

November 30, 2009

*Via Electronic Mail: [broadbandrfi@ntia.doc.gov](mailto:broadbandrfi@ntia.doc.gov)*

Hon. Jonathan S. Adelstein  
Administrator  
Rural Utilities Service  
U.S. Department of Agriculture  
Washington, D.C. 20250

Hon. Lawrence E. Strickling  
Assistant Secretary for Communications Information  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
Washington, D.C. 20230

Re: *Rural Utilities Service and National Telecommunications and Information Administration; Docket No. 0907141137-91375-05, Broadband Initiatives Program and Broadband Technology Opportunities Program, Joint Request for Information, Comments of Hughes Network Systems, LLC, WildBlue Communications, Inc., EchoStar Satellite Services L.L.C., and ViaSat Inc.*

Dear Administrator Adelstein and Assistant Secretary Strickling:

Hughes Network Systems, LLC (“Hughes”), WildBlue Communications, Inc. (“WildBlue”), EchoStar Satellite Services L.L.C. (“EchoStar”), and ViaSat Inc. (“ViaSat”)(collectively, the “Broadband Satellite Commenters”) respectfully submit these comments and their “**Broadband Connectivity Credit**” proposal described in Attachment A, hereto, in response to the Joint Request for Information (“RFI”) released by the Rural Utilities Service (“RUS”) and the National Telecommunications and Information Administration (“NTIA”) in the captioned docket.<sup>1</sup> The RFI relates to the implementation of the Broadband Initiatives Program (BIP) and the Broadband Technology Opportunities Program (BTOP) and the preparation of the second round Notice of Funds Availability (“NOFA”) for BIP and BTOP.

Each of the Broadband Satellite Commenters or one or more of their affiliates was a party to one or more applications in response to the first NOFA. We applaud the agencies’ work and efforts to date in what has been an extremely compressed timeframe. We welcome this opportunity to comment on the RFI in order to assist RUS and NTIA in ensuring that the second round NOFA meets the purpose of bringing broadband to the broadband “**have nots**” – consumers, anchor institutions and others that are presently unserved by terrestrial providers – and narrowing the “digital divide.”

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<sup>1</sup> 74 Fed. Reg. 58940 (Nov. 16, 2009).

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## EXECUTIVE SUMMARY

In the second round of the Broadband Stimulus program, the agencies should focus to a significant extent on reaching the actual end users who do not *in fact* have access to terrestrial broadband service. The Broadband Satellite Commenters have two primary recommendations.

*First*, we propose that the agencies create a category of award we are calling the "**Broadband Connectivity Credit**" that would focus on those specific end users who *in fact* cannot receive terrestrial broadband today. We propose that \$500 Million be set aside to fund this program. A summary of the proposal is provided in Attachment A, hereto.

Combining elements of the existing "broadband infrastructure" and "sustainable broadband adoption" categories, this new application category would provide a maximum subsidy of \$1,000 per new end user, covering up to 80% of the incremental infrastructure cost of reaching such end user (including customer premises equipment and installation costs), and a sustainable adoption component covering up to 80% of the cost of providing service at a lower price and/or higher quality, and of associated innovative adoption programs. The Broadband Connectivity Credit would be available to qualified applicants of any type – satellite, wireless or wireline. Eligibility would be determined by an end user self-certification process (subject to verification) that would allow end users that are actually unserved to identify themselves as such. The credit will permit eligible service providers to improve their current quality of service and/or improve affordability of the broadband experience, the latter being directly related to adoption. This approach obviates the need for census-block-based maps of service areas, which have the unintended consequence of rendering ineligible for broadband infrastructure funding those end users who *in fact* lack access to terrestrial broadband service, simply because they are located in areas that mathematically are *deemed* served under the current NOFA rules.

Establishing this proposed application category would help achieve the goals of the Recovery Act in a number of important respects. First, it efficiently uses the limited Recovery Act funds by subsidizing the extension of broadband service to those end users who actually adopt broadband service. Second, because it is designed as a "demand-based" program, it avoids the construction of redundant terrestrial networks to serve end users located in pockets of larger areas that are deemed "unserved," "underserved," or "rural," but who actually have access to terrestrial broadband today. Third, it encourages the provision of broadband service to end users who have no access to terrestrial broadband, located in pockets of broader areas that are technically deemed to be "served," and who otherwise would be left behind.

*Second*, we offer responses to a number of specific questions raised by the Request for Information ("RFI"). These responses primarily focus on removing structural barriers in the first round NOFA that impeded proposals that were national, multi-state, or regional in nature. For example, the mapping requirement applicable to both BIP and BTOP infrastructure applications that applicants separately draw each of their numerous proposed "service areas" (even if the purpose of the proposal was to address all eligible service areas), the BIP requirement that only one project could be funded in any service area, and the BTOP approach of relying upon state-level recommendations, made it difficult or impossible for national or regional projects to compete effectively for funds with locally-focused projects. Funding broadband service to *actual* unserved households should always be possible, regardless of mapping requirements or service areas claimed by other providers.

By implementing a program such as the Broadband Connectivity Credit and removing structural barriers outlined below, the agencies can go a long way towards delivering broadband connectivity to consumers, small businesses and community anchor institutions who do not have terrestrial broadband today.

