:
Bank of deposit:
Account No.:

Organization code: 91330206144290713E
Address: No. 8, Waitang Road, Xiaogang Street,

Postal code: 315803
Legal representative: Wang Fuhong
Entrusted agent: _____
Tel.: _____
Fax: _____
E-mail:
Bank of deposit: _____
Account No.: _____

Attachment 6:

List of Major Construction Management Personnel of the Contractor

Name	Name	Title	Professional title	Key qualifications, experience and Projects undertaken
I. Headquarters staff				
Project Director	Hu Deqiang	General Manager	Constructor	
Other personnel	Wang Lian'an	Chief Engineer	Senior Engineer	
II. On-site Personnel				
Project Manager	Fu Guixiang	Male	Grade I Constructor	
Deputy Project Manager:	Zhong Tongxing	Male	Construction Worker	
Technical Director	Yu Zheyi	Male	Technical Director	
Cost Management	Ma Jie	Male	Engineer	
Quality Management	Li Huihui	Female	Engineer	
Material Management	Lv Chunhui	Male	Engineer	
Plan Management	Lou Yiwen	Male	Engineer	
Safety Management	Zhuang Yun	Male	Safety Officer	
	He Hui	Male	Safety Officer	
	Wang Haitao	Female	Safety Officer	

Other personnel				

Certification

I, Chih-Hsiang (Thompson) Lin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Applied Optoelectronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ CHIH-HSIANG (THOMPSON) LIN
CHIH-HSIANG (THOMPSON) LIN
President and Chief Executive Officer

Certification

I, Stefan J. Murry, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Applied Optoelectronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ STEFAN J. MURRY
STEFAN J. MURRY
Chief Financial Officer

Certification

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the U.S. Code (18 U.S.C. § 1350), Chih-Hsiang (Thompson) Lin, President and Chief Executive Officer of Applied Optoelectronics, Inc. (the "Company"), and Stefan J. Murry, Chief Financial Officer and Senior Vice President of the Company, each hereby certifies that, to the best of his knowledge;

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018, to which this Certification is attached as Exhibit 32.1 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
2. The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of the operation of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 8th day of May, 2018.

/s/ CHIH-HSIANG (THOMPSON) LIN
CHIH-HSIANG (THOMPSON) LIN
President and Chief Executive Officer

/s/ STEFAN J. MURRY
STEFAN J. MURRY
Chief Financial Officer

This certification accompanies the Quarterly Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Applied Optoelectronics, Inc. under the Securities Act of 1933, as amended, or the Securities Act of 1934, as amended (whether made before or after the date of the Quarterly Report), irrespective of any general incorporation language contained in such filing.
