

FREQUENTLY ASKED QUESTIONS REGARDING THE A.45, CARBON MONITORING SYSTEM SOLICITATION

GENERAL QUESTIONS:

Q: The description in A. 45 states that "new work is intended to build upon the lessons learned in the pilot studies and scoping efforts", but in digging around a bit, it's not clear what these lessons are at this stage. Are there any reports that the flux or biomass projects, e.g., have submitted that you can point me to?

A: We did offer an extensive background section in the solicitation (section 2) in the hope that it would help. You should also consult the CMS Web site where much more information about the CMS pilot and scoping activities is available. On February 10, 2012, we unveiled a new look to the CMS Web site, with a lot of new information, including up-to-date progress reports and links to CMS data products. If you checked the CMS Web site before this date, we recommend you check it again and explore the new information. The URL is unchanged: <http://carbon.nasa.gov> The CMS Phase 1 team will continue to post new information and data products as they become available in the upcoming months, and proposers are encouraged to check the Web site periodically for updated information.

Q: As I read the appendix, there is great flexibility in the size of projects that could be funded. This would mean that there is scope for a (very) large team to propose. Is this correct?

A; Yes, this is correct. The large range of potential selections (i.e., 15-40 proposals) was intended to convey NASA's expectation that this solicitation might result in a mix of large, medium, and small awards. Of course, NASA would be unable to support any requests that exceeded the available funds called out in the NRA.

Q: How will the SDT be defined in the future? Does it comprise all of the funded PIs (as a Science Team), a sub-set of the PIs, or an entirely different group?

A: The CMS Science Definition Team (SDT) will not change as a result of this solicitation. It will however, be incorporated within a larger CMS Science Team. This is explained in section 3 of the solicitation as follows: *A NASA Carbon Monitoring System Science Team (CMS ST) will be established to include the Principal Investigators selected under this solicitation, members of the CMS SDT through the duration of their current CMS SDT awards, and representatives of the initial NASA Center-led pilot product production teams through the duration of their current awards. Additional information about the roles and responsibilities of the CMS ST is provided in section 3 of the solicitation.*

Q: How would NASA respond to receipt of a group of "linked" proposals, based around sub-themes?

A: Linked proposals would be reviewed as individual, separate proposals. Depending on the nature and degree of linkage, such proposals can sometimes be more difficult to consider. Proposers are advised to be very clear about the exact nature of a linkage to another proposal and about any critical dependencies that a linkage might create (i.e., situations in which one proposal cannot succeed without the other one also being selected). If these things are made clear in each proposal, then the review and selection process can

proceed in the same way as for all other proposals. In general, it is usually preferable to avoid creating any critical dependencies between proposals because then the fate of one becomes tied to the fate of the other. However, proposers are free to take that risk if they so desire.

Q: This NRA solicits efforts to develop new products and evaluate the utility, cost, etc of those products. Those are absolutely necessary functions but this seems to follow the "push" approach of linking science products to applications. I think CMS has made good progress over the past 6-12 months addressing the "pull" dimension of decision support and systems analysis and feel the program could benefit from some continuation. However it is not clear how to propose such activities given the requirements of the NRA.

A: Such activities would be responsive, and welcome, in the context of a broader study addressing any of the elements in section 3.3.1 of the solicitation.

Q: If we have a project that requires airborne data, is the airborne data considered to be part of internal or external costs?

A: For the purposes of this ROSES-2011 element only, it does not matter what the type of activity is, what matters is the type of organization that receives the funding allocation (award/subaward) and, for U.S. Government agencies and FFRDCs, whether it is a new award to that external organization or not. If the award/subaward (funds transfer) for airborne data purchase or acquisition is to an internal entity, then it is internal. If it goes to an external entity under an existing contract of a U.S. Government agency or FFRDC then it is internal. If it goes to an external entity under a new contract then it is external.

Q: I have read the ROSES solicitation for the Carbon Monitoring System, and am wondering if development of an instrument to remotely sense CO₂ and/or CH₄ is within the scope of the program. Would that follow the intent of the solicitation, or is it mainly concerned with analysis of data from other instrumentation?

