

AGREEMENT AMONG:

THE NATIONAL SCIENCE FOUNDATION OF THE UNITED STATES OF AMERICA

THE NATIONAL RESEARCH COUNCIL OF CANADA,

THE COMISIÓN NACIONAL DE INVESTIGACIÓN CIENTÍFICA Y
TECNOLÓGICA OF CHILE,

THE MINISTERIO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN
PRODUCTIVA OF ARGENTINA,

AND

THE MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO OF
BRAZIL

CONCERNING

THE OPERATION OF
AN 8 METER TELESCOPE ON MAUNAKEA, HAWAII AND
AN 8 METER TELESCOPE ON CERRO PACHÓN, CHILE
KNOWN AS THE INTERNATIONAL GEMINI
OBSERVATORY

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AGREEMENT AMONG:

**THE NATIONAL SCIENCE FOUNDATION OF THE UNITED STATES OF AMERICA
(hereinafter referred to as “NSF”)**

**THE NATIONAL RESEARCH COUNCIL OF CANADA
(hereinafter referred to as “NRC”)**

**THE COMISIÓN NACIONAL DE INVESTIGACIÓN CIENTÍFICA Y
TECNOLÓGICA OF CHILE (hereinafter referred to as “CONICYT”)**

**THE MINISTERIO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN
PRODUCTIVA OF ARGENTINA (hereinafter referred to as “MCTIP”)**

AND

**THE MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO OF BRAZIL
(hereinafter referred to as “MCTI”)**

CONCERNING

**THE OPERATION OF AN 8 METER TELESCOPE
ON MAUNAKEA, HAWAII AND AN 8 METER TELESCOPE
ON CERRO PACHÓN, CHILE
KNOWN AS THE INTERNATIONAL GEMINI OBSERVATORY.**

Desiring to encourage further scientific collaboration among the United States of America, Canada, Chile, Argentina, and Brazil,

Taking into account their common interest in supporting research in Astronomy,

Recognizing the scientific importance of access to both hemispheres with large telescopes,

Recognizing that NSF and NRC support astronomical facilities on Maunakea, Hawai'i,

Recognizing that NSF and MCTI support astronomical facilities on Cerro Tololo and Cerro Pachón, Chile,

Desiring to achieve full intellectual and economic benefits to all Participants in the operation of the International Gemini Observatory with a fair and equitable division of responsibilities and benefits among the Participants, consistent with their contributions and the timely and cost effective execution of Gemini,

NSF, NRC, CONICYT, MCTIP, and MCTI, hereinafter referred to collectively as the “Participants”,

HAVE REACHED THE FOLLOWING UNDERSTANDINGS:

STATEMENT OF PRINCIPLES

The signatories declare that the primary purpose of the International Gemini Observatory and this collaboration is to deliver forefront scientific capability to the countries that are Participants to this Agreement, resulting in state-of-the-art science and robust development of their scientific and technical communities. With this purpose in mind, allocation of Observing Time and development of observatory capabilities is to be based primarily on unbiased peer review, but taking into account the commitments made by the participating countries and the principle of *juste retour*.

1 DEFINITIONS

In this Agreement:

- 1.1 “**Assessment Point**” means the time at which the Participants to this Agreement must decide whether or not to continue their collaboration.
- 1.2 “**Award**” means the legal agreement between the Executive Agency and the relevant Managing Organization.
- 1.3 “**Budget**” means an estimate of expected expenditure within a specified financial year, including future-year commitments.
- 1.4 “**Commissioning Activities**” means the activities necessary to test, calibrate, and characterize new or upgraded capabilities before they are offered for the regular execution of scientific programs.
- 1.5 “**Contributions**” means the total annual contributions to the Operations and the Instrument Development Fund of the International Gemini Observatory, as defined in Sections 15.2 and 17.2.
- 1.6 “**Designated Members**” means those members of the Gemini Board authorized to speak on behalf of the Participants on matters before the Gemini Board.
- 1.7 “**Executive Agency**” means the agency established under Section 9.11 empowered to act on behalf of the Participants to arrange for the carrying out of Gemini Operations.

- 1.8 “**Engineering Activities**” means the activities necessary for maintenance and improvement of the Gemini Facilities.
- 1.9 “**Gemini**” means the project involving the Operation of the Gemini Facilities, as well as the construction and commissioning of new instrumentation.
- 1.10 “**Gemini Board**” (hereinafter referred to as the Board) means the Board established by the Participants under Section 9.1 as the primary forum for interactions and decisions among the Participants.
- 1.11 “**Gemini Facilities**” means two facilities, one in the northern hemisphere and one in the southern hemisphere, each of which comprises an 8 meter reflecting telescope, its enclosures, its instrumentation, and all other things associated with it.
- 1.12 “**Gemini North**” means that part of the Gemini Facilities operating on Maunakea, Hawai'i.
- 1.13 “**Gemini South**” means that part of the Gemini Facilities operating on Cerro Pachón, Chile.
- 1.14 “**Gemini Telescopes**” means the 8-meter reflecting telescopes located at Gemini North and Gemini South.
- 1.15 “**Intellectual Property**” means intellectual and industrial property produced or generated during the performance of the Work which is capable of protection by patents, trademarks or copyright; and industrial design, technical information, inventions, prototypes and specifications produced or generated in the performance of the Work which are capable of being licensed.
- 1.16 “**International Agreement**” or “**Gemini Agreement**” means this document, along with its annexes and any subsequent amendments.
- 1.17 “**Limited-Term Collaboration**” means the arrangement by which a Non-Participant collaborates with the Gemini Participants and secures Observing Time for a limited period.
- 1.18 “**Managing Organization**” means the organization referred to in Section 9.13 appointed by the Executive Agency to manage Gemini.
- 1.19 “**Non-Participant**” means any individual or organization that is not a Participant under this Agreement.
- 1.20 “**Observing Time**” means the time scheduled for execution of scientific research programs, including associated system setup and calibration procedures, but excluding the time required for Engineering and Commissioning Activities.

- 1.21 “**Operation**” means the stage of steady-state operation of Gemini, requiring a complement of scientific and technical staff able to support routine astronomical observations with the existing facilities, and the capability to commission new instruments and telescope enhancements with minimal disruption.
- 1.22 “**Participant**” means any one of the organizations that is a signatory to this Agreement or any organization that joins the Agreement pursuant to Section 8.
- 1.23 “**Resolutions**” are specific items agreed to by the Board, either (1) noting and commenting on various aspects of Gemini; or (2) describing decisions made regarding the Operation of Gemini that are transmitted to the Managing Organization for action.
- 1.24 “**Subawards**” means any financial awards made from the Managing Organization to other financial entities, the “Subawardees,” for the purpose of securing deliverable value to the International Gemini Observatory.
- 1.25 “**Weighted Vote**” refers to a vote by the Participants that is weighted according to their Operations Contribution levels, set in Section 15.2.
- 1.26 “**Work**” means any activity approved by the Gemini Board relating to the Operations and Maintenance of Gemini or to the development and implementation of Gemini instrumentation.

2 SCOPE OF THE AGREEMENT

- 2.1 This Agreement covers all activities related to Gemini, including the Operation of the Gemini Facilities as well as the construction and commissioning of new instrumentation.
- 2.2 The Participants (except for CONICYT) intend to contribute to the operation of Gemini through cash payments.
- 2.3 Any benefits to the University of Hawai'i (hereinafter referred to as UH) arising from reference in this Agreement are understood to be subject to the signed Operation and Site Development Agreement (or OSDA) and sublease between NSF and UH.
- 2.4 This Agreement is comprised of Sections and Annexes.
- 2.5 This Agreement is not intended to create obligations binding under international law.

3 MODIFICATION

- 3.1 Except as provided in Section 3.2, no modification of this Agreement is of effect unless it is in writing, dated and signed by all Participants, and specifically states the intention to modify this Agreement.
- 3.2 When it deems necessary, the Gemini Board may modify any Annexes to this Agreement, providing the modification does not significantly alter the intent of this nonbinding Agreement. Any modification to the Annexes requires the unanimous consent, in writing, of the Designated Members from the Participants.

