

Gemini Science Committee

Meeting Resolutions
Meeting #9, October 1996

RESOLUTION 9.1:

We continue to be very impressed with the dedication of the Project staff to the Gemini goals. In light of the projected cash flow problems and the very tight construction and commissioning schedules, we reiterate the importance of the Gemini partners meeting agreed contribution schedules.

RESOLUTION 9.2:

The GSC welcomes the announcement that the SOAR project has been approved and we are looking forward to positive interactions between the Gemini and SOAR projects, including the possibility of shared instrumentation and infrastructure with Gemini-S. We see real advantages, both scientific and operational, if SOAR were to be located close to Gemini South on Cerro Pachon.

RESOLUTION 9.3:

The GSC endorses the HROS performance requirements given in the Table as the basis for Conceptual design activities.

	<i>R=50,000</i>	<i>R=120,000 - 150,000</i>
spectral range - total	300 - 1000 nm	300 - 1100 nm
spectral range - single exposure	350 - 700 nm	
throughput - no slit or CCD	>20% max > 10% min	>20% max > 10% min
nominal slit width	0.6 arcsec	0.24 arcsec
range of slit widths	0.1 - 10 arcsec	0.1 - 10 arcsec
slit length	60 arcsec	60 arcsec
image slicer	no	yes, deployable
atm disp compensation	no	no
image quality - dR	< 10%	< 10%
image quality - dPSF (10th %ile seeing)	< 10%	< 10%
simultaneous arc	required	required
maximum displacement of stellar spectrum in wavelength after 1 hour, without calibration	< 0.05 resolution element	< 0.05 resolution element
multi-object capability	yes	yes
multi-longslit	yes	yes
spectropolarimetry capability	yes	yes
scattered light order separation level	15x median seeing < 5% at 700 nm	15x median seeing < 5% at 700 nm
exposure time weighted mid-exposure actual exposure time	precise to 1 s precision of 1%	precise to 1 s precision of 1%
slit viewer	yes	yes

The GSC recognizes the scientific importance of a stable spectrograph that is capable of a radial velocity precision of 1 m/sec.

RESOLUTION 9.4:

The GSC is concerned that there is no agreement with NOAO for use of COB as the commissioning imager for Gemini-South, and urges an immediate resolution to this situation.

RESOLUTION 9.5:

The GSC endorses the Conceptual On-going Instrumentation Program proposed by the Project Scientist Team, as the basis for discussions at the Gemini Instrumentation Conference in January 1997.

The GSC is excited about the impressive gains now being made with AO and urges that a major focus of the conference be next generation AO and the associated instrumentation on both telescopes.

RESOLUTION 9.6:

The GSC recommends that Gemini undertake work in the following areas in 1997: 1) characterization of Cerro Pachon for adaptive optics, 2) initial design studies for a laser beacon adaptive optics capability to investigate expected performance, feasibility and estimated cost, and 3) a design for implementation of a NIR IFU capability in NIRS.

RESOLUTION 9.7:

The GSC recommends that:

- Gemini scientific staff should be allowed access to both queue and classical time.
- Staff time should be taken "off the top" after the liens for engineering and the host country.
- The bulk of staff time should be awarded through competitive evaluation of observing proposals.
- The staff share of time should not be a fixed fraction but should be variable depending on the quality of the proposals.

The GSC also recognizes the importance of Director's Discretionary Time for special scientific cases.

RESOLUTION 9.8:

Gemini scientific support will be provided by science fellows, who nominally will have 3-5 year fixed term positions, and staff astronomers. The GSC strongly endorses the proposal that science fellows have 40% of their time free for research, and that the fraction for staff astronomers should be 30%. The GSC urges that Gemini take steps to ensure that the staff are able to utilize these allocations.

RESOLUTION 9.9:

The goals for archiving in version 2.0 of the Gemini SRD should become the top-level requirements in version 3.0. More specifically:

- The encoding of devices and recording of data must be sufficient for the future re-creation of the observations from the information recorded with the data.

- A permanent record of all observations and ancillary data must be established in perpetuity.
- The data as recorded should be suitable for inclusion in an existing archive. Gemini should not be required to establish such an archive.

RESOLUTION 9.10:

The GSC recommends that the Project organize a workshop in 1997 with the aim of describing and quantifying the observational capabilities in the partner countries required to support the use of the Gemini telescopes in an optimum way.

RESOLUTION 9.11:

In order that Gemini fully exploit its potential and operate as the principal optical-infrared observatory of the partner countries and provide the focus for the development of their ground-based astronomy communities, we urge the Board to fully support the long-term, realistic funding of (1) a continuing instrumentation program as described in Resolution 9.6, and (2) the scientific operations of the telescopes.

RESOLUTION 9.12:

The GSC endorses Version 3.0 of the SRD and recommends its acceptance by the Gemini Board.