# TMT International Observatory, LLC

Financial Statements Period From May 6, 2014 (Inception) Through December 31, 2014

# TMT International Observatory, LLC. Index December 31, 2014

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# **Independent Auditor's Report**

To the Board of Directors of TMT International Observatory, LLC

We have audited the accompanying financial statements of TMT International Observatory, LLC (the "Organization"), which comprise the balance sheet as of December 31, 2014, and the related statements of activities, changes in members' equity (deficit) and cash flows for the period May 6, 2014 (date of inception) to December 31, 2014.

# Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

# Auditor's Responsibility

Our responsibility is to express an opinion on the financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Organization's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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# Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of TMT International Observatory, LLC as of December 31, 2014, and the results of operations and its cash flows for the period from May 6, 2014 (date of inception) to December 31, 2014 in accordance with accounting principles generally accepted in the United States of America.

Pricewater house Coopers 22P

October 9, 2015

# TMT International Observatory, LLC Balance Sheet December 31, 2014

Assets	
Cash and cash equivalents	\$ 5,169,392
Construction in progress	7,414,861
Total assets	\$ 12,584,253
Liabilities and Members' Equity (Deficit)	
Accounts payable	
Trade creditors	\$ 403,616
Due to TMT Observatory Corporation	3,192,394
Community benefits payable	1,000,000
Total current liabilities	4,596,010
Long term liabilities	
Community benefits payable	10,855,800
Asset retirement obligations	410,876
Deferred lease liabilities	219,193
Total liabilities	16,081,879
Commitments and contingencies (Note 4 and Note 7)	
Members' equity (deficit)	
Contributed capital	12,198,719
Accumulated deficit	(15,696,345)
Members' equity (deficit)	(3,497,626)
Total liabilities and members' equity (deficit)	\$ 12,584,253

# TMT International Observatory, LLC Statement of Activities Period From May 6, 2014 (Inception) Through December 31, 2014

Revenue	\$ -
Total revenue	-
Expenses	
Program services	15,503,003
Supporting services	193,343
Total expenses	15,696,345
Net deficit	\$ (15,696,345)

# TMT International Observatory, LLC Statement of Changes in Members' Equity (Deficit) Period From May 6, 2014 (Inception) Through December 31, 2014

	Contri Cap	ibuted A bital	Accumulated Deficit	Members' Equity (Deficit)
Balances at May 6, 2014	\$	- \$	-	\$-
Contributions Net deficit	12,1	98,719	- (15,696,345)	12,198,719 (15,696,345)
Balances at December 31, 2014	\$ 12,1	98,719 \$	(15,696,345)	\$ (3,497,626)

# TMT International Observatory, LLC Statement of Cash Flows Period From May 6, 2014 (Inception) Through December 31, 2014

Cash flows from operating activities Net deficit Adjustments to reconcile net deficit to net cash from operating activities Changes in assets and liabilities	\$ (15,696,345)
Accounts payable and other liabilities	3,850,665
Community benefits payable - short-term	1,000,000
Community benefits payable - long-term	10,855,800
Net cash from operating activities	10,120
Cash flows from investing activities	
Capital expenditures	(7,039,447)
Net cash used in investing activities	(7,039,447)
Cash flows from financing activities	
Contributions from members	12,198,719
Net cash from financing activities	12,198,719
Net increase in cash and cash equivalents	5,169,392
Cash and cash equivalents Beginning of period	
End of period	\$ 5,169,392

## 1. Description of the TMT International Observatory, LLC

TMT International Observatory, LLC ("TIO"), a Limited Liability Company, was formed in the state of Delaware in 2014 by the California Institute of Technology ("Caltech"), the University of California ("UC"), the National Institute of Natural Sciences ("NINS") and the National Astronomical Observatories of China, Chinese Academy of Sciences ("NAOC"), hereinafter collectively called "the Members" for the purpose of providing for the observation and collection of images and information from deep space to advance human knowledge of astronomy and the origins of the universe by and through the execution of the Thirty Meter Telescope Project hereinafter called the "TIO Project". TIO is responsible for the execution of the TIO Project through the construction, commissioning and operation of an observatory. Each of the Member has signed the Limited Liability Company Agreement of TIO ("Company Agreement") and a Contribution Agreement with TIO.