4 TERM AND DISCONTINUATION

- 4.1 Cooperative activities pursuant to this Agreement are to begin on 1 January 2016 and cease on 31 December 2021 unless extended in accordance with Section 4.2.
- 4.2 At points, to be known as Assessment Points, the Participants are to decide whether or not to close the Gemini Facilities, in whole or in part, and whether to:
 - a) extend this Agreement for a further period of at least three years, possibly with a different set of Participants; or
 - b) allow this Agreement to expire without renewal and dispose of the Gemini Facilities; or
 - c) develop a new arrangement for future operations of Gemini.
- 4.3 The first Assessment Point is to be within calendar year 2018 and apply to participation after the initial expiry date of 31 December 2021. Subsequent Assessment Points are to be at intervals of every three years unless otherwise determined by unanimous agreement of the Designated Members of the Board.
- 4.4 At any Assessment Point, any Participant may elect not to continue its participation in Gemini beyond the current expiry date. Any Participant electing not to continue is not to be subject to penalty. However, if in consequence of any Participant electing not to continue, the remaining Participants are able to operate only part of the Gemini Facilities, the Participant electing not to continue is to share any costs or benefits arising from the partial closure of the Gemini Facilities in proportion to its Contribution to Gemini Operations as defined in Section 15.2. Should the remaining Participants decide to continue to operate the full suite of Gemini Facilities, the Participant electing not to continue is not to make any claim for compensation for prior contributions.

- 4.5 The remaining Participants are expected to take full responsibility for the assets and liabilities of Gemini, and must agree to the proportions in which those assets, and the costs of operating the Gemini Telescopes, are to henceforth be apportioned between them. In consequence, the remaining Participants should either modify this Agreement or discontinue this Agreement and replace it with a new arrangement.
- 4.6 In the event that all the Participants decide to discontinue this Agreement without replacement by a new agreement, or to close the Gemini Facilities, in whole or in part, during Operation, the Participants will share any costs and/or benefits arising from such termination or closure in proportion to their contribution to Gemini.
- 4.7 In the event of expiry of this Agreement without replacement by a new arrangement, the Participants are to agree on the manner in which the assets will be disposed of. The costs or benefits arising from that disposal, including the net proceeds that may arise from any sale of assets, are to be divided among the Participants in proportion to their annual Contribution to Gemini Operations, as defined in Section 15.2.

5 WITHDRAWAL

- 5.1 A Participant wishing to withdraw from this Agreement prior to the Agreement's expiration may do so at any time by providing written notice of withdrawal to the other Participants to this Agreement. The effective date of withdrawal will be the date designated in such notice, or in the event that a date of withdrawal is not specified, the date of receipt of the notice. To enable the remaining Participants to continue Operation, the withdrawing Participant is expected to pay the total of its scheduled payments for two (2) years commencing with the date of withdrawal; that is, from the date at which that Participant ceases to receive Observing Time. The penalty is expected to be paid in the amounts and on dates to be determined by the remaining Participants after consultation with the withdrawing Participant.
- 5.2 The extent to which the sums already paid entitle a withdrawing Participant to Observing Time after withdrawal are to be determined by the remaining Participants.
- 5.3 A withdrawing Participant's penalty may be reduced in whole or in part if the withdrawing Participant is able to find a replacement acceptable to the remaining Participants. It is understood that the extent of the reduction is to be determined by the remaining Participants in consultation with the withdrawing Participant and, if appropriate, the replacement Participant or Participants. The new Participant or Participants are expected to abide by all the conditions of this Agreement, and to assume responsibility for the withdrawing Participant's Contribution as specified in Section 15.2.

- 5.4 Except as provided in Section 5.2 and as otherwise understood by the remaining Participants, all rights and benefits conferred on a Participant under this Agreement are to be forfeited at the date of withdrawal.
- 5.5 Notwithstanding Section 5.4, a withdrawing Participant will retain any rights in Intellectual Property acquired as of the date that notice of withdrawal is given.
- 5.6 A withdrawing Participant understands that, at the request of the remaining Participants, it will transfer all its right, title, and interest in any property, contracts (to the extent allowed under those contracts) or work in progress funded out of money contributed to Gemini under this Agreement to such other persons or organizations as the remaining Participants direct and commit to otherwise cooperate in order to facilitate the continuation of Gemini by the remaining Participants.

6 PRECEDENCE/PRIMACY

- 6.1 This Agreement is intended to supersede all prior communications, negotiations and agreements between the Participants concerning Gemini.
- 6.2 If the Annexes and the Sections of the main body of this Agreement are inconsistent, the Sections are to prevail. The headlines of Sections are not relevant to the interpretation of the Sections.
- 6.3 No Participant shall enter into other arrangements concerning Gemini that conflict with the terms of this Agreement. Should conflict with another agreement arise, this Agreement is intended to prevail.
- 6.4 Each Participant commits, in the performance of all of its rights and obligations under this Agreement, to comply with all applicable laws, rules, regulations and by-laws and with all orders, decrees, policies, and directives issued by applicable governmental authorities.

7 OWNERSHIP

- 7.1 All assets of Gemini are to be the property of the Executive Agency (see Sections 9.11 and 11), or such other body as the Participants agree. However, the Executive Agency or other body as agreed upon by the Participants is not to dispose of assets, in whole or in part, during the period of this Arrangement without the written consent of all the Participants.
- 7.2 The Managing Organization (see Sections 9.13 and 12) is to be granted delegated authority by the Executive Agency to dispose of assets the value of which does not exceed a limit set from time to time by the Board subject to the said assets being either surplus to the future requirements of Gemini or unserviceable and beyond economic repair. Initially, that limit shall be

50,000 US dollars. Surplus assets shall be offered for sale to the Participants before being offered for sale to Non-Participants. All proceeds realized are to be reinvested in Gemini.

- 7.3 Where the value of an asset identified for disposal exceeds the limit referred to in Section 7.2 above, the Managing Organization is expected to seek the approval of the Board before disposing of that asset and seek instruction from the Board as to whether the proceeds realized are to be reinvested in Gemini or distributed between the Participants in proportion to their Contributions to Gemini Operations, as defined in Section 15.2.

8 NEW MEMBERSHIP AND LIMITED-TERM COLLABORATION

- 8.1 Any Non-Participant is permitted to join Gemini subject to the unanimous agreement of the Designated Members and the Board Member appointed by UH, who determine the terms under which the Non-Participant will be invited to join.
- 8.2 Where a Non-Participant joins Gemini, this Agreement should be amended such that the Non-Participant becomes a Participant to the Agreement and accepts and abides by the understandings thereof. This may be accomplished following transmission of a letter from the new Participant to the Chair of the Gemini Board, which is to be incorporated into this agreement as a new Annex to the Agreement. (Also see Section 15.3.)
- 8.3 A Non-Participant may engage in a Limited-Term Collaboration with the Gemini Participants, under terms and conditions to be set on a case-by-case basis, and on approval as specified in Section 10.5. Members of the Limited-Term Collaboration are not entitled to any voting seats on the Gemini Board or other representative bodies, and must agree in writing to accept and abide by the understandings herein. Attendance of representatives from a limited-term collaborator as observers at Gemini Board meetings may be allowed, as set forth in Section 9.3.

9 MANAGEMENT

- 9.1 The Participants are to establish a supervisory and regulatory body to be known as the Gemini Board.
- 9.2 The Board is to be composed of
- 6 members appointed by NSF
 - 2 members appointed by NRC
 - 1 member appointed by MCTIP
 - 1 member appointed by MCTI
 - 1 member appointed by UH
 - 1 member appointed by CONICYT

If a new Participant joins Gemini (see Section 8.2), Board membership may be adjusted by a unanimous vote of the Designated Members (see Section 9.6) of the Board, and the new distribution of Board membership should become an Annex to the Agreement.

