

September 10, 2024

Mr. Douglas Kinkoph
Associate Administrator, Office of Internet Connectivity and Growth
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, D.C. 20230

RE: National Telecommunications and Information Administration Broadband Equity, Access, and Deployment Program Draft Alternative Technologies Guidance.

Dear Mr. Kinkoph:

On behalf of the Commercial Spaceflight Federation (CSF), the leading trade association for the commercial space industry, thank you for the opportunity to comment on the National Telecommunications and Information Administration's (NTIA) Broadband Equity, Access, and Deployment (BEAD) Program Draft Alternative Technologies Guidance (Draft Guidance). CSF supports the NTIA and BEAD program's goal to provide high-speed internet access to all Americans. However, CSF is concerned that the BEAD program and the Draft Guidance unreasonably disfavors low-Earth orbit (LEO) satellite internet services which are essential to accomplishing that mission.

From its inception, the BEAD program has been plagued by a focus on only one technology: fiber. Despite clear congressional direction to consider all technological solutions, the NTIA decided to structure the BEAD program to be explicitly fiber-first at every stage of the program. Despite technologies like LEO satellite internet providing high-speed broadband to millions of customers in the United States, NTIA did not list this revolutionary technology as a "reliable" broadband service.

Since the initial guidance was released more than a year ago, there has thankfully been an updated approach that recognizes the importance of LEO systems in connecting the millions of households the BEAD program is meant, and required, to serve. LEO providers have engaged with NTIA and states to support NTIA, the states, and most importantly the individuals relying on BEAD to bridge the digital divide. CSF appreciates the updated Draft Guidance for Alternative Technologies recently released by NTIA, but additional action by NTIA is required to ensure that LEO providers can participate in BEAD and the program successfully delivers on its goal to connect every household in the United States.

Overall, NTIA must undertake a fundamental shift in how they think about LEO systems. This is absolutely essential if LEO providers are realistically expected to participate in the program. These broad goals include the following:

1. **LEO providers should be reimbursed for the underlying infrastructure investments made to deploy service to BEAD locations – just as the BEAD program requires for every other technology. LEO providers must be reimbursed for the costs associated with each location they are obligated to serve – without limiting reimbursement to subscribers. States should also be required to reserve all necessary funds.**

The Draft Guidance proposed to only reimburse LEO costs related to actual subscribers. BEAD projects based on all other technologies are provided assurance that their network deployments will be reimbursed, while alternative technologies are not. NTIA also does not address how states are to compensate LEO providers when a state exhausts the reserved funds. This is inherently biased against LEO providers. A LEO provider, just like all other technologies, must undertake the network investments to ensure the availability of service to every awarded location for the duration of the program, regardless of whether a subscriber at a covered location requests service. If LEO providers are to be held to the same BEAD requirements as other technologies they should be reimbursed in the same manner: for each location they are obligated to serve. States must be required to reserve the funding necessary to serve a location if the state is to claim that a location is “covered” by a BEAD obligation.

2. **Reimbursement levels should be fixed for the duration of the program, with reasonable estimates of actual costs for the life of the award must be approved as the basis of reimbursement at the time of subgrant issuance.**

The Draft Notice provides guidance for states in limiting reimbursement to a future review of a LEO provider’s actual costs. This is backwards – it essentially reverses the point of doing reimbursement based on a fixed amount. A LEO provider’s cost structure is much more complex than a traditional fiber deployment given the unique (pursuant to BEAD) task of allocating global infrastructure costs (as the satellites are constantly orbiting the globe) to specific locations in the United States. Such a future cost review for LEO and potential downward revision of award amounts based on actual expenditures would remove any level of confidence a LEO provider has regarding enormous capital expenditures to build out their networks. Like all other technologies, LEO providers and states should be permitted to enter into a fixed amount subaward based on a reasonable estimate of actual costs, and then judge the provider’s success or failure based on program goals, i.e. connectivity, rather than a post-hoc examination of costs across 50 states.

3. **The employee- and contractor-related NOFO provisions should not apply to LEO providers. NTIA must clarify that these provisions only apply to the workforce that exclusively supports a BEAD project. NTIA should issue clear guidance that the workforce-related provisions are not applicable to LEO providers.**

Under BEAD, LEO providers will utilize a global satellite constellation that relies on a workforce that doesn't engage in specific work related to deployment of service to an individual location. This is quite distinct from terrestrial providers, as there is no clear separation between BEAD-supporting activities and other business activities that support the global network. The same is true for a LEO provider's ground network and user equipment manufacturing.