A: We did not rule out instrument development in the solicitation. If such a proposal addresses all requirements listed in the solicitation, it will be considered compliant. However, the researchers must be able to perform all of the work proposed and either produce a carbon monitoring product or provide a "demonstration of feasibility for decision making" of a new carbon monitoring product, or perhaps for quantifying errors and uncertainties, within 18-months of the start date (the maximum allowed duration under this solicitation). This may be challenging for a new instrument development.

Q: We are at an institution outside of the U.S. and we were wondering if we would be eligible to apply to this program.

A: You are eligible to apply to participate, but NASA will not be able to fund any research at non-U.S. institutions. You would have to identify your own funding from other sources (but we could fund U.S. institutional partners on selected proposals). See section 1.6.1 of the *Guidebook for Proposers* for more information about NASA's no-exchange-of-funds policy for non-U.S. institutions.

Q: Are projects that monitor carbon exclusively outside of the U.S. eligible for funding? In other words, could one propose carbon monitoring activities that support REDD+ (Reducing

Emissions from Deforestation and Degradation +) in tropical/developing countries?

A: The solicitation requires that the proposer demonstrate that the work addresses U.S. national needs, but does not restrict the work to the U.S. Projects addressing carbon monitoring outside of the U.S. may be proposed if such relevance can be demonstrated. NASA anticipates that it should be quite possible for projects addressing REDD+ to document responsiveness to U.S. national needs.

QUESTIONS FOCUSED ON PARTICIPATION BY NASA CENTERS, OTHER GOVERNMENT AGENCIES, AND FFRDCs AND THE DEFINITIONS OF “INTERNAL” AND “EXTERNAL” ORGANIZATIONS:

Q: SEVERAL VARIATIONS ON THE FOLLOWING QUESTIONS HAVE BEEN RECEIVED: Will the funding for [NAME OF ORGANIZATION] will be considered “internal” or “external” according to the provision of the solicitation? OR If we include research by [NAME OF RESEARCHER] at [NAME OF ORGANIZATION], will that be considered “internal” or “external.”

A: The solicitation provides definitions to be used in deciding whether funding to a particular organization (or individual at that particular organization) will be considered internal or external for the purposes of A.45 CMS. The “organization type” to be input on NASA’s official electronic cover page in NSPIRES will be helpful in determining an organization’s status, but will not address all of the requirements of this solicitation. Some organizations have entered into official, legal relationships with other organizations that could affect their status as internal or external under this solicitation. The proposing organizations will be most knowledgeable of their own legal status, official relationships with other organizations, and proposed funding mechanisms. Therefore, NASA believes it is better for the proposers to apply the definitions provided in the solicitation and explain their rationale for an organization’s funding being internal or external under the solicitation, than for NASA to attempt to make case-by-case determinations based on potentially incomplete information provided through emails and telephone inquiries.

The following set of questions may prove useful in helping proposers make their own determinations.

- Is the funding to be provided to a U.S. Government organization (including NASA Centers and laboratories of other Federal agencies) or a Federally Funded Research and Development Center (FFRDC) for work to be performed by that organization (either through the primary award or a subaward)? If “yes,” then those funds will be considered internal.**
- Regardless of the status of the organization to be funded, will the work be performed on-site at a U.S. Government organization facility or FFRDC? If “yes,” then it will be considered internal.**
- Regardless of the status of the organization to be funded, will the work be performed under an existing agreement (i.e., grant, cooperative agreement,**

contract, interagency agreement) with a U.S. Government organization or FFRDC? If “yes,” then it will be considered internal.

All other organizations and funding mechanisms will be considered external.

