

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Rural Digital Opportunity Fund	)	WC Docket No. 19-126
	)	
Connect America Fund	)	WC Docket No. 10-90

**COMMENTS OF INCOMPAS**

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INCOMPAS, by its undersigned counsel, hereby submits these comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) *Notice of Proposed Rulemaking* to establish the Rural Digital Opportunity Fund (“RDOF”).<sup>1</sup>

**I. INTRODUCTION AND SUMMARY**

INCOMPAS, the internet and competitive networks association, is the preeminent national industry association for providers of internet and competitive communications networks. We represent companies that provide competitive residential broadband Internet access service (“BIAS”), as well as other mass-market services, such as video programming distribution and voice services in urban, suburban, and rural areas, including small fiber providers that are building more fiber than, and offering service that is competitive to, large incumbents such as AT&T and Comcast, as well as fixed wireless entities delivering high-speed broadband to consumers. We also represent companies providing business broadband services to anchor institutions, hospitals and clinics, and businesses of all sizes. Our wireless and satellite members

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<sup>1</sup>*In re Rural Digital Opportunity Fund and Connect America Fund*, WC Dockets No. 19-126 & 10-90, Notice of Proposed Rulemaking, FCC 19-77 (rel. Aug. 2, 2019) (“NPRM”).

offer services to residential and business customers. Finally, we represent transit and backbone providers that carry broadband and Internet traffic, and online content and video distributors (“OVDs”) that offer various content and communications services and video programming over BIAS to consumers.

INCOMPAS members are dedicated to deploying the next generation of high-speed networks and services and are eager to compete for customers seeking faster broadband service at lower prices. Consumers appreciate choice and are increasingly turning to competitive, online alternatives to traditional services, including streaming video, voice, and cloud services. These innovative offerings allow the association’s members to compete, where possible, and ensure that consumers are able to engage in the digital economy and benefit from broadband availability and competition.

Broadband demand is growing across the economy. Consumers are using broadband to work, do their homework, entertain themselves, shop, and stay connected to friends and family, among many other uses. Higher broadband speeds, where available, have brought digital competition to the media marketplace as new companies have entered the landscape and traditional institutions like newspapers and broadcast stations have moved an increasing amount of content online. Residential consumers have adopted new online applications that compete with legacy services. For example, consumers can now stream video content online and can do so rather than subscribing to a traditional cable or MVPD service. E-commerce also is robust as consumers purchase more of the goods they value from digital marketplaces. Edge providers have also made it easy to find information from a plethora of digital sources, including search engines, applications, websites, and smart devices. And government agencies at every level—

local, state, and federal—have moved much of their activities online to serve their constituents, including the FCC.

Businesses are using broadband connections, where available, more than ever before. Cloud services are growing and entire industries are changing as they too are relying more on broadband connectivity. The healthcare industry, manufacturing, agriculture, and retail, among many others, are experiencing the impact of broadband. Businesses large and small must be connected to compete, and broadband demand is expected to continue to grow.

However, as the Commission is fully aware, there are persistent gaps in the availability of broadband networks. Therefore, its work to support the deployment of networks where there is no business case for the private sector to deploy broadband is incredibly important. At this time, an infrastructure package that could lead to more broadband network investment is stalled in Congress, leaving the RDOF as the only significant, likely investment in broadband for our country for the next several years. It is apparent from discussions with our members and others in the industry that many companies are standing ready to assist the Commission's efforts—INCOMPAS' competitive broadband provider members included. Through the RDOF, the Commission has an important and critical opportunity to invest up to \$20.4 billion over ten years. If designed correctly, the RDOF investment can help address the persistent broadband availability problem by enabling the deployment of robust, sustainable, scalable and future-proof technologies that will be used to deliver both wired and wireless digital opportunity for millions of Americans and their communities. As such, INCOMPAS and its members are supportive of the FCC's effort to further address the digital divide through the RDOF, and we are happy to provide our perspective in these comments.

## **II. THE RDOF GOALS ARE LAUDABLE; REASONABLE COMPARABILITY OF SERVICE SHOULD BE INCLUDED AS A GOAL.**

INCOMPAS supports the Commission’s stated goals of: (1) ensuring that high-speed broadband is made available to all Americans quickly, and at an affordable price; (2) reducing waste and inefficiency in the high-cost program and promoting the use of incentive-based mechanisms to award support; (3) requiring accountability to ensure that public investments are used wisely to deliver intended results; and (4) minimizing the contribution burden.<sup>2</sup> Moreover, as we discuss further below, INCOMPAS believes the Commission should adopt a fifth goal of promoting the availability of comparable service for consumers to be served by the auction winners.