## **INTRODUCTION AND BACKGROUND**

### **A. The Broadband Satellite Commenters.**

**Hughes** is a global leader in providing broadband satellite networks and services for large enterprises, governments, small businesses, and consumers, providing satellite connectivity to more than 490,000 consumer, small business, governmental and enterprise customers in the U.S. market. Hughes developed, owns and operates the 10 Gbps Spaceway 3 Satellite System and will launch a high capacity broadband satellite in early 2012. **WildBlue** pioneered the use of the Ka-Band spot beam technology for satellite broadband, and currently provides satellite broadband to approximately 425,000 subscribers, principally to residential and rural locations throughout the lower 48 states. **EchoStar**, a leader in bringing satellite projects to fruition for the benefit of U.S. consumers, provides satellite services through nine satellites and related FCC licenses; together with its affiliate and predecessor companies, it has had active involvement in many satellite broadband ventures including the initial formation of StarBand Communications through a joint venture with Gilat and WildBlue. **ViaSat** is a world leader in providing communications links and secure communications in challenging environments to military, Government and commercial customers, has shipped over 600,000 Ka-band consumer satellite terminals, and will launch a 130 Gbps high capacity broadband satellite in early 2011.

### **B. The Role and Importance of Satellite Broadband Under the Recovery Act.**

Among the key goals of the broadband provisions of the Recovery Act are to provide access to broadband service to consumers in unserved areas, provide improved access to consumers in underserved areas, and stimulate the demand for broadband, economic growth and job creation through grant programs, including those that encourage sustainable adoption of broadband service. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115, Div. B, §§ 6001(b),(f) (the “Recovery Act”). The Recovery Act specifically directs NTIA to “promote the purposes of the [broadband] section in a technologically neutral manner.” *See id.*, § 6001(e) (1) (C).

With respect to satellite broadband in particular, the legislative history of the Recovery Act reflects Congress’ intent that, “consistent with the public interest and purposes of this section, as many entities as possible be eligible to apply for a competitive grant, including . . . satellite carriers.” H.R. Rep. No. 111-16, at 775 (2009). Likewise, as reflected in the RFI and the first round NOFA, cost effectiveness and efficiency are key policies underlying the Recovery Act, and the ability of a project to serve the greatest portion of a currently unserved or underserved population at the lowest cost is an important consideration. This allows the Government to effectively leverage its Recovery Act dollars in order to ensure that “the Recovery Act funds make the greatest impact possible.” RFI, 74 Fed. Reg. at 58942.

Consistent with these Recovery Act mandates, the agencies should ensure that the second round NOFA includes clear funding opportunities for satellite broadband, which is the fastest, most efficient, and most cost effective means of increasing adoption and bringing broadband to unserved areas. Satellite broadband providers have demonstrated that they can serve very low density areas with an economically sound business model. Almost 1 million U.S. residential, small business, governmental and enterprise customers use satellite for Internet access. In

addition, the industry continues to make significant investments in upgrading satellite infrastructure and improving the end user's broadband experience, including with third generation satellites under construction and scheduled for launch by ViaSat and Hughes respectively, in early 2011 and 2012.

As opposed to middle mile projects, satellite broadband technology provides an end-to-end solution that covers both legs of communication networks, the middle mile and the last mile. Integrated end-to-end networks are advantageous from the point of view of a quicker proliferation of broadband services since they remove interdependencies that might delay bringing the broadband experience to the end user, and remove uncertainties regarding the ultimate cost of service to the consumer – the latter being an important metric for adoption. Satellite networks are also very efficient in rapidly connecting large numbers of new users, with a quick (typically less than 10 days) installation of customer premises equipment, which leverages existing space segment infrastructure and requires no additional "middle mile" infrastructure between the satellite and the end user. Finally, satellite broadband is well suited to provide connectivity to the millions of unserved and underserved households sprinkled throughout America who likely will not be counted in any definition of "unserved" and "underserved" based on census blocks. As previously explained, the location of today's satellite broadband subscribers demonstrates that unserved households often exist within census blocks that otherwise are deemed to be "served."

### **C. The First Round NOFA.**

In our view, the first round NOFA and application process were oriented for local terrestrial models and applicants. Regional or national projects, *e.g.*, satellite, did not easily fit within the eligibility requirements, and the proposed projects either fell short of meeting the highest scoring criteria or were not priorities for state recommendations regardless of merit.

For example, if read literally, RUS's one-loan-per-market rule could create significant barriers for a regional or national system because by definition a satellite's coverage will encompass service areas otherwise funded by RUS. While the Broadband Satellite Commenters do not believe this reading is correct, the risk of an over-literal interpretation remains. A community-by-community approach fails to recognize the substantial efficiencies and benefits of universal coverage offered by satellite. In addition, NTIA's requirement that each state rank every project, including multi-state or national projects, creates a preference for "local" systems, making it far less likely that any one state would highly rank a satellite project. As would be expected, states tended to favor projects that proposed dedicated funding within the state's boundaries.

