

CY01 Evaluation Criteria for NIRSpec MEMS Programmable Aperture Mask Development

Criteria	% Weight
Compatibility with NIRSpec instrument design concept <ul style="list-style-type: none"> • ESA MEMS requirements document (revision 7 June 01 or later): http://www.ngst.nasa.gov/cgi-bin/pubdownload?Id=614 	50
Accomplishments to date <ul style="list-style-type: none"> • Demonstrated technical progress <ul style="list-style-type: none"> - demonstrated technical path to TRL¹ 6 - demonstrated cryo performance of enabling elements - modeling and simulation results to date - pixel addressing scheme and test results - logical test flow and requirements validation text matrix - foundry utilization plan • Project plan <ul style="list-style-type: none"> - project plan for implementation of TRL¹ 6 prototype during FY04 - detailed milestone schedules with positive slack identified - critical path analysis - compatibility with NIRSpec schedule² • Team development <ul style="list-style-type: none"> - staffing: quality, commitment, short falls - partnering - institutional capability to build flight arrays and controller electronics • Project management <ul style="list-style-type: none"> - organization - lean, clear lines of authority, clear organizational interfaces, demonstrated decision making - progress against the cost plan to date - details of the cost plan for next phase (FY02) - subcontract plan and vender responsiveness • Risk management <ul style="list-style-type: none"> - identified risks to the appropriate level - mitigation plan for each risk element - probability of successful timely development 	50

Notes:

1: <http://www.ngst.nasa.gov/cgi-bin/pubdownload?Id=375>

2:

Schedule Milestones for MEMS Aperture Mask Development Planning: Jul 01	
MEMS Flight Development Team Selection	Jul 02
MEMS MOS/Alternative Instrument Decision Point	Jun 03
MEMS Aperture Mask at TRL 6	Mar 04
Engineering Test Unit Delivery	Sep 04
Flight Unit Delivery	Nov 05