- 9.3 Such other persons as deemed appropriate or necessary may be invited to attend meetings of the Board as the Board Chair may from time to time determine.
- 9.4 The Chair is elected by the Board. The Chair is appointed for a two-year term, with the Chair alternating between a US nominee and an individual nominated by the other Participants. The Chair is a non-voting member of the Board, and shall not represent any specific Participant; thus the Board Chair is not to be counted against the numerical Board representation specified in Section 9.2.
- 9.5 There is a Secretary to the Board, who is responsible for the support of the Board including keeping records of the meetings and Resolutions of the Board.
- 9.6 It is understood that each Participant having a member on the Board will appoint a member as its "Designated Member" and that Designated Member has the authority to speak for that Participant on matters before the Board.
- 9.7 The Participants are to advise the Chair and Secretary, in writing, of the members they have appointed to the Board and the duration of the appointments.
- 9.8 A Participant may change its appointed member(s) and/or its Designated Member by giving notice, in writing, to that effect to the Chair and Secretary of the Board, who are then responsible for notifying the other Participants.
- 9.9 The members appointed by CONICYT and UH have voting rights only on scientific matters appertaining to Gemini South in the case of CONICYT, and to Gemini North in the case of UH. The addition of new Participants (Section 8.1) and the engagement in limited-term collaborations (Section 8.3) are deemed to be scientific matters appertaining to both Gemini North and Gemini South. The Chair is responsible for the interpretation and application of these restrictions in case of dispute.
- 9.10 A representative of UH is entitled to attend all meetings of committees of the Board and all formal meetings concerning Gemini that involve all of the Participants.
- 9.11 There is an Executive Agency empowered to act on behalf of the Participants to arrange for the carrying out of Gemini Operations.

- 9.12 NSF is the Executive Agency.
- 9.13 It is understood there will be a Managing Organization appointed by the Executive Agency to manage Gemini.
- 9.14 At intervals to be determined by the Board, the choice of Managing Organization is subject to review by the Executive Agency. The terms of reference (i.e. policies) for each review are to be agreed by the Participants. The Executive Agency is expected to ask the Participants to nominate potential participants in the review, and review panels should contain members from institutions in the countries of the non-US Participants. Reports of the review panel, subject to redaction for confidential information, are to be made available to the Board for inspection. At each review, the Board is expected to either approve the choice of Managing Organization for a further defined period or indicate to the Executive Agency that an alternate Managing Organization be appointed.

10 RESPONSIBILITIES OF THE GEMINI BOARD

- 10.1 It is understood that the Board will:
- (a) be the primary forum for interactions and decisions among the Participants;
 - (b) ensure that Gemini is managed and operated in accordance with the understandings in this Agreement;
 - (c) be the body with overall budgetary and policy control over Gemini;
 - (d) meet at least twice per year;
 - (e) define, appoint, and review, as necessary, such committees as the Board deems necessary;
 - (f) provide guidance to the Managing Organization on the content of their Program Plans;
 - (g) approve a management structure for Operations following proposals by the Managing Organization, and the job description and appointment of the Director;
 - (h) taking into account Sections 15.2 and 18.1, determine the policy and procedures for the allocation of Observing Time which shall be based on peer review;
 - (i) receive and comment on reports from the Participants on negotiations with Non-Participants wishing to join Gemini; and,
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- (j) participate in, and advise on, the Chilean astronomy program described in Section 24 and remain informed of its progress.

10.2 It is also understood that the Board will be responsible for reviewing and approving:

- (a) annual and multi-year Gemini Budgets;
- (b) Subawards to be made by the Managing Organization with a value exceeding \$1 million;
- (c) the Executive Agency's selection of Managing Organization and any renewals or changes;
- (d) the terms of the Award between the Executive Agency and the Managing Organization supporting Gemini;
- (e) the annual accounts and auditors' reports of the Managing Organization and Executive Agency;
- (f) the Program Plans as prepared by the Managing Organization;
- (g) plans for the use of the Instrument Development Fund as described in more detail in Section 17.

10.3 The Board is not to employ staff.

10.4 The Board may, with the agreement of the Designated Members, adopt common oversight and management activities chargeable to Gemini, and may request the Executive Agency to arrange for the engagement of staff to assist in such tasks. Expenses related to such oversight functions as may be required by individual Participants shall be the responsibility of the respective Participant.

10.5 The Board should seek consensus on issues. On issues brought to a vote, a simple numerical majority will carry the matter unless at least one Designated Member calls for a weighted vote. In that case, votes will be weighted so that the total weight of votes from each Participant is proportional to that Participant's share in Gemini, as specified in Section 15.2. If a vote is called for on budget and financial issues, as described in Section 13.1 or on modifications to this Agreement, agreement is to be determined by a weighted vote of 80% of the Designated Members of the Board. In accordance with Section 9.9, members appointed by the University of Hawai'i and CONICYT are expected to have voting rights only on scientific or partnership matters pertaining to Gemini North in the case of UH and Gemini South in the case of CONICYT. A vote from UH or from CONICYT on issues brought to a weighted vote will have a weight of 5% each out of 110% for matters pertaining to both Gemini North and Gemini South,

and a weight of 10% out of 110% for matters pertaining only to Gemini North (UH) or Gemini South (CONICYT).

- 10.6 Rules of Procedure for the Board form Annex “A” of the Agreement. In accordance with Section 10.5, these may be modified with a weighted vote of at least 80% of the Designated Members of the Board.

11 RESPONSIBILITIES OF THE EXECUTIVE AGENCY

11.1 It is understood that the Executive Agency is to:

- (a) select the Managing Organization, subject to Section 10.2, with participation from representatives of the Participants as described in Section 9.14;
- (b) ensure that all agreements between the Managing Organization and Subawardees do not conflict with this Agreement;
- (c) require that the Managing Organization, to the maximum extent practicable, makes Subawards on the basis of competitive tender;
- (d) receive and maintain records of contributions from the Participants, and report to the Board as described in Section 13.9;
- (e) transfer contributions received from the Participants to the Managing Organization, with provision made to assure sufficient cash on hand for the Managing Organization in the event of a temporary interruption in the flow of funds, assuming that contributions from the Participants have not yet been spent by Gemini;
- (f) require that the Managing Organization adheres to the procedures for authorizing requisitions, commitment, obligation and expenditure of funds as set forth in the Award between the Executive Agency and the Managing Organization, as approved by the Board, and be responsible for ensuring that the Award fulfills the requirements of this Agreement among the Participants;
- (g) ensure that the terms of the Award include sufficient audit provisions so that contributions provided for Gemini are properly accounted for annually;
- (h) inform the Managing Organization of the Resolutions of the Board;
- (i) ensure that the Participants have access to the Gemini Facilities at all reasonable times;
- (j) use its best efforts to facilitate the employment by or on behalf of the Managing Organization of non-US citizens;

- (k) use its best efforts to facilitate the free movement between the United States and Chile and the Participants' countries of materials, equipment and other items necessary to the execution of Gemini;
- (l) provide, at the expense of the Executive Agency, a Secretary for the Board and associated administrative support; and
- (m) report regularly to the Board.

12 RESPONSIBILITIES OF THE MANAGING ORGANIZATION

- 12.1 The Executive Agency is expected to ensure that the Managing Organization:
- (a) develop and make accessible to the Board annual Program Plans, which are based on the Budgets described in Section 12.1 (f);
 - (b) be responsible for the overall management of Gemini in accordance with the management plans as approved by the Board;
 - (c) employ key Gemini staff;
 - (d) carry out the Resolutions of the Board as transmitted by the Executive Agency according to Section 11.1(h);
 - (e) keep proper records and accounts;
 - (f) produce for the Board by October 31 of each year a Budget for the following year and prospective Budgets for not less than two (2) further years;
 - (g) establish safety rules;
 - (h) report through the Executive Agency to the Board; and,
 - (i) facilitate the distribution of funds to CONICYT for the development of Chilean astronomy, as described in Section 24, and assist in realizing the program if requested.

13 FINANCIAL PROVISIONS - GENERAL

- 13.1 Specification of the required or prospective contributions of the Participants to Gemini Operations requires the unanimous approval of the Designated Members from all Participants except CONICYT. Unless otherwise stated herein, the approval of other financial matters before the Board requires the approval of an 80% weighted vote of the Designated Members from all Participants except CONICYT.

Accounting and Audits

- 13.2 The accounting unit is the US dollar.