Satellite projects need not be defined by limited local service areas; they have the ability to serve consumers located anywhere in their large geographic coverage areas – particularly consumers who are unserved by terrestrial providers. The first round NOFA and application, through its local service area-centric construct and associated census block-based mapping tool, while perhaps applicable to local terrestrial projects, is ill-suited for satellite projects, which can reach almost all unserved end users, wherever located in the nation. The Broadband Satellite Commenters know from attempting to correlate certain data from States with the census block/mapping tool data that many underserved households are in fact really unserved. The rules

thus may have inadvertently disenfranchised those end users who may be in an area that mathematically is *deemed* served by the agencies, but who nevertheless *in fact* lack access to terrestrial broadband service.

In a sense, the first NOFA was aimed at providing broadband to medium-density zones where broadband is currently nonexistent or inadequate. While this approach is laudable, it should be expanded to facilitate the provision of service to those large territories, particularly in rural and remote/low-density areas, where local or regional projects may not be economically feasible. From experience in the U.S, Canada, Europe, and Australia, we also know that there are considerable numbers of unserved or underserved households in small pockets within the putatively “served” areas where consumers remain unable to obtain terrestrial broadband. Rules in the second round *NOFA* should address and give preference to the needs of those end users and anchor institutions that do not and will not benefit from current terrestrial deployment (or from granted projects), so that NTIA and RUS will better meet their desire to deploy broadband to *all* Americans, especially those in rural America.

## **THE BROADBAND CONNECTIVITY CREDIT PROPOSAL AND ITS BENEFITS**

### **A. Overview of the Broadband Connectivity Credit Proposal.**

Setting aside funds specifically for projects that encourage broadband adoption in the first round, as envisaged by the Recovery Act, was a good idea, which the Satellite Broadband Commenters applaud. In the second round NOFA, the agencies should continue to emphasize the importance of adoption by expanding the first NOFA’s program. The Broadband Satellite Commenters urge the agencies to establish a category for “**Broadband Connectivity Credit**” applications, as described more fully in **Attachment A**, hereto. The program will have at its core bringing affordable broadband directly to consumers, anchor institutions, critical community facilities, and other governmental/public safety, educational, and commercial entities that today are unserved by terrestrial broadband alternatives. The program is based on customer choice, promotes competition among broadband providers and drives adoption by defraying upfront equipment and installation costs, in addition to recurring service costs. This category is also technology neutral, applying equally to all providers, and is an innovative, outside-the-box approach for rapidly increasing broadband adoption in unserved areas, as well as within targeted vulnerable populations and targeted anchor institutions in these areas – central purposes of the Recovery Act.<sup>2</sup>

Under this proposal, the second round NOFA would set aside \$500 Million in grants (or such other amount as determined by the agencies), pooled from existing last mile/middle mile infrastructure and adoption categories, for a new Broadband Connectivity Credit category, open to broadband satellite, wireless, and wireline providers. The category will fund infrastructure and combined infrastructure/sustainable adoption projects to connect and provide broadband service to unserved consumers, anchor institutions, critical community facilities, and other governmental/public safety, educational, and commercial entities, typically located in rural and

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<sup>2</sup> This type of approach is not without precedent. For example, Australia, through its Australian Broadband Guarantee Program, devised a plan on how to provide broadband to all their citizens, that among other things, uses government subsidies to incentivize providers to buildout broadband to those areas that are unserved by terrestrial providers, including through the use of satellite broadband.

remote/low-density areas and also the large number of households and businesses sprinkled throughout America who, although they are in fact unable to get terrestrial broadband, likely will not be counted in any definition of “unserved” that is based on census block data.

The purpose of this category is to specifically target support for those end users, the literal terrestrial broadband **“have-nots”** that are not currently served by terrestrial broadband alternatives. The infrastructure component of such awards will provide a **“Connectivity Credit”** to cover up to 80% of the eligible infrastructure costs per-end user, including the cost of customer premises equipment, installation and incremental infrastructure required to serve an eligible end user. The sustainable adoption component of such award would provide for a lump sum per-subscriber **“Broadband Adoption Credit”** available for applicant-specified targeted populations and entities that are also eligible for the Connectivity Credit, in order to subsidize up to 80% of a reduction in recurring monthly service fees and up to 80% of the cost of innovative adoption programs aimed at such targeted populations and entities.

The program would have an overall per-subscriber cap of \$1,000 for the combined Connectivity and Broadband Adoption Credits, to allow maximum participation in the category from those end users that do not currently have access to terrestrial broadband, to encourage use of the most efficient technologies to serve these consumers and entities, and to prevent the fund from being depleted through a limited number of high cost connections. End user eligibility would be established through a customer self certification process, under criteria determined by the agencies. The credit will permit eligible service providers to improve their current quality of service and/or reduce their monthly fees. To the extent a provider proposes to utilize part or all of the credit to improve quality of service, the provider would specify the metric being improved, the extent of improvement, and the cost of such improvement.

