



GEMINI BOARD MEETING

LA SERENA, CHILE – 14-16 NOVEMBER 2018

Resolutions Arising from the 14-16 November 2018 Gemini Board Meeting

2018.B.1. NSF, NRC, CONICYT, MCTIP and MCT, hereinafter collectively referred to as the “Participants”, entered into an agreement (hereinafter referred to as the Gemini Agreement) on January 1, 2016, concerning operation of an 8 meter telescope on Maunakea, Hawai’i and an 8 meter telescope on Cerro Pachón, Chile, to be known as the International Gemini Observatory.

The Korea Astronomy and Space Science Institute (hereinafter referred to as KASI) has been a committed and much valued Limited-Term Collaborator in the International Gemini Observatory since 2014. KASI has reviewed the provisions of the Gemini Agreement and, by letter dated March 29, 2018, expressed its interest in becoming a full Participant in accordance with Article 8.

Pursuant to Article 8.1 of the Gemini Agreement, the Gemini Board of Directors (hereinafter referred to as the Gemini Board) welcomes the full Participation of KASI in the Gemini International Observatory and Gemini Agreement, on behalf of the astronomical community of the Republic of Korea.

The Designated Members of the Gemini Board and the Board Member appointed by the University of Hawai’i unanimously agree to KASI becoming a Participant to the Gemini Agreement and have determined the terms of their joinder by issuance of this Resolution, in accordance with Article 8.1;

In response to this Resolution, KASI has agreed to the terms of their joinder in a letter addressed to the Designated Members of the Gemini Board and the Board Member appointed by the University of Hawai’i dated July 17, 2018, to be attached to the Gemini Agreement as Annex F, pursuant to Article 8.2. With the issuance of this Resolution and Annex F, an amendment to the existing Gemini Agreement is hereby entered into between 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), the Ministério da Ciência, Tecnologia e Inovação of Brazil (hereinafter referred to as MCTI), and KASI.

Therefore, it is understood as follows:

1. With this Resolution and Annex F, KASI is a full Participant in the International Gemini Observatory and the Gemini Agreement.
2. In accordance with Article 15.3, Article 9.2 of the Gemini Agreement is amended for the period January 1, 2019 to December 31, 2021 to read as follows:

The Board is to be composed of:

- 6 members appointed by NSF
- 2 members appointed by NRC
- 1 member appointed by MCTI
- 1 member appointed by KASI
- 1 member appointed by MCTIP
- 1 member appointed by CONICYT



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1 member appointed by UH

3. In accordance with Article 15.3, Article 15.2 of the Gemini Agreement is amended for the period January 1, 2019 to December 31, 2021 to read as follows:

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

NSF	67.24%
NRC	18.15%
MCTI	6.51%
KASI	5.00%
MCTIP	3.10%
CONICYT	0.00%

4. A 5.0% contribution to the Operations & Maintenance (O&M) budget of Gemini will be made starting in 2019. Consistent with Board Resolution 2015.A.2, KASI’s contribution to O&M is expected to increase by 2% each year through to the end of the current Agreement on December 31, 2021.
5. In lieu of a one-time buy-in fee, KASI intends to provide a Visitor Class Instrument for use at either the Gemini-North or Gemini-South telescope, the specifications of which are to be defined before the end of 2020 in agreement with the Gemini Board, upon recommendation from the Gemini Science & Technology Advisory Committee. KASI’s contribution to the construction of this instrument is to exceed \$2 million U.S.
6. In accordance with Article 17, KASI should contribute to the Instrument Development Fund to the best of their ability, with a target contribution of 10% of their O&M contribution as per Board Resolution 2015.A.2.
7. Annex C of the Gemini Agreement is amended to include an address for KASI for financial matters:
Korea Astronomy and Space Science Institute
776 Daedeok-Daero
Yuseong-Gu
Daejeon
34055, Korea
Contact Person: International Finance Officer
8. Annex D, item 7, of the Gemini Agreement is amended to include a payment schedule for KASI. Payments from Korea must be made by April 30th and October 31st each year.
9. In accordance with Article 15.3, the results of the addition of KASI as a new Participant is made publicly available in this Resolution of the Gemini Board.
10. KASI is invited to participate fully in any and all Assessment Point discussions prior to the extension, renewal, or expiration of the Gemini Agreement on December 31, 2021, as outlined in Article 4.
11. All other Articles and Annexes of the Gemini Agreement are unchanged by this Resolution.

2018.B.2. The Board extends a warm welcome to KASI/Korea as a full Participant to the Gemini Observatory.