Based on NTIA's NOFO, the states have developed BEAD programs to include virtually all workforce-related requirements suggested by NTIA as well as additional state-specific requirements. These requirements, often handled by the state through broad yes/no certifications without the opportunity to apply context or nuance, impose significant ongoing compliance obligations on participating providers. A company might balance these obligations when applied to a discrete portion of its workforce being funded by BEAD against other benefits of participation. However, if these requirements were to apply to a company's *entire* workforce, (as the current language could be read to do), this enormous additional cost would likely deter any LEO provider from participating. NTIA should make clear that these requirements are only applicable to a participating ISP's workforce that *exclusively* supports a BEAD project and that satellite capacity is an asset with no relevant supporting workforce for purposes of these provisions of the NOFO.

4. NTIA should conduct a one-time financial review for LEO providers – rather than requiring a complicated process that does not actually enhance the financial integrity of the program.

The Draft Notice proposed to have a LEO provider work with *every* state broadband office to determine an eligible cost and reporting framework that is most relevant for a LEO provider. This is incredibly complex and would likely result in 50+ distinctive frameworks that would be nearly impossible to manage administratively. NTIA is much better positioned to ensure that the program is adequately protected by a review of a LEO provider's financial capability informed by relevant subject matter expertise. NTIA should conduct a one-time review of a LEO provider's financial capability and allow states to rely on the findings of this review for their purposes.

5. NTIA should specify that states are permitted to prioritize time-to-service as a key award factor for the evaluation of alternative technology projects.

NTIA should permit states to prioritize awards based on the provider's deployment timeline as the principal scoring factor when comparing alternative technologies. If NTIA does not focus on *deployment* as a key award factor, households may be relegated to unproven providers that ultimately may never deliver the service promised – rather than well-established LEO providers that can quickly and reliably deploy service. Time to

deployment is a simple metric to evaluate providers on that is also significantly meaningful for the beneficiaries of the BEAD program.

6. NTIA should rely on natural incentives rather than mandatory responses in a state's "Case 2" analysis.

The Draft Guidance's proposed implementation plan for the two-step process to ensure that an alternative technology is not already serving a location pursuant to BEAD requirements is unclear and overly burdensome. A state analysis on the sufficiency of existing services should not solely be based on the speeds experienced by existing subscribers. LEO is a capacity-constrained service compared to terrestrial services, which are primarily coverage-constrained. The efficient operation of a LEO network requires the expenditure and management of resources for existing customers. LEO operators do not reserve a finite resource like network capacity for locations without subscribers because there is no obligation to do so, and doing so would likely negatively affect its commitments to the existing, paying customer base. With BEAD funding, LEO providers would deploy and reserve additional capacity for BEAD subscribers, so it does not make sense to use speeds for *current* customers as a proxy for eventual speed to BEAD customers.

Additionally, the Draft Guidance proposes to require each alternative technology provider to respond within seven days of a state's "Case 2" investigation. This is a significantly aggressive and burdensome standard. Services under BEAD would face significant challenges engaging in what amounts to yet another challenge process in 50+ jurisdictions, with tight 7-day, followed by 30-day timelines to evaluate the state-specific situation and respond. NTIA should provide significantly greater timelines for this process. A mandatory response is also not necessary. As the draft guidance notes, companies who can serve locations have an interest in protecting these locations from subsidized competition. Therefore, providers who will not commit to serve BEAD locations without BEAD funding should not be required to issue a mandatory response in the "Case 2" process to maintain eligibility for "Case 3."

NTIA should include the framework outlined above as an additional option for states in all approved or pending Initial Proposal Volume II. The BEAD program is well underway, and many states have designed their programs based on NTIA's existing rules and guidance, which do not contemplate LEO systems and their unique deployments. NTIA must authorize each state to proceed under the requested LEO framework as an *additive* option to the procedures outlined in a state's Initial Proposal Volume II to ensure that as many households as possible are able to receive reliable, high-speed, affordable internet as soon as possible.

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CSF appreciates NTIA's consideration of this matter and these recommended enhancements to the BEAD program. We look forward to continuing to work with NTIA to ensure that all communities have access to high-speed broadband internet services.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Cavossa". The signature is fluid and cursive, with the first name "Dave" being more prominent.

Dave Cavossa

President

Commercial Spaceflight Federation