Prior to establishment of TIO in May 2014, the pre-construction activities were managed by TMT Observatory Corporation ("TMT Corp"), a not for profit public benefit corporation, formed by Caltech and UC. Since May 2014, TMT Corp managed the in-kind construction contributions of Caltech and UC. In 2014, TIO also entered into a Personnel Administrative Agreement with TMT Corp under which TMT Corp provides labor and support services to TIO.

#### 2. Summary of Significant Accounting Policies

#### **Basis of Presentation**

The financial statements of TIO have been prepared on the accrual basis of accounting in accordance with U.S. Generally Accepted Accounting Principles ("GAAP"). The significant accounting policies are described below to enhance the usefulness of the financial statements.

#### Members' Equity (Deficit)

All member equity contributions are considered to be available for unrestricted use. The only limits on Members' equity (deficit) are broad limits resulting from the nature of TIO and the purposes specified in the Company Agreement and the Contribution Agreements with TIO and limits resulting from contractual agreements.

# **Revenue Recognition and Project Funding**

Construction of the project is dependent upon funding from the Members of TIO, who have collectively committed \$0.7 billion to fund toward the construction costs. During the construction phase, members will make contributions which are reflected as increases in their membership equity. Such membership equity interests may be transferable by the Member if approved by TIO. The project will not reflect revenue until the telescope is operational and providing access to Members and others for viewing time. As such, the project will incur losses and negative cash flows from operations until the facility is operational. To offset these negative cash flows, TIO will continue to rely upon Member contributions in accordance with the agreed upon project funding schedule.

#### **Cash and Cash Equivalents**

TIO considers cash on deposit, temporary investments, and all highly liquid financial instruments with original maturities of three months or less to be cash equivalents.

#### **Concentration of Credit Risk**

Cash and cash equivalents are maintained in an account with a bank. While these deposits exceed the amount of insurance provided by the FDIC, they may be redeemed upon demand and

are maintained by a financial institution with reputable credit; therefore management believes the deposits bear minimal risk.

#### **Management Estimates and Uncertainties**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenditures at the date of the financial statements. Significant items subject to such estimates include the carrying amount of long term liabilities. Actual results could differ from those estimates.

#### **Accounts Payable to Related Parties**

Amounts payable to TMT Corp are for the pending reimbursement of costs incurred by TMT Corp for labor and support services provided to TIO.

#### **Income Taxes**

TIO is generally exempt from federal income taxes under Section 501(c) (3) of the Internal Revenue Code. TIO is also generally exempt from payment of state income, gift, estate, and inheritance taxes. TIO has no reporting requirements for uncertain tax provisions for the year ended December 31, 2014. Accordingly, no provision for income taxes has been made in the accompanying financial statements.

# **Construction in Progress**

Direct labor, subcontract costs and the present value of the current Asset Retirement Obligation costs are capitalized as part of Construction in Progress. They remain in such an account until the assets are placed into service, at which time the costs of the assets are transferred into respective property, plant and equipment accounts to be depreciated over their estimated respective periods of operation.

# **Fair Value Measurement**

The Organization has adopted accounting standards consistent with the Financial Accounting Standards Board (FASB) codification which defines fair value, establishes a framework for measuring fair value and enhances disclosures about fair value measurements for all financial assets and liabilities.

# 3. THINK Fund

# **Community Benefits Payable**

TIO launched THINK (The Hawaii Island New Knowledge) fund to better prepare Hawaii Island students to master STEM (Science, Technology, Engineering and Math) and to become the workforce for science and technology jobs in Hawaii's 21st century economy.

TIO's unconditional promise to give to THINK includes an annual payment of \$750,000 to the Hawaii Community Foundation until January 2033 and \$250,000 to the Ke-Ali'i Pauahi Foundation annually initially through February 2019:

	Current		ong Term	Total
Ke Ali'l Pauahi Foundation Hawaii Community Foundation	\$ 250,000 750,000	\$	810,460 10,045,341	\$ 1,060,460 10,795,341
-	\$ 1,000,000	\$	10,855,800	\$ 11,855,800

Amounts are payable as follows and are based upon the present value of estimated future cash flows, using a discount rate of 5.35%.