Applicants, in response to the second round NOFA would submit proposals for their Broadband Connectivity Credit projects. After evaluating all applications under the program, the agency would determine which applicants qualify for the Broadband Connectivity Credit category, and for each based on the applicant’s proposal, the eligible infrastructure costs and the per-subscriber Connectivity Credit to be funded under the program, which would not exceed 80% of actual cost. Where there is an adoption component in the application, the agency would additionally determine the per-subscriber Adoption Credit for service charge reductions and associated adoption programs, which would not exceed 80% of such reduction and of the applicable costs.

It is envisioned that multiple applicants will qualify and be deemed eligible to receive and use such Credits. The agencies would commit a fixed amount – we propose \$500 Million – to the category, rather than awarding specific amounts to particular applicants. Grantees would then submit appropriate end user self certifications to draw down funds from the pool. Credits could be cleared through a third party administrator, as proposed by the applicant, which would interface with the agencies and service providers and provide validation, rather than the agencies processing individual credits. Funds would be paid on a first-come, first-served basis, until the category grant amount of \$500 Million was exhausted, ensuring immediate and intense competition among providers for new subscribers. In addition, as eligible customers are identified and submitted for Recovery Act support, a point representing their address could be

entered into the Broadband USA mapping database (provided this could be done in a manner consistent with consumer privacy and the protection of confidential business information).

**B. Benefits of the Broadband Connectivity Credit Proposal.**

The Broadband Connectivity Credit Program would have the benefit of allowing RUS and NTIA to meet their statutory obligations over the entire U.S., through a program allowing any unserved household or entity in the country to take advantage of the credit. Importantly, rather than a supply-side model where applicants specify in detail particular areas to be served, a Broadband Connectivity Credit application category would be a customer-driven, demand-side model. It is the most efficient means to apportion Recovery Act dollars directly to the provision of broadband service to consumers and other end users that today have no access to terrestrial broadband service. To the best of the Satellite Broadband Commenters knowledge, this type of innovative, nationwide program would be the first of its kind in the U.S., and may well serve as a prototype for other broadband programs.

The program would also increase adoption of broadband by unserved consumers by defraying upfront equipment and installation costs (a substantial portion of the total infrastructure costs associated with providing satellite broadband), a factor which many potential customers cite as a reason for declining to subscribe to broadband service. As a customer-based initiative, support would be tightly focused on those who need and want it most without the need for the government to make those decisions *a priori*. It would also hold the benefit of creating widely dispersed economic activity -- creating and saving installation, maintenance, and customer care/education jobs across the country.

The program would create significant incentives for broadband providers to begin marketing the program and providing services as quickly as the government can fund it. Under the program, service providers will have strong market incentives to publicize the program (and its reduced rates). In and of itself, this will increase adoption. Further, the government will not need to publicize the program; it will be left to competitors in the market to do so, who will have significant incentives to market the program given its proposed structure.

As to the satellite industry in particular, since the program can be implemented using existing satellite infrastructure, the program is shovel-ready on Day One and new customers can begin receiving service almost immediately. Indeed, local installation crews can be rapidly deployed to install broadband service to unserved consumers as soon as the order is received. Money distributed under the program would thus lead to immediate job creation and preservation, as local installers are needed to install and maintain these terminals,<sup>3</sup> and would support small business by enabling them to compete more effectively in an increasingly connected world.

As structured, the program will promote competition among providers, a key Recovery Act priority, and at the same time, will not put the agencies in a position of having to disrupt a

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<sup>3</sup> For example, in a single state, one of the Broadband Satellite Commenters has almost 200 dealer resellers, and approximately 160 installation firms employing over 700 installers.

competitive market by selecting winners and losers among competitors. By tying the grant to an end user, RUS and NTIA would allow such end users to decide who will be their broadband provider of choice. Finally, the program could be easily audited, as NTIA and RUS, or a third party, could verify customer records to confirm that the subsidized equipment/service has been provided to end users that are in fact unserved.

## **SPECIFIC RESPONSES TO THE RFI**

In the sections below, the Broadband Satellite Commenters provide responses for the specific areas on which the agencies seek comment in the RFI both in support of their Broadband Connectivity Credit proposal, and to improve other elements of the first round NOFA rules. For ease of review, we have not repeated the specific questions, but have organized our response to track the organization and numbering of the areas of inquiry in the RFI.

### **RFI Section I: The Application and Review Process**

#### **A. Streamlining the Applications.**

##### ***Streamlining the application and reducing burden, generally.***

- *Flexibility.* The Second Round NOFA should allow for more flexibility in responses. For satellite applicants in particular, the very structure of the program presented a great challenge. Although Congress stated its intent that the broadband program be administered in a technologically neutral way, the structure of the application and the criteria for eligibility were inadvertently oriented towards technologies more suitable to a local service area-based model of service. As a result, satellite broadband technology, which might have been enabled in the first round, was disadvantaged and the most remote consumers were left out.

Satellite service is ubiquitous and therefore is not circumscribed by relatively small geographic service areas. A broadband program designed primarily around concepts like local service territories and market penetration within a limited geographic area – *de facto* favors terrestrial technologies. Accommodating the hardest to serve end users is an important goal of the Recovery Act, yet narrow mapping and service territory definitions may preclude funding of these households and entities.