- 13.3 The financial year of Gemini is the calendar year (January 1 - December 31).
- 13.4 The audit year of the Managing Organization is its fiscal year.
- 13.5 It is understood that on or before November 30, the Board will approve a Budget for the following year. Approval of the Budget requires the unanimous agreement of the Designated Members of the Board, excepting CONICYT.
- 13.6 The contributions of the Participants are calculated in US dollars. For Operations, a payment schedule will be as per Administrative Guidelines described in Annex D. A Participant may reschedule payments subject to the approval by a weighted vote of at least 80% of the Designated Members of the Board, excepting CONICYT.
- 13.7 The Executive Agency and any Participant may bring proposals to the Board for its unanimous agreement for alternative methods of making contributions to Gemini.
- 13.8 Any Participant may propose to make additional payments in a Gemini financial year in excess of those due. Such proposals are subject to approval by the Board. It is understood that such approval should not be unreasonably withheld, unless the Executive Agency advises the Board that advance payments may cause difficulties with the timely expenditure of Observatory funds. Any approved additional payments are to be credited as advance payments against contributions due in future fiscal years.
- 13.9 The Executive Agency is expected to provide the Board with a semi-annual report of payments, and sums authorized or transferred to the Managing Organization, and contributions received but not yet provided to the Managing Organization, including the source and designated usage (Operations or Development) of the funds. Any Participant may request through the Board a copy of the financial instrument giving the specific details of authorizations and/or transfers to the Managing Organization.
- 13.10 Funds provided to the Managing Organization are subject to an annual external audit, the results of which will be available to the Participants via the Board.

Subawards

- 13.11 All Subawards awarded by the Managing Organization between \$250 thousand (\$250,000) US and \$1 million (\$1,000,000) US, are to be reported to the Board. All Subawards totaling in excess of \$1 million (\$1,000,000) US are to be put to the Board for approval prior to being awarded (see Section 10.2b).

13.12 Subaward approvals made by the Board require the agreement by a weighted vote as specified in Section 13.1. In cases of urgency such agreement may be obtained in writing through the Designated Members, independent of a Board meeting, but such cases are to be reported to the next Board meeting.

14 FINANCIAL PROVISIONS – CONTRIBUTIONS BY THE PARTICIPANTS

14.1 Under the Award, the Executive Agency may authorize the Managing Organization, subject to any approvals required under this Agreement, to enter into long term Subawards. If the Managing Organization believes that the Project will benefit financially from placing specific contracts that exceed annual commitment limits, it should discuss with the Participants through the Executive Agency the provision of additional financial cover. This process will normally take place during the Board approval of Budgets and approval for such contracts is expected to be confirmed by the Participants, in writing, to the Executive Agency.

14.2 The Participants fully expect that the funds that they will set aside and obligate from time to time to the International Gemini Observatory will fully meet their obligations under this Agreement. However, pursuant to the restrictions contained in the national laws of the Participants, the ability of each Participant to obligate its full commitment, or its ability to satisfy any contingent liability that may arise under this Agreement, including, but not limited to, Section 5 (Withdrawal) and Section 16 (Default), are necessarily subject to the availability of appropriated funds.

15 FINANCIAL PROVISIONS - OPERATION

15.1 Funding of the travel costs of observers or others wishing to use the Gemini Facilities is outside the scope of this Agreement.

15.2 It is understood that the Contributions for Operations of Gemini are to be shared among the Participants as follows:

NSF	69.84%
NRC	19.88%
MCTI	6.96%
MCTIP	3.32%
CONICYT	0.0%

- 15.3 In the event of the addition of a new Participant to the Agreement under the terms of Section 8, the shares designated in Section 15.2 and the Board Membership in Section 9.2 may be modified by unanimous agreement of the Designated Members of the Board. The results of any new Participant process should be made publicly available in a Resolution of the Board.

16 DEFAULT

- 16.1 If a Participant is in arrears on any payment by more than 90 calendar days, the Executive Agency is to inform the Participants. The remaining Participants may suspend the observing privileges, in whole or in part, of that Participant in arrears, by means of a Board Resolution (with the Participant in arrears ineligible to vote), until the arrears are paid.
- 16.2 If a Participant is in arrears for more than twelve (12) months, the Executive Agency should inform the Board. The Chair of the Board will notify the defaulting Participant, in writing, that the remaining Participants intend to consider that Participant as having withdrawn from the Agreement. The defaulting Participant will then have 90 days to pay the arrears. If it does not pay the arrears within the 90 days, the defaulting Participant is to be treated as having withdrawn from the Agreement and it is intended that the relevant provisions of Section 5 will apply. Under exceptional circumstances, these timescales may be modified by unanimous vote of the Designated Members of the Board, with the Participant in arrears being ineligible to vote.
- 16.3 Where a satisfactory explanation for any delay in payment has been made by the defaulting Participant and accepted by the Board, such further period as the Board considers appropriate may be granted for the payment of arrears.
- 16.4 On expiry of such further period, in the event that the arrears remain unpaid, the Chair of the Board will notify the defaulting Participant, in writing, that the remaining Participants intend to consider that Participant as having withdrawn from the Agreement and the relevant provisions of Section 5 shall apply.

17 INSTRUMENT DEVELOPMENT FUND

- 17.1 The Participants intend that an Instrument Development Fund will be used to provide for instruments and their supporting systems to significantly augment, upgrade or replace those provided under this Agreement.
- 17.2 The Board is expected to annually set a target level for the Instrument Development Fund, based on an assessment of the needs of the Observatory and the Participants' ability to contribute. Each Participant should contribute to the Instrument Development Fund to the best of their ability, in

proportion to their Operations Contributions or in such other proportion as the Board may determine.

- 17.3 Funds for the Instrument Development Fund are to be contributed through the Executive Agency and authorized for transfer to the Managing Organization as part of the budget approval process.
- 17.4 The Managing Organization is expected to produce plans for the use of the Instrument Development Fund. These plans are subject to approval by the Board.
- 17.5 Any Work arising out of expenditures from the Instrument Development Fund is subject to a distribution that is mindful of the responsibilities and benefits of the Participants.
- 17.6 Upon discontinuation of this Agreement, the Participants expect to share any excess money contained in the Instrument Development Fund and share responsibility for any commitments outstanding at the time of termination in the same share as their total contribution to the Instrument Development Fund during the lifetime of this Agreement.

18 OBSERVING TIME AND DATA RIGHTS

- 18.1 The allocation of Observing Time on the Gemini Telescopes is calculated on an annual basis. UH will receive 10% of the available Observing Time on the Gemini North telescope. CONICYT will receive 10% of the Observing Time on the Gemini South telescope. The Participants understand that the remaining Observing Time will be divided among the remaining Participants equitably, with consideration of the seasons of the year and the sky illumination by Moon and Sun, and allocated in proportion to each Participant's individual Contribution to the annual budget approved by the Board. This total Contribution includes the contribution to Operations, as specified in Section 15.2, and to the Instrument Development Fund, as described in Section 17.3.
- 18.2 The Board is expected to determine the ownership rights of data, rules for access to the archival data and use of the data resulting from Operation of the Gemini Telescopes.
- 18.3 Any observer who obtains data using either of the Gemini Telescopes should have exclusive use of those data for the first twelve (12) months after its collection; in exceptional cases, extensions of the proprietary period may be granted by the Director at his/her discretion, with an annual report of such extensions to be provided to the Board. After the expiration of the proprietary period, the data, including appropriate log and calibration

information, is expected to become available to any qualified individual in accordance with general principles approved by the Board.

19 ACCESS BY OTHERS

- 19.1 The Board is to determine the terms under which a Non-Participant may access and use the Gemini Facilities. (See Section 8.3 regarding Limited-Term Collaborations, as distinct from occasional or one-time usage.)
- 19.2 By agreement among the Participants, any Participant may assign its Observing Time, in whole or in part, to a Non-Participant. The agreement of the Participants to such arrangements, which must be in accordance with this and any other agreements concerning Gemini as well as national legal requirements of the Participants, should not be unreasonably withheld. Assignment of Observing Time is not to be construed to include an assignment, in whole or in part, of any of the other rights and responsibilities of the Participants.