Given the diversity of our membership and their business models, it should not be surprising that INCOMPAS embraces competitive and technological neutrality. Nonetheless, with respect to goal number one—the Commission should consider that it can meet the expectations of consumers for the availability of both fixed and mobile broadband access if the RDOF is designed to deliver robust fixed broadband networks that are sustainable, scalable, and future proof. Accordingly, the FCC’s RDOF reverse auction design should ensure that as much fiber is deployed in rural America as possible.

Since 2017, INCOMPAS has been a proponent of the Commission using 1 Gigabit as the metric for broadband service. Where our members have deployed competitive fiber, they are able to offer 1 Gigabit symmetrical service at reasonable prices.<sup>3</sup> Competitive fiber is delivering

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<sup>2</sup> See NPRM ¶ 13.

<sup>3</sup> Comments of INCOMPAS, GN Docket No. 17-199 (filed Sept. 21, 2017) (“INCOMPAS’ 2017 Section 706 Comments”) at 16-20. INCOMPAS is not the only association that recognizes where the market is going. In 2017, NCTA—The Internet and Television Association explained

greater bandwidth at higher speeds in urban and suburban America. Fiber is also the backbone to wireless communications, and with the advent of 5G technology, mobile providers will be dependent on fiber backhaul. The density of 5G network architecture will require widespread deployment of fiber, and the RDOF can enable more investment in fiber in rural America which will benefit both fixed and mobile networks.

As the Commission is fully aware, consumers and businesses prefer access to both fixed and mobile broadband service. In fact, the FCC has agreed that the availability of both types of service are necessary for finding that broadband service is available under Section 706 of the Communications Act.<sup>4</sup> Most American consumers and businesses continue to use a fixed broadband service in addition to mobile, and INCOMPAS believes that it is imperative for the Commission to promote fiber networks through the RDOF which will indirectly support 5G deployment, as well as address the availability of mobile broadband in rural areas through the Commission’s Mobility Fund.

With respect to its second and fourth goals, INCOMPAS agrees that reverse auctions are a more efficient mechanism for distributing funding, and we support the Commission’s reverse

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that “ensuring that the U.S. remains a global Internet leader means that our networks have to stay ahead of demand. We must transition from an era defined by megabits to one which gigabit connectivity is unleashed.” INCOMPAS could not agree more. INCOMPAS has maintained that the U.S. should be the global leader in fixed broadband and deployment of fiber—which is the backbone for 5G networks—and winning the global race to the future.

<sup>4</sup> *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, 2019 Broadband Deployment Report, FCC 19-44, at 4-5 ¶ 10 (rel. May 29, 2019). Fixed and mobile broadband services are meeting different needs, and they are priced differently. Fixed wireline typically delivers faster, more robust BIAS connections while mobile provides the convenience of access, but typically at slower speeds and with higher prices and data caps.

auction proposal. As INCOMPAS recently discussed in the E-rate docket, competitive bidding benefits consumers—it drives down costs (here, support levels), reducing inefficiencies that will help minimize the contribution burden of those consumers and businesses that contribute to the USF.<sup>5</sup> With the next quarter’s contribution factor being at its all-time high of 25%,<sup>6</sup> decreasing the USF demand in the high-cost fund through a reverse auction for the RDOF is appropriate.

As former Commissioner Clyburn discussed in recent Congressional testimony:

[R]everse auctions have brought more benefits, saved the taxpayers money and should be embraced to more efficiently and effectively close the broadband network availability gap. For example, one study estimated that the Connect America Fund II auction resulted in 70% less funding than the FCC’s original CAF model suggested would be needed to deploy broadband. Indeed, in the CAF II, on average the FCC will be spending just over \$2,000 per location as compared to its recent announcement that the rate-of-return carriers opting into the A-CAM model will receive just over \$6,000 per location.<sup>7</sup>

Competition drives efficiencies and affords more consumer benefits; thus, INCOMPAS supports more competition for the high-cost fund through an RDOF reverse auction and would support the Commission embracing this model for all high-cost mechanisms.

With respect to its RDOF goals, INCOMPAS believes that the Commission should adopt a fifth goal of promoting the availability of reasonably comparable service for consumers and businesses in rural, insular, and high-cost areas. Section 254(b)(3) of the Communications Act

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<sup>5</sup> INCOMPAS Opposition, RM-11841, at 6-8 (July 1, 2019).