Accordingly, the program and the application process should be flexible enough to accommodate satellite-based projects, and in particular, innovative Broadband Connectivity Credit projects. These projects are not based on traditional local service area concepts, but provide broadband to consumers and other end users unserved by terrestrial technologies, whether they are located in large unserved remote areas, or smaller, literally unserved pockets comprised of a neighborhood, a group of homes, or even a single residence or business.

- *Professional Engineer Certification.* The first NOFA, if read literally, would have required that system designs be certified by professional engineers certified in each state of operation. Though satellite broadband providers have been provided informal guidance that the agencies will not strictly interpret this requirement, it is still overly

burdensome for national or multi-state providers, unnecessary to ensure prudent investment of taxpayer dollars, and nearly impossible to satisfy. Instead, the applicant should be required to provide reasonable assurance that the project is technologically feasible. A single engineer possessing professional credentials and experience in the relevant technology should be sufficient to advance an application to the due diligence stage. If the agencies determine that additional engineering validation is required, it could be requested later during the due diligence stage.

- *Functionality.* In addition to the improvements that NTIA and RUS made to the functionality of the online submission process during the first round, applicants should be provided an opportunity to compile a complete application offline and then upload the final version.
- *Pro Forma Financials.* Pro-forma financials at the application stage should be focused on the viability of the project, and not be required to be produced for the entire company. While it is reasonable for applicants to project with a degree of specificity revenues and expenses for a stimulus-supported project, a 5-year projection for the entire company could have unintended Securities and Exchange Commission compliance and disclosure implications. For applicants that make regular filings with the SEC, the agencies should be able to understand the general viability of any applicant from such documents and disclosures, and request follow-up documentation in the due diligence stage, if warranted.
- *State Recommendations.* National and multi-state applications, such as those under the Broadband Connectivity Connect program, should be considered separately, independent of state recommendations that may not focus on the greater benefits of multi-state programs.

***Request No. I.A.3 -- Specification of Service Areas.***

Data collection and documentation required to establish the boundaries of the proposed funded service areas should be flexible enough to recognize that satellite services, in particular, are not limited to narrowly-defined local service areas in the same way as terrestrial services. While Congress clearly intended the broadband program to be administered in a technologically neutral way, the manner in which the agencies structured the application requirements and the criteria for eligibility could have been read as creating an unintentional structural bias towards a community-by-community traditional telecom model of service deployment.

For these reasons, the agencies should modify the rules to accommodate nationwide or regional applications using technologies like satellite. By its very nature, satellite service is self-selecting. It is most attractive to those consumers who have no terrestrial broadband service available. As a corollary, the agencies must also ensure that the application of its service territory definitions does not have the unintended effect of excluding satellite service to consumers who are not actually served (e.g., because terrestrial facilities do not reach a particular street, neighborhood or group of homes), but happen to be located in a geographic areas that satisfy the mathematical

metrics of the program. Satellite service is uniquely well suited for reaching these types of unserved end users. Service provided by funded satellite broadband projects should *always* be available to those who are *actually* unserved, even if the generic criteria employed by the agencies' mapping methodology identify the broader area around such location as "served."

Accordingly, rather than being required to define specific service areas, and draw maps around each census block within such service areas, applicants for national or regional satellite projects should be able to rely on a customer self certification process, such as that provided in the Broadband Connectivity Credit proposal discussed in Attachment A, to determine any given household's eligibility to receive the reduced cost service. Such customer self-certification will enable the NOFA to "fill in the gaps" and achieve adoption in a pin-pointed way that cannot be achieved by use of any mapping tool.

However, if use of maps and the specification of service areas are deemed necessary for particular types of projects, RUS/NTIA should require use of one map of unserved/underserved areas created by RUS and NTIA, which would provide consistency, accuracy, and efficiency. Each applicant would then not have to undertake the expansive task of compiling the information itself, duplicating the efforts of countless other applicants, only to be challenged by other providers.

The first round NOFA did not preclude third parties from submitting unsubstantiated and un rebutted objections to an applicant's maps -- and also did not give the relevant applicants notice and an opportunity to comment. In the second round of the NOFA, applicants should be allowed to propose broad service areas, and the agencies should confirm (as we believe was the case in the first round) that applicants can "scale back" projects to eliminate any ineligible areas, or replace ineligible areas with eligible ones, rather than having their applications be rejected outright.

In addition, applicants for regional or national projects should be exempted from using any online mapping tool if it is required in the second round NOFA. The current mapping tool is unduly burdensome to national and regional projects, and was an almost insurmountable hurdle for those projects in the first round applications. For example, using this tool required manual entry of county-by-county service area boundaries. As one example, one of the Broadband Satellite Commenters with a footprint over the contiguous U.S. was not permitted to state its service area as "all rural areas within the contiguous 48 states," but rather, was required to individually and manually map 3,100 counties. The spreadsheet files of corresponding information to support drawing such maps for another Broadband Satellite Commenter totaled nearly 300 Mb of data (more than 10,000 pages), all of which was painstakingly assembled in an attempt to satisfy the literal requirements of the first round NOFA.