20 INTELLECTUAL PROPERTY

- 20.1 The Participants expect that, except as provided in Sections 18.2 and 18.3 concerning data acquired at the Gemini Telescopes, the inventor or creator of Intellectual Property or his or her assignee or employer will have ownership or the option to own all Intellectual Property arising out of the Work done pursuant to this Agreement.
- 20.2 Subject to Section 20.6, for all Intellectual Property created during Work under this Agreement other than inventions, the Managing Organization is expected to provide and obtain a non-exclusive, non-transferable, irrevocable, paid-up license (1) for use by the Managing Organization for Gemini and (2) for each of the Participants to use or have used on their behalf throughout the world for non-commercial research purposes any such Intellectual Property.
- 20.3 If applicable, the provisions of the Award to the Managing Organization are to contain the patent right provisions required by Chapter 18 of Title 35, United States Code, including a requirement as authorized by 35 USC 202 (c) (4) that the Managing Organization provide or obtain, in addition to the license rights of the United States, a non-exclusive, nontransferable, irrevocable, paid-up license for each of the non-U.S. Participants to practice or have practiced on their behalf throughout the world for research purposes any subject inventions. The license rights which the Managing Organization is expected to obtain for the United States under subawards or other arrangements with persons or organizations from countries of the non-U.S. Participants understand that they will be limited to a non-exclusive, nontransferable, irrevocable, paid-up license for NSF to practice or have

practiced on its behalf for research purposes any subject inventions created during Work under this Agreement.

- 20.4 It is recognized that some arrangements made by the Managing Organization for the undertaking of research or development work for Gemini may involve funding agreements that are not subject to Section 20.3. The provisions of the NSF Award to the Managing Organization are expected to contain terms and conditions designed to assure the identification and reporting of inventions on a basis comparable to that contemplated under Section 20.3 and the granting of licenses to all the Participants by the owner of the inventions that are substantially the same as those required for non-US Participants under Section 20.3. Each Participant recognizes that when arrangements involving its employees are made that are subject to this Section, the Participant will have to enter into appropriate arrangements with the Managing Organization to accomplish the intent of this Section.
- 20.5 In the case of scientific or technical papers, reports, books or the like (whether in print or electronic form) prepared by the Managing Organization or its subawardees which are provided to the Participants or the Board, each Participant understands it is free to translate, reproduce and publicly distribute them, subject to such intended restrictions, if any, as may be placed on the document pursuant to Section 20.6.
- 20.6 The Participants recognize that in some cases the Managing Organization or its subawardees may have to obtain goods or services from organizations that limit the uses made of certain technical data, software, know-how, or other information provided to the Managing Organization or its subawardees because the organization providing the data, software, know-how or other information treats it as proprietary or trade secret and normally restricts its use. This is likely to be particularly true where pre-existing technical data or software is involved. In such cases, the Participants recognize that it may not be cost-effective or possible for the Managing Organization or its subawardees to obtain license rights for the Participants of the type normally contemplated by Sections 20.2 and 20.5 and do not expect the Managing Organization or its subawardees to obtain such rights in such cases; provided that, whatever license rights are obtained should be the same for all the Participants.

21 LIABILITY & INDEMNITY

- 21.1 The Executive Agency is expected to require the Managing Organization to procure and maintain for its own benefit, and the benefit of the Participants, comprehensive general liability insurance. The Board is to approve the adequacy of this insurance.

22 NOTICE

22.1 Any notice contemplated by this Agreement, unless a different address is subsequently notified by one Participant to the others in writing, should be sent to the Participants at the addresses stated in Annex "C", and copied to the Secretary to the Board, by either

(a) certified mail, and then it is considered to have been received ten days after it is sent; or

(b) courier, facsimile, or signed e-mail copy, and then it is considered to have been received only when acknowledged by an official receipt, a return facsimile transmission, or a return of a signed copy via e-mail.

23 DISPUTES

23.1 Any disagreements regarding the interpretation, implementation or application of this Agreement should be resolved by consultation among the Participants. Disagreements shall not be referred to any national or international tribunal or third Participant for settlement.

24 COOPERATIVE PROGRAMS FOR THE DEVELOPMENT OF CHILEAN ASTRONOMY

24.1 CONICYT has established a framework of a nationwide program for the development of Chilean astronomy, consistent with the objectives stipulated in Annex "E." Annex "E" within the present Agreement is an updated version of a previous agreement, dated May 2003, between CONICYT and the Gemini partnership at that time.

24.2 The funds previously transferred from the Gemini Participants to the Managing Organization are being used in a program established by CONICYT for the development of Chilean astronomy and closely related sciences. It is understood that they are to be used wholly and exclusively for this purpose as described in Annex "E" of the Gemini Agreement. Any arrangement for the transfer of these funds for another purpose should be approved by the Gemini Board.

24.3 The funds are to be financially administered by the Managing Organization on behalf of the Participants, and under the direction of CONICYT in accordance with its legal faculties, the present agreement and any relevant laws and regulations.

25 LISTING OF ANNEXES


25.1 The following annexes are incorporated by reference and form part of this Agreement:

- (a) Annex “A” Gemini Board: Rules of Procedure
- (b) Annex “B” Gemini Board of Directors Policy on Conflict of Interest
- (c) Annex “C” Addresses for the Participants and UH for Financial Matters
- (d) Annex “D” Administrative Guidelines and Payment Schedules Concerning the Operations of the Gemini Facilities
- (e) Annex “E” Addendum to the Cooperative Agreement between CONICYT and the other Gemini Participants.

26 SIGNATURES


Cooperative activities outlined in this Agreement will commence upon signature by **the National Science Foundation of the United States of America (herein referred to as “NSF”), The National Research Council of Canada (herein referred to as “NRC”), the Comisión Nacional de Investigación Científica y Tecnológica of Chile (herein referred to as “CONICYT”), the Ministerio de Ciencia, Tecnología e Innovación Productiva of Argentina (herein referred to as “MCTIP”), and the Ministério da Ciência, Tecnologia e Inovação of Brazil (herein referred to as “MCTI”).**

Signed this 13 day of August 2015 on behalf of the **U.S. National Science Foundation** by


(signature)

France A. Cordova
(printed name and title)
Director

Signed this 2nd day of DECEMBER 2015 on behalf of the **National Research Council of Canada** by


(signature)

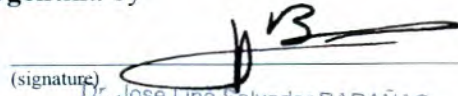
JOHN R. McDOUGALL
(printed name and title)
PRESIDENT

Signed this 11 day of DECEMBER 2015 on behalf of the **Comisión Nacional de Investigación Científica y Tecnológica of Chile** by


(signature)

CHRISTIAN NICOLAI
(printed name and title)
DIRECTOR EJECUTIVO

Signed this _____ day of _____ 2015 on behalf of the **Ministerio de Ciencia, Tecnología e Innovación Productiva of Argentina** by


(signature)

Dr. José Lino Salvador BARAÑAO
(printed name and title)
Ministro de Ciencia, Tecnología e Innovación Productiva

Signed this 29 day of December 2015 on behalf of the **Ministério da Ciência, Tecnologia e Inovação of Brazil** by

(signature)

(printed name and title)

Celso Pansera
Ministro de Estado da Ciência
Tecnologia e Inovação

ANNEX A
GEMINI BOARD: RULES OF PROCEDURE

Section 1: Definitions

1.1 In these Rules Of Procedure the following terms shall be used in the sense in which they are defined in this Section:

- (i) *The Participants*: The participants in the Gemini Agreement;
- (ii) *The Agreement*: the Agreement signed by all of the Participants concerning operation of an 8 meter telescope on Maunakea, Hawai'i and an 8 meter telescope on Cerro Pachón, Chile; together with associated infrastructure, these are known as the Gemini Facilities;
- (iii) *The Board*: The Gemini Board set up according to Section 9 of the Agreement.

Section 2: Framework

2.1 The Terms of Reference of the Board are laid down in Section 9 of the Agreement and its responsibilities in Section 10. If this Annex is inconsistent with the Sections of the main body of the Agreement, the Sections are to prevail, as specified in Section 6.2 of the Agreement.

2.2 The Executive Agency is expected to provide at its expense a Secretary to the Board, in accordance with Section 11.1(l).

Section 3: Membership of the Board

3.1 The membership of the Board is laid down in Section 9.2 of the Agreement; methods for appointment and replacement also are laid out in Section 9 of the Agreement.