Payable in less than one year	\$ 1,000,000
Payable in less than five years	4,989,257
Payable in more than five years	12,467,854
Total unconditional promise to give	18,457,111
Less: Discounts to net present value	(6,601,311)
Total net present value of unconditional promises to give	\$ 11,855,800

The commitment amounts are subject to revision based upon an inflation rate on an annual basis and will be adjusted accordingly.

TIO has committed funding from the Members in the future to meet the future liabilities. TIO expects to meet these liabilities as and when they fall due for payment.

#### **Fair Value Management**

TIO adopted the methods of fair value measurements to value its financial assets and liabilities. Fair value is based on the price that would be received to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability in fair value measurements, a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels has been established.

- Level 1 Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities. The fair value hierarchy gives the highest priority to, Level 1.
- Level 2 Observable inputs other than Level 1 prices as quoted prices for similar assets or liabilities; quoted in inactive markets; or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated with observable market data.
- Level 3 Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

## Liabilities Recorded at Fair Value on a Nonrecurring Basis

TIO may be required, from time to time, to measure certain assets of liabilities at fair value on a nonrecurring basis in accordance with GAAP. TIO's financial liabilities shown at fair market value is the Community Benefit Payable applying Level 3 valuation technique. For liabilities measured at fair value on a nonrecurring basis in 2014 that were still held on the balance sheet at year-end, the following table provides the fair value hierarchy and the carrying value of the related liability at year end:

				2014		
	Level 1		Level 2		Level 3	Total
Liabilities Unconditional promises to give	\$	- \$	i	- \$	11,855,800	\$ 11,855,800

The unconditional promises to give are valued using a discounted cash flow model and are classified as Level 3.

The following summarizes fair value measurements using significant Level 3 inputs, and changes therein, for the year ended December 31, 2014:

	Unconditional Promises to Give
Balances at May 6, 2014	\$ -
New pledges granted Payments	12,355,800 (500,000)
Changes in present value on pledges	
Balances at December 31, 2014	\$ 11,855,800

#### 4. Commitments and Contingencies

# Deferred Lease Liabilities

TIO has entered into a lease agreement with the University of Hawaii as of July 28, 2014. The annual rent during the construction period is based on the incremental value of the major milestones achieved as the project enters into each phase of the construction. TIO recognizes the expense on a straight-line basis over the lease term in accordance with GAAP, with a deferred liability on the balance sheet for the difference between lease expense and cash outlay.

# TMT International Observatory, LLC Notes to Financial Statements December 31, 2014

As of December 31, 2014, future minimum payments related to the lease with the University of Hawaii are as follows:

Years Ending December 31,	
2015 to 2016	\$ 300,000
2017 to 2018	400,000
2019 to 2020	600,000
2021 to 2022	700,000
2023	900,000
Thereafter	1,080,000

Annual Rent

Lease expense was \$348,324 for the period ended December 31, 2014. Since the lease agreement has scheduled changes in the annual lease payments, the lease has been expensed on a straight-line basis over the term of the lease, with a deferred liability of \$219,193 on the balance sheet for the difference between lease expense and cash outlay.

#### **Asset Retirement Obligations**

As part of its lease with the University of Hawaii, TIO has an obligation to decommission its observatory. Decommissioning is expected to begin after the expiration of the lease agreement in 2033. The liability for the asset retirement obligation ("ARO") is based on a present value of a weighted average of site-specific studies conducted in 2013, using a discount rate of 5.35% amounting to \$15.6 million. The establishment of the ARO increased ARO liabilities and construction in progress. In future years, the ARO liability will be increased for accretion and the related asset depreciated over the useful life of the observatory.

TIO will establish a sinking fund which would fully fund the cost of decommissioning the observatory before the end of its expected life. Contributions to this sinking fund will commence with \$1 million per year beginning the first year of operations and will be maintained for the 50-year life of the observatory. As of December 31, 2014, TIO has accrued an ARO at a present value of \$410,876. Adjustments of the ARO will be made based on updated site-specific studies for decommissioning costs.