***Request No. I.A.4 -- Relationship between BIP and BTOP.***

Applicants should be allowed to choose to submit directly to either NTIA or RUS or both. The agencies have different missions and the Recovery Act imposes different requirements for broadband stimulus funding on each agency. For example, it is possible that applications serving rural areas may more appropriately meet the NTIA criteria; such applications should be permitted to be submitted to that agency directly if desired by the applicant. Moreover, the decision to apply for a loan and/or grant should be left up to the applicant and established in the application submitted. For some projects, a loan is not financially feasible and this should be determined by the applicant at its discretion.

**B. Transparency and Confidentiality.**

In order to protect the confidential information of applicants, the agencies need to inform applicants in advance what information will and will not be made public, and must ensure that an applicant's commercial information is kept confidential. An applicant should be able to withhold from public disclosure confidential commercial information. In particular, the agencies should permit an applicant to redact information from its application before the application is shared with the states—which each have varying disclosure and privacy laws—or the public. In addition, rather than making the Executive Summary public, which will often contain confidential information that the applicant wishes to include in support of the application, the application should include provision for a “public version” or narrative of the Executive Summary, which the applicants can revise to exclude confidential information. For all applicants, such public version should include, at a minimum: (1) advertised speed on uplinks and downlinks; (2) the cost per end user household connected (with such being included as a projection by middle mile projects); and (3) the retail monthly service charge for a specified quality of service.

**C. Outreach and Support.**

It is critical that the agencies post up-to-date and accurate information on one website, such as [www.broadbandusa.gov](http://www.broadbandusa.gov), so that applications have a reliable, consistent and authoritative source for information about BTOP and BIP, and provide live phone/email/chat assistance with faster response times.

**RFI Section II: Policy Issues Addressed in the NOFA.**

**A. Funding Priorities and Objectives.**

***Request No. II.A.1 -- Middle Mile “Comprehensive Community” Projects.***

The RFI inquires into the efficacy of emphasizing middle mile “comprehensive community” projects in the next round. While “comprehensive community” projects are a good start towards deploying broadband by reaching “early adopters” across the United States, many of the fruits of connecting community anchor institutions with broadband would be either lost or would not deliver optimal impacts without “last mile”

connectivity. Implementing middle-mile projects without last mile connectivity would run the risk of creating the broadband equivalent of “bridges to nowhere.”

Moreover, without last mile connection cost estimates, one can neither guarantee connections nor estimate the real end-to-end cost of providing a broadband connection. Thus, no middle mile funding should be awarded without substantiation of, at a minimum, the costs per site connected (including the last mile estimates appropriately documented).

To the extent the agencies seek to focus second round funding on community-based projects, this can be done through the proposed Broadband Connectivity Credit program, and in a way that includes multiple technologies who actually will provide end user service, not just middle mile projects, as currently proposed in the RFI. In particular, under the first round NOFA, satellite providers fall under the definition of last mile providers because they provide service to end users even though they also perform middle mile functions.<sup>4</sup> Focusing on those service providers who *only* provide middle mile service would have the unintended and undesirable effect of leaving out entirely those service providers who are capable of both last mile and middle mile service—and thus can provide end-to-end service to the target community projects.

Moreover, utilizing only the two categories of last mile or middle mile does not accurately account for the systems that combine both elements in order to efficiently reach unserved Americans. For example, a satellite service provider can both provide service to end users (a last mile component) and provide its own backhaul (an element of middle mile projects).<sup>5</sup>

As a result, a third category – end-to-end – should be created to accommodate those providers whose systems combine both last mile and middle mile segments of service provisioning. Those applicants seeking to provide end-to-end service should be given priority over other applicants because this service (1) removes interdependencies that might delay provisioning and ensures that broadband is ultimately delivered within the promised cost parameters; (2) is likely to be the fastest and most efficient in adding new users; and (3) drives down the cost of service to the consumer.

The Broadband Satellite Commenters have no objection to rules in the next round that allow for the consideration of terrestrial-based middle mile projects that link to anchor institutions and other community based projects. However, the NOFA should not give special consideration to this middle mile approach, and the NOFA certainly should not

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<sup>4</sup> The first round NOFA defined “last mile project” as “any infrastructure project the predominant purpose of which is to provide broadband service to end users or end-user devices (including households, businesses, community anchor institutions, public safety entities, and critical community facilities).” *First Round NOFA*, 74 Fed. Reg. 33,108 (July 9, 2009).

<sup>5</sup> “Middle mile project” is defined in the first round NOFA as “a broadband infrastructure project that does not predominantly provide broadband service to end users or to end-user devices, and may include interoffice transport, backhaul, Internet connectivity, or special access.” *Id.* at 33,109.

adopt such approaches to the exclusion of infrastructure projects from low-cost technologies such as satellite that are capable of end-to-end connections. Cost and efficiency considerations make satellite technology particularly well-suited to serve end users in rural and remote areas around the country that are not reached by terrestrial broadband technologies. In the second round NOFA, the agencies should make room for all types of applications, including end-to-end, rather than express an explicit preference for "middle mile" or "last mile" projects, *per se*.

If RUS and NTIA were to focus the remaining funds on "comprehensive community" projects (and they should not), sustainability is an appropriate consideration, regardless of organizational form. A public-private partnership, while desirable for many reasons, is not inherently more sustainable than a purely private proposal, and may be decidedly less so.