3.2 In the event that a duly appointed member of the Board is unable to attend a meeting, an alternate may be appointed to attend in that member's place. The alternate shall, for that meeting only, have the same voting rights as the member for whom the alternate is substituting, except that if a Designated Member is unable to attend, the Participant concerned is to formally confirm to the Secretary in writing who is to act as its Designated Member. Any Participant appointing an alternate for a given meeting should notify the Secretary, giving not

less than 7 days' notice in writing. The Secretary, in turn, will notify the other Participants of that appointment.

Section 4: Chair and Vice-Chair

4.1 Rules for the appointment and reappointment of the Chair of the Board are laid down in Section 9.4 of the Agreement.

4.2 The Board is to appoint a Vice-Chair who is expected to be a member from a Participant other than that of the Chair. The Vice-Chair will act for the Chair whenever the Chair is not available.

4.3 The Chair and Vice-Chair normally hold office for two years, with identical terms of office.

4.4 Should the Chair resign before the normal date of termination of the period of office, the Vice-Chair is expected to also resign as soon as the new Chair is appointed. In the event that the Chair is unable to fulfill his or her role, the Board is to appoint a replacement Chair as soon as possible. The Vice-Chair acts as Chair in the meantime, but should resign on appointment of the new Chair. A new Vice-Chair will then be appointed.

4.5 The Board may reappoint the Vice-Chair with no restrictions other than that mentioned in paragraph 4.2 of this Section.

4.6 In the absence of the Chair and Vice-Chair at any meeting the Designated Members are expected to agree on an Acting Chair for that meeting from among the members.

Section 5: Meetings of the Board

5.1 The Board is expected under Section 10.1(d) of the Agreement to meet at least twice per year. Board meetings are normally held in May and November, on dates and at venues to be proposed by the Secretary and agreed between the Chairman and Designated Members.

5.2 The Chair may, subject to the agreement of the Vice-Chair and the Designated Member from each Participant, call additional meetings as required, at times and venues to be agreed between the aforementioned individuals.

5.3 The Secretary notifies all members of the date and venue of required meetings not less than 8 weeks in advance. Additional meetings may be called as

required by the Chair with the agreement of the Designated Members. Members shall confirm their attendance not less than 7 days before meeting.

5.4 Participants hosting meetings of the Board are responsible for the costs associated with hosting the meetings. Each Participant is responsible for the expenses of its members attending meetings, including travel and accommodation costs.

5.5 The Board should seek consensus on issues. On issues brought to a vote, requirements for approval are described in Section 10.5 of the Agreement.

Section 6: Attendance at Meetings

6.1 The meetings of the Board are attended by:

- (i) the duly appointed members or their alternates;
- (ii) such members of the Gemini management as the Board shall from time to time determine;
- (iii) persons invited by the Chair of the Board to attend specific items on the agenda of the Board relevant to the responsibilities of those persons, or for the efficient administration of the Board's business;
- (iv) the Secretary to the Board.

6.2 It is understood that The Board will take decisions in its meetings only if Designated Members representing at least 80% of the Participant shares are present. In this respect the alternates are regarded as members, providing the Secretary and the other Participants and UH have been notified of the appointment of an alternate in accordance with Section 3.4 of these Rules of Procedure. Resolutions by the Board in accordance with this Section are binding on the Board.

6.3 The expenses of persons attending the meetings of the Board in accordance with paragraph 6.1(i) of this Section above will be met by their National Agency. The expenses of persons attending under 6.1(ii) will be met from the joint budget of Gemini. The expenses of persons attending under 6.1(iii) are normally met by their direct employer or National Gemini Organization.

6.4 The expenses of the Secretary and the administrative expenses associated with the office of Secretary are covered by the Executive Agency.

6.5 Other expenses associated with hosting the meeting, including venue, and technical support, will normally be met by the host. When meetings are held at the Gemini Facilities, Gemini will be the host.

6.6 Closed sessions may be called by the Chair or at the request of any two members of the Board. Closed sessions should be attended only by the persons mentioned in paragraphs 6.1(i) and (iv) of this Section. Other persons may, by the unanimous agreement of the Board, be invited to attend all or part of the closed session as necessary.

Section 7: Agenda of Meetings

7.1 The Secretary will prepare the draft agenda for the meetings of the Board in consultation with the Chair.

7.2 Any member of the Board may introduce items on the draft agenda for a meeting of the Board. The Secretary should be notified of items for the agenda at least four weeks before the meeting will take place.

7.3 The Secretary will dispatch the draft agenda and supporting documents to the members or their alternates at least two weeks before the meeting will take place.

7.4 At the beginning of each meeting the Board will adopt an agenda, taking into account the draft agenda.

7.5 The Secretary, together with the Board Chair, drafts minutes and a set of Resolutions following each meeting of the Board, and circulates them in draft within 1 month of the meeting date to members and to attendees as appropriate. The draft minutes, amended where necessary, are to be submitted to the Board for approval at the meeting following the meeting they record.

Section 8: Committees

8.1 According to Section 10.1(e) of the Agreement the Board may set up such Committees as it deems necessary.

8.2 The Board decides upon a written draft regarding:

- (i) the membership of the committee(s);
- (ii) the charge to and/or Terms of Reference of the committee(s);
- (iii) the time during which the committee(s) shall be active;
- (iv) the method of reporting by the committee(s) to the Board.

8.3 The Participants and UH are each expected to meet the expenses of their respective members attending meetings of a committee.

8.4 During each meeting of the Board, the Secretary, or such other person as agreed by the Board for each committee, is to provide the Board with information about the progress in the committee(s).

Section 9: Consideration of Business by Correspondence

9.1 The Board, through its Chair and Vice-Chair, on the request of any member of the Board, may decide to consult the members by correspondence on items of business which have to be settled between meetings.

9.2 The Secretary should provide the members with a well-defined written proposal concerning the aforesaid item(s) and allow at least two weeks for a written answer by the members. The Participants and UH should ensure that alternates are consulted, should the duly appointed members not be available for consultation, and send the Secretary the answers of the alternates.

9.3 The normal working procedures of the Board, as set out in Section 10.5 of the Agreement, should be applied in reaching any decision by correspondence on proposals circulated in accordance with Section 9.2 of this Annex.

9.4 The results of the consultation by correspondence should be recorded in the minutes of the meeting following the consultation.

Section 10: Consideration of Urgent business by the Chair

10.1 The process defined in this Section shall be known as the "Urgency Procedure."

10.2 In the event of business arising requiring an urgent decision, and which for reasons of time cannot be dealt with under the correspondence procedure laid down in Section 9, the Chair or, in his/her absence, the Vice-Chair, is expected to make the decision. (References in this Section to "the Chair" shall apply when appropriate to the Vice-Chair.)

10.3 Where the urgent decision concerns financial matters, the Participants understand that Board approval must also be sought, in accordance with Section 13.1 of the Agreement.

10.4 The Secretary should provide the Chair with a well-defined written proposal concerning the aforesaid item(s).

10.5 The Chair or, in the case of financial matters, the Chair and Designated Members, approves the minimum action necessary to deal with the item(s) satisfactorily until the next Board meeting, in such a way as to minimize prejudice to any subsequent action the Board may consider.

10.6 The Secretary shall write to members as soon as possible to inform them of any decisions taken by the Chair under the Urgency Procedure.

10.7 Decisions taken under the Urgency Procedure are expected to be reported formally to the Board at its next meeting.

ANNEX B

GEMINI BOARD OF DIRECTORS POLICY ON CONFLICT OF INTEREST

Effective January 1, 2016

1. Principle

The Gemini Board is committed to having its members conduct themselves in accordance with the highest standards of integrity and ethics, and in compliance with applicable norms of behavior related to conflict of interest and objectivity in research. It is essential that the work of the Board not be compromised by any significant personal, scientific, or professional conflict of interest.

2. Context

The Managing Organization has an obligation to carry out selection processes where conflicts of interest (and apparent conflicts of interest) are minimized or eliminated. The Gemini Board approves awards and the National Science Foundation (NSF), as the Executive Agency, conveys the authority to the Managing Organization to act on those awards. The Gemini Board is not subject to NSF internal policies. Therefore, the Gemini Board has elected to articulate conflict of interest terms of reference, recognizing the need to maintain a suitable level of balance and expertise as well as appropriate representation and participation of all Participants, and acknowledge these terms and guidelines through a Board resolution.

