



National Aeronautics and Space Administration

**Headquarters**

Washington, DC 20546-001

November 16, 2017

Reply to Attn of: Human Exploration and Operations Mission Directorate

Lt. Gen. James A. Abrahamson  
Chairman of the Board of Directors

Mr. Gregory H. Johnson  
President and Executive Director

Center for the Advancement of Science in Space  
6905 N. Wickham Road, Suite 500  
Melbourne, FL 32940

Dear Gen. Abrahamson and Mr. Johnson:

I am writing this letter to you to address recent complaints about CASIS activities that have been brought to my attention both by the ISS Program and by outside stakeholders that require serious and immediate attention. Additionally, it is necessary to communicate some significant concerns brought forward by a number of the National Laboratory's commercial implementation partners (CIPs) so that actions may be taken to address these issues.

As part of NASA's oversight of agreements with companies who operate their own commercial hardware on ISS, NASA solicits feedback from them annually to assess their satisfaction with progress towards a robust commercial presence in space and to solicit opinions on any changes that may be needed. There were a number of positives from these exchanges; however, a number of items were raised indicating possible trends that must be addressed. NASA's chief concerns include the following:

- Unbalanced support to CIPs possessing similar capabilities: Since there are more ideas than there is funding available at this point in time, it is critical that CASIS continue to help all users find funding sources, whether they come from CASIS's own contacts or are commercial customers of the various CIPs;
- Lack of transparency and parity in CASIS's CIP selection process: Complaints were raised that CASIS was not consistent nor transparent in determining which CIPs would support National Lab users. While not strictly bound by the same procurement regulations as the federal government, it is critical that CASIS does not enter into situations that create real or perceived conflicts of interest;
- Protection of CIP intellectual property: CIPs indicated that their unique ideas, when brought to CASIS for funding consideration, were not always protected but instead openly competed;

- Delayed communications with CIPs: Complaints from a broad spectrum of CIPs that CASIS is not timely in providing responses to CIPs as well as potential users on projects they have been proposed to CASIS, including a lack of feedback to proposing CIPs on why they were not selected;
- Insufficient communications between the operations and business development teams: Reports of conflicting messages from CASIS departments to CIPs results in frustration and waste of limited resources;
- Limited CIP access to customers which were initially identified by CASIS: Reports of obstruction of direct communication between CIPs and organizations whose initial contact was through CASIS, as well as attempts to control CIP's ability to directly solicit funding at the source rather than going through CASIS;
- Perception of representational organizational conflict of interest: The appearance that CASIS endorses, supports, or otherwise advocates on behalf of some CIPs, but not all.

CASIS must examine its processes and communication in order to ensure inclusion and transparency to all CIPs. As partners in upholding the public's trust, we must quickly address these concerns – particularly those that could give even the appearance of impropriety – in order to ensure continued confidence in the ISS National Laboratory. To that end, I propose the following actions:

- CASIS should work with NASA to develop a detailed plan of action to address the issues cited above;
- NASA-facilitated face-to-face discussions with individual CIPs to discuss concerns;
- Restructuring of the venture capital promotion activity;
- NASA HQ and ISS Program attendance at open and closed CASIS board meetings;
- Installation of an experienced Chief Operations Officer (COO), to be responsible for day-to-day CASIS operations within the organization and working with implementing organizations in executing National Lab activities. The COO would be under the authority of the CASIS Executive Director and would report activities to the CASIS Board of Directors along with the CASIS Executive Director;
- Assurance that the Board of Directors is providing appropriate level of strategic guidance while opening doors and raising funds to support CASIS's mission;
- Merging the annual target metrics proposed by CASIS with the Cooperative Agreement-required Annual Performance Plans to allow NASA/CASIS collaboration on annual goals and remediation of concerns;
- Discussion of a possible restructuring of CASIS Board of Directors.

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While the above issues are serious in nature and require remediation, I wanted to take this opportunity to congratulate you on some of your recent successes, including the increase in new users as demonstrated by the increased attendance at the 2017 International Space Station Research & Development Conference (ISS RDC).

The substantial growth in this year's ISS RDC participation – an increase of over 40% over the previous two years – is a testament to the work CASIS has done in continuing to develop the new user base. Continuing to ensure that this conference is valuable to the new user community is vital to attracting a strong base of researchers for the National Lab. NASA is also encouraged to see CASIS continuing to work closely with other government agencies, most recently with the National Institutes of Health and the National Science Foundation, to enable research announcements from a variety of areas including fluids, combustion, organ on a chip, and tissue engineering. Additionally, new commercially sponsored programs, like those from Goodyear Tire and Rubber, Target, and Nalco Champion, as well as repeat commercial research from Eli Lilly, Merck and Amgen, are developing long-term users in the commercial sector, exposing companies to the benefits that research in space can provide across their portfolios. Beyond the commercial work, the recent addition of the Michael J. Fox Foundation and other non-profits has begun to open up the ISS to a new audience. Finally, attendance at non-traditional space conferences, like BioInternational, are informing a new audience about the use of ISS and the unique capabilities it provides. All of these efforts are critical to enabling a sustained commercial economy in low-Earth orbit, in direct support of one of NASA's major strategic goals.

I look forward to meeting with you in the very near term to discuss these issues and ensure that they do not detract from the positive impact that CASIS is having on maximizing the utilization of the ISS National Laboratory.

Sincerely,



Sam Scimemi  
Director, International Space Station  
CASIS Liaison  
NASA Headquarters

cc:

HEOMD/W.H. Gerstenmaier

HEOMD/M. S. Geyer

HEOMD/A. L. Mumford

HEOMD/R. L. Gatens

OA/K. A. Shireman

OA/M. Y. Gard

OA/J. R. Montalbano

OZ/M. A. Edeen

OZ/M. E. Read