***Request No. II.A.2. -- Economic Development.***

It is not necessary for RUS and/or NTIA to allocate a portion of the remaining funds available under the BIP and BTOP programs to promote a regional economic development approach to broadband deployment. Broadband access itself promotes economic development. The economic power of access should not be under-estimated. The ability of even one worker to telecommute, do business or access government services online can spur economic development in that community.

Thus the NOFA should also recognize that in order to achieve the goal of universal adoption, it will be absolutely essential to provide the ability for consumers to access the Internet from their homes. Such is crucial to so many vital Internet applications, including medical care, job search and job applications, education, tele-commuting and social networking.

***Request No. II.A. 4 -- Other Changes.***

- *The One Loan Per Market Rule Should not Apply to Regional or Multi-State Projects.* The prohibition against "overlapping service areas" in the BIP program, if read literally, could significantly hamper satellite projects from participation in BIP funding. This "one-loan-per-market" rule was apparently carried over from the RUS's pre-existing broadband program.<sup>6</sup> During the initial round of funding, RUS acknowledged the issue but did not issue a clarification.<sup>7</sup> If preserved at all, the one-loan-per-market rule should apply solely to terrestrial providers and/or single-state projects. Without a clarification, potential customers of satellite broadband could be unfairly precluded from obtaining the benefits of Broadband Stimulus programs funded by RUS.

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<sup>6</sup> See *First Round NOFA*, 74 Fed. Reg. at 33111, Overlapping Service Areas ("RUS will not fund more than one project to serve any given geographic area.").

<sup>7</sup> See, e.g., Broadband Stimulus National Town Hall Meeting Webcast, July 9, 2009, NTIA/RUS Panel, Q&A at 32:40 (available at <http://www.nlctv.org/events/broadbandstimulus%5Fthm/090709/>) (Registration required).

- *Modifications to eligibility and evaluation criteria.* The agencies should modify both the eligibility and evaluation criteria in the second round of funding. For example, eligibility should not be exclusively linked to a specific area for all applications. Rather, the agencies should allow for eligibility of individual consumers that are actually unserved, *i.e.*, an actually unserved area could be a community, neighborhood or group of residences that do not have access to terrestrial broadband services. Some consumers have no access to terrestrial broadband service, but the area of their residence does not qualify under the eligibility criteria specified in the first round.

In the second round, the agencies should also consider special eligibility and evaluation criteria for unique solutions – such as proposals that would fall under a Broadband Connectivity Credit category. Thus, the rules must be flexible enough to grant applications requesting combined infrastructure and adoption funding to subsidize the CPE and other infrastructure elements of providing broadband service to individual subscribers, as well as a subsidy for monthly service fees and adoption programs to vulnerable populations and other targeted entities.

- *Efficiency Measures.* The first round NOFA measures cost efficiency for BTOP infrastructure projects based on the ratio of total cost of the project to households passed. In addition to looking at this efficiency measure, the agencies should measure efficiency of both last mile and middle mile projects based on the cost per household *connected* for a specified quality of service.
- *Tax Treatment of Broadband Stimulus Awards.* Currently there is a lack of clarity of the tax treatment of broadband awards under the Recovery Act. The agencies should seek clarification of the tax treatment of Broadband Stimulus awards, and to the extent it is determined that such awards may be taxable, seek additional clarification from Congress, since taxation of stimulus funding will reduce the amount of funds available to complete a proposed project and thus would undermine Recovery Act objectives.

## **B. Program Definitions.**

- *Unserved and Underserved.* The definitions for eligibility should be made more flexible. In particular, applicants should be allowed to propose broad service areas, and the agencies should confirm (as we believe was the case in the first round) that applicants can “scale back” projects to eliminate any ineligible areas, or replace ineligible areas with eligible ones, rather than their applications being rejected outright. As discussed above, the agencies should allow for the funding of infrastructure and service costs for eligible end users who can certify that they do not have access to broadband from terrestrial-based providers. Finally, to the extent that greater weight (or points) is given to “remote” projects, we believe population density is the more appropriate criteria, rather than the “remote” definition from the first NOFA. Lower population density areas are far more likely to be unserved by terrestrial technologies, and areas with a population density of less than 500 households per square mile should receive special consideration for funding.

**C. Public Notice of Service Areas.**

The public notice and challenge procedure devised in the first round NOFA should not be applied to projects that would be funded under the proposed Broadband Connectivity Credit category, where funding would be provided for infrastructure costs to eligible subscribers, based on self certification and service provider verification. However, to the extent the procedure does apply, third parties should not be permitted to submit a challenge without giving the relevant applicant notice and an opportunity to comment. Applicants spend a substantial amount of time, effort, and resources preparing an application and their potential competitors have a significant interest in preventing the applicants from obtaining funding. Fairness demands that applicants have the right to respond to any challenges.

**CONCLUSION**

Consumers and entities who are in fact the hardest to serve, who otherwise would not be served by any terrestrial broadband provider, and would be best served by satellite technology should not be left behind in the second round of funding. At a minimum, the agencies should entertain innovative national or regional projects such as the Broadband Connectivity Credit category described in Attachment A. The Broadband Satellite Commenters also urge RUS and NTIA to adopt the specific recommendations made above in order to enhance the applicant experience and achieve the Recovery Act goal of extending broadband service to all Americans.