The conflict of interest terms of reference have been developed to ensure that potential personal, scientific, professional, and financial conflicts are disclosed by Gemini Board members, documented in the record of the Gemini Board, reviewed by the Board Chair in consultation with the Executive Agency and Designated Members, as necessary, and a satisfactory resolution reached.

3. Definitions

The Gemini Board recognizes that appointed and Designated Board members (as defined in the International Gemini Agreement between the agencies) serve to represent, among other interests, those of their respective countries, managing agencies, and/or appointing organizations. As such, these Participants' interests

normally are considered beyond the bounds of the conflict of interest articulated within the guidelines and terms of reference herein.

With reference to usage within this document, defining terms, abstracted from the International Gemini Agreement, are adopted as:

"Designated Members," means those members of the Gemini Board authorized to speak on behalf of the Participants on matters before the Gemini Board (Section 1.6 of the Gemini Agreement); and

"Participants," means the Participants to the Gemini Agreement (Section 1.22).

The Gemini Board acknowledges each Participant having a member on the Board is to appoint a member as its "Designated Member" and that Designated Member is to have authority to speak for that Participant on matters before the Board (Section 9.6).

The term conflict of interest as defined by the Gemini Board, involves any situation where any financial or other interests could (1) impair the individual's objectivity or (2) create an unfair competitive advantage for the individual or an organization with which they have common interests.

Conflict of interest may result from (1) external relationships that directly or indirectly affect the financial interest of an individual Gemini Board member, (2) decision-making processes that result in allocation of resources, including but not limited to contracts, studies, work packages, Observing Time, etc. that directly or indirectly affect the scientific interest of an individual Gemini Board member or close scientific collaborators, or (3) direct and predictable actions affecting the financial interest of organizations within which the individual is an officer, director, trustee, partner, or employee.

4. Discussion and Concepts

Conflict of interest requirements are objective and prophylactic. Conflict of interest requirements are objective standards designed to eliminate specific, potentially compromising situations from arising, and thereby to protect the individual, the other members of the Gemini Board, the Gemini Observatory, and the public interest of the Gemini Participants. The Gemini Board and the Gemini Observatory should not be placed in a situation where others could reasonably question, and perhaps challenge, the work and decisions of the Gemini Board simply because of the existence of conflict of interest.

The term "conflict of interest" applies only to current interests. It does not apply to past interests that have expired, no longer exist, and cannot reasonably affect the

current behavior. Nor does it apply to possible interests that may arise in the future but do not currently exist, because such future interests are inherently speculative and uncertain. For example, a pending formal or informal application for a particular job with an organization or research group under consideration for contract award is a current interest, but the mere possibility that one might apply for such a position with that organization or research group in the future is not a current interest.

The term “conflict of interest” applies not only to personal interests of the individual Gemini Board member but also to the interest of others with whom the Board member has substantial financial and/or close scientific interests, if these interests are relevant to the Gemini Board actions and activities to be performed. In assessing an individual’s potential conflicts of interest, consideration must be given to the interests of the individual but also to the interests of the individual’s employer, the individual’s close scientific collaborators and others with whom the individual has substantial common financial interest.

The preeminent objective of the conflict of interest inquiry in each case is to identify whether there are interests – primarily financial in nature, although scientific interest may be relevant – that conflict with the Gemini Board service of the individual because these external relationships could impair the individual’s objectivity or could create an unfair competitive advantage for any person or organization. The fundamental question in each case is does the individual, or others with whom the individual has substantial common financial interests or close scientific collaborative interests have interest that could be directly affected by the outcome of a Gemini Board action?

The application of these concepts to specific scientific and technical studies and procurement awards must necessarily be addressed in each case coming before the Gemini Board for consideration in a consistent and timely fashion on the basis of the particular facts and circumstances involved.

5. Rights and Responsibilities

It is the right and responsibility of each Gemini Board member to invoke commonly acceptable, typical considerations and best-practice metrics to assess whether potential financial (both personal and institutional), scientific (both personal and institutional), professional (both personal and institutional), or other (both personal and institutional) conflicts of interest exist that are relevant to the functions to be performed in the selection of, evaluation of, and potential award of major contracts, scientific studies, or technology development programs on behalf of the Gemini Observatory.

6. Disclosure Process

The appointing organization and the Designated Member, with assistance from the Secretary of the Gemini Board, is expected to provide these guidelines and terms of reference to all Gemini Board members. The Designated Member, appointee, and the appointing organization should review and discuss concerns regarding potential conflicts arising as a result of Gemini Board service directly with the individual appointee as necessary. Outcomes of these discussions should be communicated to the Gemini Board Chair and the Secretary of the Gemini Board as warranted.

The Gemini Board Chair, in consultation with the Executive Agency, Designated Member, and appointing organization, as necessary, have the responsibility of bringing the disclosure of any conflict of interest of any individual or individuals to the attention of the Gemini Board prior to the consideration, discussion, or action regarding agenda items related to Gemini Board business. Prior notification is assumed to be at least 72 hours in advance of Board action.

Undeclared potential conflict of interest concerns also can be forwarded in writing to the Secretary of the Gemini Board, who would communicate, in confidence, with the Gemini Board Chair and the Executive Agency. The Executive Agency and the Gemini Board Chair will then work with the Designated Members of the Gemini Board to resolve the issue.

7. Review and Resolution Process

The Gemini Board Chair, in consultation with the Executive Agency, Designated Member, and appointing organization, as necessary, will ensure that the disclosure of conflict of interest is evaluated in an objective, reasonable, fair, and timely manner guided by the concepts and principles contained herein. In a case where the Gemini Board Chair may have a real or suggested conflict, he or she is to be replaced by the Gemini Board Vice-Chair in all actions of this Review and Resolution Process.

The evaluation is intended to:

- Determine if disclosure is required;
- Identify and discuss the conflicts (real, potential, or perceived);
- Clarify the issues and how they relate to pending Gemini Board actions;
- Ascertain the category (degree) in which the potential conflict falls;
- Develop possible remedies.

The potentially conflicted Gemini Board member may also suggest to the Gemini Board Chair mechanisms to manage any potential conflicts of interest, including exclusion from decision-making process, voting recusal, no action, and describe reasons for recommending such strategies.

It is understood that the Gemini Board Chair also has the responsibility for reporting a finding on the appropriate course of action. The Gemini Board Chair, at his or her discretion, may request concurrence based on the majority vote of Gemini Board members in attendance at the meeting (exclusive of the individuals under discussion). Notice of concurrence deliberations in the minutes of the Gemini Board should include a brief executive statement articulating the position of the Gemini Board regarding its action.

The Gemini Board Chair, communicating through the Secretary of the Gemini Board, also can request a Board consensus by email majority vote. This process shall include advanced confidential dissemination of the conflict of interest charge and a finding summary to Board members, with a response to the Secretary required within 3 days of receipt.

As a matter of practice, Gemini Board members are bound to abide by processes and outcomes to resolve personal, scientific, and professional conflict of interest.

ANNEX C

ADDRESSES FOR THE PARTICIPANTS AND UH FOR FINANCIAL MATTERS

1. National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230 USA
Contact Person: Grants and Agreements Officer
Division of Acquisition and Cooperative Support

 2. National Research Council

National Research Council of Canada
1200 Montreal Road, Building M-2
Ottawa, Ontario K1A 0R6 CANADA
Contact Person: Vice President, Emerging Technologies

 - 3) Comisión Nacional de Investigación Científica y Tecnológica

Canada 308, Providencia
Santiago, Chile
Contact Person: Finance Officer

 - 4) Ministerio de Ciencia, Tecnología e Innovación Productiva

Godoy Cruz 2320 (C1425FQD)
Ciudad Autónoma de Buenos Aires
República Argentina
Contact Person: Finance Officer

 - 5) Ministério da Ciência, Tecnologia e Inovação

Esplanada dos Ministérios, Bloco E,
CEP: 70067-900, Brasília, Brazil
Contact Person: Finance Officer

 - 6) University of Hawai'i

Office of the President, 2444 Dole Street,
Honolulu, HI 96822
Contact Person: President
-

ANNEX D

ADMINISTRATIVE GUIDELINES AND PAYMENT SCHEDULES CONCERNING THE OPERATIONS OF THE GEMINI FACILITIES

These revised Administrative Guidelines and Payment Schedules apply to the Agreement that went into effect on 1 January 2016.