<sup>6</sup> See *Proposed Fourth Quarter 2019 Universal Service Contribution Factor*, DA 19-910, Public Notice (rel. Sep. 12, 2019), available at <https://docs.fcc.gov/public/attachments/DA-19-910A1.pdf>.

<sup>7</sup> See Written Testimony of Mignon L. Clyburn, Former FCC Commissioner, Before the U.S. House of Representatives, Committee on Energy and Commerce Regarding “LIFT America: Modernizing Our Infrastructure for the Future,” at 6 (May 22, 2019), available at <https://docs.house.gov/meetings/IF/IF00/20190522/109531/HHRG-116-IF00-Wstate-ClyburnM-20190522.pdf>.

provides that consumers in rural, insular and high-cost areas should have access to “advanced telecommunications and information services . . . that are reasonably comparable to those services provided in urban areas.”<sup>8</sup> Section 254(b)(2) likewise provides that “[a]ccess to advanced telecommunications and information services should be provided in all regions of the Nation.”<sup>9</sup> In its *USF/ICC Transformation Order*, the FCC held that USF Connect America Fund recipients must provide service that is reasonably comparable to service offered in urban America, including comparable speeds, latency, and usage limits (if any).<sup>10</sup> Current entry-level BIAS service options in urban and suburban America<sup>11</sup> are at least 50 Mbps and include up to 1 Gig symmetrical where competitive fiber is offered.<sup>12</sup> Indeed, Ookla finds that with gigabit networks expanding across the nation, fixed broadband speeds in the United States are rapidly increasing. Speedtest® data reveals a 35.8% increase in mean download speed during the last year and a 22.0% increase in upload speed.<sup>13</sup> The average U.S. Internet download speed is 96.25 Mbps, and upload speed is 32.88 as of mid-year 2018.<sup>14</sup> As broadband demand continues to

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<sup>8</sup> 47 U.S.C. § 254(b)(3).

<sup>9</sup> 47 U.S.C. § 254(b)(2).

<sup>10</sup> *USF/ICC Transformation Order*, 26 FCC Rcd 17663, at ¶ 91 (2011).

<sup>11</sup> In those geographic areas where incumbent telcos have not upgraded their copper to fiber or added new electronics, these higher speeds may not be offered.

<sup>12</sup> See Comments of INCOMPAS, GN Docket No. 17-199, at 18 (filed Sept. 21, 2017).

<sup>13</sup> *2018 Speedtest U.S. Fixed Broadband Performance Report by Ookla*, OOKLA (Dec. 12, 2018), available at <https://www.speedtest.net/reports/united-states/2018/fixed/> (presenting results based on data taken in the second and third quarters of 2018).

<sup>14</sup> *Id.* According to Ookla, the U.S. ranks 7th in the world for download speed, between Hungary and Switzerland. The U.S. ranks 27th for upload, between Bulgaria and Canada, during Q2-Q3 2018.

grow, broadband networks' capabilities will increase as well. As with its universal service obligations, the broadband networks and services to be supported by the RDOF must be reasonably comparable to network capabilities in urban and suburban America when they are deployed. Additionally, the Commission's auction should aim to invest in robust fixed networks that are scalable over time and offer comparability in the future—especially given that support will be for ten years.

### **III. THE RDOF AUCTION DESIGN SHOULD ENCOURAGE AND ENABLE GIGABIT SERVICE.**

INCOMPAS supports the initial auction potentially allocating up to \$16 billion of support over ten years. INCOMPAS' smaller providers have limited resources and are encouraged that one sizable auction may provide opportunity for them to participate and win areas they would like to serve. Whereas multiple auctions over multiple years may drive more efficiencies over time, small companies' ability to devote the resources to multiple auctions may be challenging.

Nonetheless, until the Commission has completed the first proposed auction, the Commission should refrain from settling on the total number of auctions. Rather, it should plan for two, but potentially be open to additional auctions, depending upon the results of the first auction. If there are still a number of unserved areas that have not been covered and if sufficient funding is available, then the Commission could consider conducting additional auctions. In allowing for such a possibility, then the Commission would be allowing for potential improvements in technologies and deployment methodologies that may be successful in the future.

INCOMPAS agrees that technologies, such as fiber, that can deliver up to 1 Gigabit or more speeds should be weighted more favorably in the reverse auction. Our members are concerned that the structure of the CAF II auction did not fully reflect the value of fiber

technologies and the associated investment in local, fixed networks that will stimulate the local economy and provide a robust fixed network that is scalable and can support 5G networks.

