

NSF 12-085

Dear Colleague Letter - US Ignite: The Next Steps

The NSF Global Environment for Network Innovations (GENI) program is now in its 5th year. At this stage, the focus has moved from developing and prototyping GENI to using it. About 30 science and engineering experiments are now deployed on GENI. (For a listing of GENI EAGER awards, see http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501055&org=CNS&from=home).

While GENI will continue to provide a national research and education resource for networking scientists and engineers for years to come, NSF intends to further extend its usefulness through the US Ignite Initiative by encouraging the research community to develop novel, public sector applications that take advantage of ultra-fast software-defined networks and which have potential for significant societal impact.

The primary goal of the US Ignite is to break a fundamental deadlock: there is insufficient investment in gigabit applications that can take advantage of advanced network infrastructure because such infrastructure is rare and dispersed. And conversely, there is a lack of broad availability of advanced broadband infrastructure for open experimentation and innovation because there are few advanced applications and services to justify it. US Ignite intends to break this deadlock by providing incentives for imagining, prototyping, and developing public sector gigabit applications and by leveraging and extending this network testbed across US campuses and cities.

At this point in the process, NSF is accepting EAGER proposals or supplemental funding requests that are consistent with the guidance given in this letter and in the NSF Grant Proposal Guide: http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpg_2.jsp#IID2 and / or the NSF Award & Administration Guide: http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/aag_1.jsp#IE4. NSF is currently emphasizing the development of public sector gigabit applications in areas of national priority - advanced manufacturing, clean energy and transportation, cyber learning, health IT, and public safety/emergency preparedness. The expectation is that within a year or so, these applications could showcase new possibilities for gigabit networks.

Prior to submitting an EAGER proposal or supplemental funding request, however, a two-page summary must be submitted by email to usignite@nsf.gov. The summary should 1) identify which area of national priority the application will contribute to; 2) the scientific and engineering motivation for the proposed effort; 3) the novelty and benefits that might accrue if the application or service were to be deployed; and 4) the members of the team that will work together to show results at some level of scale and within the scope of some set of anchor institutions, campuses and / or cities. EAGER proposals or supplemental funding requests for US Ignite that do not contain the required predated email summary and a response from the NSF US Ignite team will be returned without review.

This US Ignite activity is not a proper venue for proposals for which there are existing programs or mechanisms. In particular, projects that are sufficiently aligned with other existing programs so as to receive an appropriate external review would not be appropriate for this program.

Sincerely,

Farnam Jahanian Assistant Director Directorate for Computer and Information Science and Engineering