The authorized representatives of the Participants to the Gemini Agreement intend to follow the following procedures:

1. The Executive Agency will require that the Managing Organization presents to the Board by October 31 of each year the proposed Budget for the following year and prospective budgets for the two subsequent years.
2. An Annual Observatory Budget for the following year will be approved by the Board by November 30th of each year.
3. The Executive Agency will ensure that at the same meetings as those at which the Budget is presented by the Managing Organization, the Managing Organization presents the Board with the preliminary financial reports and forecasts for the financial year about to end, so that the Board may consider these figures before approving the Budget for the following year.
4. Two weeks before the April/May Board meeting, the Managing Organization will provide the Board with financial reports for the money spent during the previous Gemini financial year.
5. The Annual Observatory Budget will provide separate line items for Operations and Maintenance and for an Instrument Development Fund (IDF).
- 6.a. The contributions of the Participants are to be calculated in U.S. dollars. Indicative contribution fractions of the Participants are noted in Section 15.2 of the Gemini Agreement, though individual Participants' fractional contributions may vary slightly from year to year.
- 6.b. Contributions to the IDF are on a best effort basis. The Participants will communicate their planned contributions for a given year by the time of approval of the Annual Budget for that year.
- 6.c. The allocation of Observing Time on the Gemini Telescopes is calculated on an annual basis, as described in Section 18.1 of the Gemini Agreement.

7. Payments are expected to be made by the Participants, based on the Annual Budget approved by the Board and the cash flow projections in subsequent years for the Gemini telescopes' operations. For the U.S. and Canada, payments are expected to be made by **15 March** and **1 July** each year. A 50% minimum payment of a Participant's annual contribution, or a lesser amount if agreed to by the Director of the Gemini Observatory and endorsed by the Board to comply with the cash flow requirements of the Gemini Operations, is due in the first installment. Notwithstanding what was paid in the first installment, the full obligation must be discharged in the July payment. Payments from Argentina must be made by **1 April** and **1 October** each year. Payments from Brazil must be made by **1 October** each year. Payments may be made in advance. A Participant may reschedule payments subject to the approval of the Designated Members of the Board, as discussed in Section 13 of the Gemini Agreement.
8. If Payment from a Participant is not received within 30 days of the due dates specified in Section 4 of this Annex, the Executive Agency is to seek explanation for the delay from the responsible Participant. The Executive Agency should inform the Board of the delay and the reasons for it.
- 9.a. Unless the Board determines otherwise, a Participant will be in default of its payments to Operations and Maintenance (O&M) if not received in whole or in part, within 90 calendar days of the scheduled 50% and 100% payment dates as indicated in Section 4 of this Annex. Subsequent actions are described in Section 16 of the Gemini Agreement.
- 9.b. Contributions to the IDF should be made following the schedule set in Section 7. If the IDF funds are different from expectations, an adjustment of Observing Time allocation will be made on an annual basis.
10. In the event of a Participant's default in payments, the Executive Agency will inform the Board of its intent to notify the Observatory of the imminent loss of Observing Time (50% or the percentage of default if larger) by the defaulting Participant. The Board may, in exceptional circumstances, instruct the Executive Agency to do otherwise. However, such action on the part of the Board should take into consideration the timing of the call for observing proposals by Gemini Observatory and the National Gemini Offices and the process of telescope time allocation. Unless the Board determines otherwise, both the Observing Time and the default will be distributed to the other Participants in the ratios set in Section 6.a of this Annex. Subsequent payments for Operations made by the defaulting Participant will be credited only to the next available observing period. The Observatory then would decrease the other Participants' Observing Time proportional to the contributions set out in Section 6 of this Annex.

11. All payments are to be remitted to the Executive Agency in US dollars.
12. The Participants understand that a Participant in default is subject to the relevant provisions of Section 16 of the Gemini Agreement and Section 10 of these Administrative Guidelines and Payment Schedules.

ANNEX E

ADDENDUM TO THE COOPERATIVE AGREEMENT BETWEEN CONICYT AND THE OTHER GEMINI PARTICIPANTS

This Addendum to the Cooperative Agreement is entered into between the Comisión Nacional de Investigación Científica y Tecnológica of Chile (hereinafter referred to as CONICYT), and the National Science Foundation of the United States of America, the National Research Council of Canada, the Ministerio de Ciencia, Tecnología e Innovación Productiva of Argentina, and the Ministério da Ciência, Tecnologia e Inovação of Brazil, which intend to abide by the following addendum:

Whereas considering:

- I. The document entitled “COOPERATIVE AGREEMENT BETWEEN CONICYT AND THE GEMINI PARTIES, signed on 17th day of March 2003, on behalf of the US National Science Foundation, signed on 13th day of May 2003, on behalf of The Particle Physics and Astronomy Research Council of The United Kingdom of Great Britain and Northern Ireland, signed on 26th day of June 2003, on behalf of The National Research Council of Canada, signed on 15th day of October 2003, on behalf of The Australian Research Council of Australia, signed on 16th day of May 2003, on behalf of the Comisión Nacional de Investigación Científica y Tecnológica of Chile, signed on 13th day of May 2003, on behalf of the Consejo Nacional de Investigaciones Científicas y Técnicas of Argentina and signed on 1th day of September 2004, on behalf of the Ministério da Ciência e Tecnologia of Brazil. This document was Annex I to the Gemini Agreement that expired at the end of 2015.
- II. The role of Chile as host country of the Gemini South telescope, and its position as a member of the Gemini partnership for more than a decade.
- III. The need for Chile to develop Chilean astronomy and closely related sciences, and the will of the Gemini Board to contribute with resources for such purpose.

THE PARTICIPANTS UNDERSTAND THE FOLLOWING:

ONE: PURPOSE AND SCOPE

The Participants to the Gemini Agreement declare that the purpose of this Cooperative Agreement shall be the development of Chilean astronomy and closely related sciences. This Annex, like the Gemini Agreement, is not intended to create binding legal obligations in accordance with Section 2.5 of the Gemini Agreement.

TWO: CONICYT'S STATUS AS A PARTICIPANT

The Participants to the Gemini Agreement agree that CONICYT will remain a Participant in Gemini and continue to hold 10% of the observing time on Gemini South as host country. CONICYT will keep its seat on the Gemini Board of Directors, with a vote on scientific matters affecting Gemini South and will retain its right to attend all meetings of the committees of the Board of Directors and all formal meetings concerning Gemini and involving all the Participants.

THREE: CONTRIBUTION OF THE GEMINI PARTNERSHIP

The Gemini partnership undertook a contribution to CONICYT in the amount of US\$ 9,366,824. This contribution was completed by November 30, 2005.

FOUR: THE FUND AND ITS MANAGEMENT

The Participants expressly understand that the Gemini Managing Organization will continue to administer the FUND under the direction of CONICYT, with the contributions referred to in clause THREE. This FUND will continue to be invested in a program established by CONICYT for the development of Chilean astronomy and closely related sciences, and is to be used wholly and exclusively for this purpose.

The Gemini Managing Organization will continue to administer the FUND under the direction of CONICYT, in accordance with the appropriate legal faculties, the present agreement and any relevant laws and regulations.

The Gemini Board intends to participate in, and advise on, the program and remain informed of its progress and the performance of the FUND.

FIVE: OPERATING COSTS OF THE GEMINI OBSERVATORY

CONICYT is liberated from all, past, present and future, operational costs and any commitments acquired in relation to them.

SIX: TERMS AND CONDITIONS FOR THE ADMINISTRATION OF THE FUND

The annual contribution by the FUND, is to continue to be administered pursuant to any regulations specifically dictated by the Chilean government on this

matter, and the FUND resources are to be deposited and administered separately from the general budget of CONICYT.

SEVEN: VALIDITY OF THE AGREEMENT

This understanding is expected to continue until December 31, 2021, renewable as per agreement of the Participants.

EIGHT: COPIES

This Cooperative Agreement has been prepared in English and Spanish versions, and the two signed counterparts have equal validity.