**Respectfully submitted,**

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Attachment

**BROADBAND CONNECTIVITY CREDIT PROPOSAL**

**KEY ELEMENTS OF AN END USER-DRIVEN  
INFRASTRUCTURE AND ADOPTION CATEGORY FOR UNSERVED  
CONSUMERS, ANCHOR INSTITUTIONS, & OTHER ENTITIES**

***Introduction and Overview.*** The second round NOFA should establish a “**Broadband Connectivity Credit**” (“BCC”) category of projects open to a broadband provider – whether satellite, wireless and wireline. The Broadband Satellite Commenters propose that this category have \$500 Million set aside in grants. This amount would be pooled from existing infrastructure and adoption categories, to fund infrastructure and combined infrastructure/sustainable adoption projects to provide broadband service to unserved consumers, as well as to unserved anchor institutions, critical community facilities, and other governmental/public safety, educational, and commercial entities, typically located in rural and remote/low-density areas.

The purpose of this category is to specifically target support for those end users, the literal terrestrial broadband “**have-nots**” that are not currently served by terrestrial broadband alternatives. The infrastructure component of such awards would provide a “**Connectivity Credit**” to cover up to 80% of the eligible infrastructure costs per-end user, including the cost of customer premises equipment (“CPE”), installation and incremental infrastructure required to serve an eligible end user. The sustainable adoption component of such award would provide for a lump sum per-subscriber “**Broadband Adoption Credit**” available for applicant-specified targeted populations and entities that are otherwise eligible for the Connectivity Credit, in order to subsidize up to 80% of a reduction in recurring monthly service fees as well as 80% of the cost of innovative adoption programs aimed at such targeted populations and entities. The program would have an overall per-subscriber cap of \$1,000 for the combined Connectivity and Broadband Adoption Credits, to allow maximum end user participation, to encourage use of the most efficient technologies to serve these consumers and entities, and to prevent the fund from being depleted through a limited number of high cost connections.

***Eligible Applicants, Covered Infrastructure, and Application Process.*** Any broadband satellite, wireless or wireline provider can apply to fund a project under this program in the second round NOFA. Providers can apply either individually or in joint applications that include multiple entities in a sector (including through third party entities).

Under the infrastructure component, applicants would specify the eligible infrastructure and installation costs to be funded and the proposed per-subscriber funding amount, which could not exceed 80% of the applicable costs. The applicants will also provide information on: (1) financial viability and other track record qualifications; and (2) the extent to which the provider will utilize the credit to improve affordability and/or to improve current quality of service in

terms of speed and/or provisioning, specifying appropriate affordability and quality of service metrics.

Funding would be available for end user equipment and installation as well as for incremental infrastructure necessary to serve eligible end users. Applications that include a sustainable adoption component would additionally specify: the targeted populations and entities to be served; any associated innovative adoption programs; the per-subscriber lump sum subsidy sought; how that subsidy would be allocated between a reduction in monthly subscriber charges and the cost of any associated adoption program; and a showing that the per subscriber subsidy is no more than 80% of the reduction in subscriber charges to be funded plus the cost of the adoption program.

The aggregate amount funded per eligible subscriber under both the infrastructure and adoption components would not exceed \$1,000. Applicants would also have the option of proposing a third party administrator to handle payment processing and administration.

Applicants would not be required to specify in their applications geographic areas to be served under the program. In particular, since the program will be customer-driven (i.e., demand-based) and designed to reach those end users who *in fact* have no access to terrestrial broadband service, there will be no requirement for applicants to designate in their applications areas to be served as unserved or underserved, provide census block data, or make use of a mapping tool.

After evaluating all applications under the program, the agencies would establish for each application granted, the eligible infrastructure costs and the per-subscriber Connectivity Credit to be funded under the program, which would not exceed 80% of actual cost (to account for matching funds from the applicant). Where there is an adoption component, the agencies would additionally determine the per subscriber subsidy for service charges and associated adoption programs, which would not exceed 80% of applicable service charge reduction and applicable adoption program cost (again, to account for matching funds from the applicant). Multiple applications from a variety of service providers could be granted for the overall Broadband Connectivity Credit category.

A \$500 Million pool would be created from which each eligible Grantee would draw the approved funds per end user. Grantees would then submit end user self certifications to draw down funds for Connectivity Credits, and, if applicable, Broadband Adoption Credits. Credits could be cleared through a third party administrator designated by the applicant, which would interface with the agencies and service providers and provide validation. Funds would be paid on a first-come, first-served basis, until the fixed amount in the pool was exhausted.

***End User Eligibility.*** End user eligibility for the program will be established by an end user self-certification process. An eligible end user will be defined as follows:

**Any consumer or other end user entity that self certifies that he/she or the entity is not currently able to receive broadband service from a wireline or wireless broadband provider.**

Additionally, end user eligibility for participation in the Broadband Adoption component will be established based on target population and entity criteria specified in a particular application and the award made by the agencies.