This additional set of questions may prove useful for U.S. Government organizations and FFRDCs applying:

- **Is the funding to be provided to a U.S. Government organization (including NASA Centers and laboratories of other Federal agencies) or a Federally Funded Research and Development Center (FFRDC) for work to be performed by another organization through a subaward (or parallel award)? If “yes,” then the funds being subawarded to the other organization will be considered:**
 - **Internal if 1) the subaward is to a U.S. Government organization or FFRDC, 2) the work performed under the subaward is to be conducted onsite at a U.S. Government organization facility or FFRDC, or 3) the funds for the subaward will be applied to an existing award of any type of that same U.S. Government organization or FFRDC.**
 - **External if the funds will be applied to a new subaward to an external organization (i.e., not a U.S. Government organization or FFRDC) for work that will not be performed onsite at a U.S. Government organization facility or FFRDC.**

Q: As I understand the CMS solicitation, in order to submit a compliant proposal a NASA Center (or Federal Lab, or FFRDC) would have to include as much funding for external collaboration as it does for internal support. This would mean that if we proposed as a single team, the whole budget would have to be at a minimum a factor of two larger than the internal funding request in the budget; is this correct?

A: That is essentially correct. A proposal involving a NASA Center, Federal Lab, or FFRDC would have to include at least \$1 more for the external team than for the internal team to be compliant. But that is not the only way to interpret this requirement. Another might be to review the tasks to be undertaken and see if a different division of labor and/or ways of conducting activities could achieve the same goals at a lower (or the same) overall total, but with more of the work being conducted by or through external entities. For example, new private sector sources of data could be considered, a new subcontract could be included, or major equipment purchases could be made by the external (rather than the internal) organization.

Q: If only FY 2012 funds are available under this NRA, can NASA civil service salaries for work to be conducted in FY 2013 be included in proposals to CMS?

A: Yes. NASA realizes that only current fiscal year funds can be used to pay NASA civil service salaries and has planned to be able to support the salaries of any NASA civil servants on selected proposals using FY 2013 funds (these FY 2013 funds would be additional to the ~\$8M of FY2012 funds made available in the CMS ROSES-2011 element).

Q: Since NASA civil servant salaries for FY 2013 cannot be covered by the FY 2012 CMS funds, does this mean that that portion of a budget is not subject to the 50:50 restriction?

A: No. The overall total for the entire proposal for its full duration must still have greater than 50% of the funding going to external organizations.

Q: Can current CMS members act as PIs in new proposals this call?

A: Yes. See section 4.3 in the solicitations where this is explicitly stated.

Q: Can an investigator employed at a NASA center (or other U.S. Government agency or FFRDC) be the Principal Investigator even if their budget is less than 50% of the total proposal budget?

A: Yes. See section 1.4.2 of the *Guidebook for Proposers*.

Q: Do you encourage/prefer the existing CMS Phase 1 teams to propose as a single unit or in smaller groups?

A; It is up to the existing teams to decide if/how they wish to respond to the CMS solicitation. What is likely to be most important to the peer reviewers and to NASA are that 1) proposals present a well-integrated, feasible research plan that is responsive to the solicitation and 2) the work plans are appropriately sized and staffed for the activities to be performed.

Q: The Phase 1 CMS flux pilot depends on a core activity that integrates the fluxes from various components and ensures that the tools and infrastructure for collaboration are readily available to the entire team. Close collaboration developed around this core has been a major strength of this activity. How do you envision the role of the existing core team in FY2013?

A: Researchers interested in continuing this type of core integration activity are encouraged to propose the work in response to this CMS solicitation. The existing team is welcome to propose – as are others.

Q: Are all current CMS activities zeroed out after July 1 (unless extensions are successfully proposed) or is there any residual (modest) funding set aside for sustained, cross-cutting activity?

A: Current CMS (i.e., Phase 1) activities will continue through their originally awarded performance periods. For most of the NASA Center activities, that is through fiscal or calendar year 2012. For the CMS SDT, it is through November or December 2012 (whatever the official end date is on their award document). For some of the research to scope new carbon monitoring products, it is not until the end of 2013.

Q: What will NASA do with a proposal from a single NASA Principal Investigator?

A: Such proposals will be considered non-compliant if they do not offer a work plan with greater than 50% of the funding going to an external organization. Unfortunately, this solicitation cannot entertain proposals that only involve internal research activities. However, future ROSES solicitations may allow such types of proposals (e.g., Terrestrial Ecology in 2012, Carbon Cycle Science in 2013) and interested parties are encouraged to watch for those ROSES program elements to be announced.