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2018.B.3. The Board has executed an Assessment Point in accordance with Article 4 of the International Gemini Agreement. At this Assessment Point, all the Participants have stated their intentions to remain in the partnership post-2021. The Board is pleased to note the strong interest in Gemini from the Participants and their user communities.

2018.B.4. The Board is pleased to welcome Dr. Jennifer Lotz as Gemini Director, and looks forward to working with her and the Observatory to implement the strategic vision for Gemini.

2018.B.5. The Board approves the following Gemini budget.

The figures and dates in the table reflect the transition to the new Fiscal Year running from October through September.

	US \$
Operations and Maintenance (Oct 1, 2018 – Sep 30, 2019)	29,693,712
Operations and Maintenance (Jan 1, 2019 – Sep 30, 2019)	22,876,817
Instrument Development Fund (Jan 1, 2019 – Sep 30, 2019)	6,481,000
Total (Jan 1, 2019 – Sep 30, 2019)	29,357,817

2018.B.6. The Board congratulates the Observatory staff on their success in securing funding from the NSF for the development of a world-leading AO system on Gemini-North, new real-time computer systems, and software enabling rapid transient follow-up. Following Article 10.1(c) in the International Agreement, the Board accepts this award and we are delighted to include this ambitious program as part of the Gemini development activities over the next years.

2018.B.7. The Board approves the STAC recommended science time goals for semester 2019B of 86% on Gemini South and 90% on Gemini North, and the adjustment of science time for semester 2019A to 93% for Gemini South and 86% for Gemini North.

2018.B.8. The Board endorses the recommended priorities by the STAC for development activities, listing in order: GNAO, SCORPIO, GN Laser, GHOST, GNAOI, IGRINS2, GIRMOS, NGS2, GNIRS Controller, Gemini AO RTCs, IUP, DM0.

2018.B.9. The Board endorses recommendation 15.4 from the STAC regarding the incorporation of an Adaptable Secondary Mirror as part of the Gemini North Adaptive Optics (GNAO) design from the beginning.

2018.B.10. The Board endorses recommendation 15.5 from the STAC regarding the proposal from the Observatory to acquire a basic GNAO Imager from IDF funds with an initial estimate of approximately \$3M. The Board recommends that a funding cap be defined after further study.

2018.B.11. The Board is pleased to appoint Dr. Elliott Horch from the US as Chair of the Gemini STAC starting January 1, 2019. The appointment is for 2 years subject to renewal at the November 2019 Board



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meeting. The Board thanks outgoing Chair Dr. Laura Parker from Canada for her excellent work in leading the STAC.

2017.B.12. The Board approves the appointments of Dr. Ryan Foley (effective November 2018) and Dr. Lisa Poyneer and Dr. Jane Charlton (effective May 2019) for the US, Dr. Henri Plana (effective November 2018) for Brazil, Dr. Damian Mast (effective May 2019) for Argentina, and Dr. Jae-Joon Lee (effective May 2019) for KASI/Korea to 3-yr terms on the Gemini STAC. The Board thanks outgoing members Guillermo Bosch (Argentina), Dr. Alberto Ardila (Brazil) and Dr. Abi Saha and Dr. Inese Ivans (US) for their valuable contributions to the STAC.

2018.B.13. The Board appoints Dr. Todd Boroson of the Gemini Board as its Chair for a two year period starting in January of 2019.

2018B.14. The Board welcomes new Board members Dr. Guillermo Bosch representing Argentina, Dr. Marcos Perez Diaz representing Brazil, and Dr. Narae Hwang representing KASI/Korea. We look forward to their contributions over the coming years.

2018.B.15. The Board thanks Dr. Greg Fahlman from Canada for his many years of dedicated service on the Gemini Board and on the Gemini Finance Committee. The Observatory and the Board have benefitted enormously from his wisdom, experience, and sound advice. We wish him all the best in his retirement.

2018.B.16. The Board thanks Dr. Victoria Alonso representing Argentina, Dr. Thaisa Storchi-Bergmann representing Brazil, and Dr. George Jacoby and Dr. Lucianne Walkowicz representing the US, for their many valuable contributions over the past years on the Gemini Board. We wish them well in their future endeavors.

2018.B.17. The Board appoints a subcommittee to work with the Observatory on finalizing the strategic plan document prior to the next Board meeting. The Board members of this subcommittee are Marcin Sawicki (Chair), Marcos Diaz, Narae Hwang, Chris Davis, and Guillermo Bosch.