#### 5. Members' Equity

The Members of TIO made the following equity contributions during the period from May 6, 2014 (date of inception) to December 31, 2014:

	 2014 Contributions							
	Caltech		NAOC		NINS		UC	Total
Cash contributions Other contributions	\$ 2,412,759	\$	1,163,201 -	\$	6,210,000	\$	2,412,759 -	\$ 12,198,719 
Total received	\$ 2,412,759	\$	1,163,201	\$	6,210,000	\$	2,412,759	\$ 12,198,719

#### **Membership Interests**

In accordance with the Company agreement, the Members' rights in TIO, including their respective economic interests and rights to participate in management, are represented by the membership participation percentages listed below:

	Membership Participation Percentage
Caltech	24.15 %
NAOC	16.31 %
NINS	35.79 %
UC	23.75 %

An allocation of TIO's income, expenses, deductions and other tax and accounting items will be allocated to the Members according to the membership participation percentages.

Liability of the Members under the Company agreement is limited so that no Member shall be individually obligated to any third party for any debt, obligations or liabilities of TIO. Each Member's liability for the debts, obligations or liabilities of TIO is limited to the maximum extent of the Members' Contribution. "Contribution" means any money (excluding loans), property provided, services rendered, or any commitment or agreement to provide money, property or to render services to TIO by a Member that is reflected in the various agreements which have been made between TIO and its Members.

#### 6. Related Party Services

The following expenses were paid by TMT Corp on behalf of TIO for the authorized labor costs, program services and purchase of goods and services for the period from May 6, 2014 (date of inception) to December 31, 2014:

Personnel administrative costs Start-up costs	\$ 5,616,304 4,460,432
	\$ 10,076,736

#### 7. Subsequent Events

Subsequent events were evaluated through October 9, 2015, which was the date the financial statements were available to be issued.

The Department of Science and Technology of the Government of India and the National Research Council of the Federal Government of Canada were confirmed as Members in February 2015 and April 2015, respectively, when they became bound by the TIO Company Agreement and by their respective contribution agreements. The Internal Revenue Service issued TIO a letter in May 2015 determining that TIO is exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code.

TIO began civil construction on its site in March 2015. The schedule for that activity has been extended to accommodate further discussions in respect of the current events relating to protests\_ against TIO's access to the site. However, TIO has a full legal right to construct and this will not be affected by the current events. The construction schedule has been delayed as a consequence of action by protest groups and efforts to reach an amicable resolution of their concerns, but TIO believes that there will not be a material impact on the time required to complete and commission the observatory.

The right to construct the observatory at Mauna Kea is based on a Conservation District Use Permit ("CDUP") which was granted by the Hawaiian Board of Land and Natural Resources ("BLNR") to the University of Hawaii on April 12, 2013. That issuance of the CDUP was challenged by a group of petitioners based in Hawaii in proceedings heard by the Circuit Court in Hawaii. On May 5, 2014 the BLNR's decision to grant the CDUP to UH was affirmed by the Circuit Court. The petitioners appealed against that decision and the appeal was transferred from the Intermediate Court of Appeals to be heard by the Supreme Court of Hawaii. Oral argument before the Supreme Court of Hawaii took place on August 27, 2015. The decision of the Supreme Court may not be known for some months, and it is not possible to predict the outcome, if any, on TIO's financial statements at this time.

On August 24, 2015 an individual filed a complaint in the US District Court in Hawaii naming as defendants the State of Hawaii, the Governor of Hawaii, various Hawaiian governmental entities, along with the chairman of TIO and representatives of national governments which are members of TIO and the United States. The complaint alleges breaches of certain duties in respect of the advancement of the TMT Project, and (among other things) is accompanied by two motions, one of which seeks a "...immediate temporary injunction..." to delay construction of the observatory. Given the early stage of this complaint, it is not possible to predict the impact, if any, on TIO's financial statements.

In August 2015, TIO entered into a sublease with Parsons Services Company for the new office facilities. The lease will commence on January 1, 2016 ending on February 28, 2021.