Investment in fiber has many benefits. It is longer lasting, offers more bandwidth, faster speeds, and is scalable as compared to other technologies. It can support residential and business services via fixed wireless solutions, higher speed DSL, and fiber to the premise. And as we have noted above, 5G small cells will be highly reliant on fiber so pushing it deeper into rural America through the RDOF is important to meeting rural America's 5G needs. Thus, fiber should be incentivized in the RDOF, and INCOMPAS believes that the zero weight for Gigabit performance is appropriate.

INCOMPAS members believe there are opportunities for improvement in the RDOF auction design (as compared to the CAF II auction). First, the Commission should recognize that the CAF II auction's final results did not provide for fixed broadband solutions that potentially could have delivered local, sustainable and scalable fixed broadband service in every area won; that those rural areas are not benefiting from companies willing to invest in a broadband network in their local communities; and that the unavailability of a local, fixed network likely will deter the availability of a mobile broadband network, including 5G, in the future. Accordingly, the Commission should account for this lost investment opportunity in the RDOF auction design.

Second, consumers have demonstrated their preference for fixed technologies that can deliver faster and low-latency broadband.<sup>15</sup> Again, this should be reflected in the RDOF auction design as there is a lot at stake in this proceeding, including fulfilling the statutory requirement

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<sup>15</sup> For example, according to the FCC's most recent Internet Access Services Report, the number of subscribers for broadband satellite measured at 25/3 Mbps is quite limited—less than 500,000 subscribers nationwide—as compared to the approximately 100 million subscribers that have chosen alternative technologies, such as cable, fiber, or DSL broadband. FCC Internet Access Services Report, at 25 (rel. Aug. 28, 2019).

of supporting reasonably comparable voice and broadband service to rural America. With respect to accounting for broadband capabilities, INCOMPAS supports the Commission increasing the weight for baseline and high latency services appropriately (to a total of 95 or above) in order to account for consumer preferences, the positive externalities associated with terrestrial, fixed broadband services that increase fiber deployment, and local investment in rural areas that will also support mobile networks.

**a. All Unserved Census Blocks Should Be Included.**

It is important that the FCC use reverse auctions and include all unserved areas in the U.S. whether it is a price cap carrier territory or a rate-of-return carrier territory. Any census block that does not have any terrestrial fixed broadband service of at least 25/3 Mbps (and will not through current support mechanisms or other programs be served) should be included in the first reverse auction. INCOMPAS supports a challenge process for census blocks that have full availability and should not be included. Because there is significant lag between Forms 477 filings and their public availability, a challenge process is necessary to allow providers to identify census blocks they have deployed to that may be incorrectly included because of the delayed availability of Form 477 information.

INCOMPAS members are concerned that reliance on the latest, publicly available Form 477 information will disqualify census blocks that are only partially served, but waiting for the FCC to complete its new broadband map based on polygon filings could unduly delay the auction. The Commission should consider instituting a process whereby providers could identify locations that are not served in partially served census blocks, allowing for the blocks to be included in the auction. Local providers, working with their communities, may be in the best position to identify partially served census blocks, allowing for more locations to obtain

broadband through the first phase of the RDOF. In addition, states and/or localities that have done their own mapping may be in the position to provide the Commission information about partially served census blocks.<sup>16</sup> The Commission should accept those submissions and include partially served census blocks in the RDOF auction where there is demonstrable evidence that a census block is only partially served by broadband.

**b. Bidders Should Be Qualified And Have A Proven Service Track Record.**

Providers should be technically, legally, and financially qualified to participate in the RDOF. Bidders should be able to demonstrate that they are able to provide voice service, the service on which USF support is and has always been conditioned, on the day that they are awarded support. Moreover, providers should demonstrate that they can build fixed broadband networks by submitting statements about their deployment success in the marketplace. Providing service to customers for at least five years should be required to show the necessary capability to deliver the much-needed broadband coverage the RDOF will support.

The Commission should allow small providers to demonstrate capability through means other than letters of credit, including for example, participation in other build projects—such as E-rate or another federal or state grant project. As the Commission recognizes in the NPRM, letters of credit can be costly, and bidders must take that into account in their auction participation. That is money that would be better invested in the network itself.

**c. Deployment and Subscription Obligations For Winning Bidders Should Reflect Commitments Made.**

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<sup>16</sup> See generally Comments of the State of Maine, ConnectME Authority, and the Maine Broadband Coalition, WC Docket Nos. 10-90 & 19-126 (filed Sept. 20, 2019).

INCOMPAS supports the deployment obligations for new fixed networks that are built under the RDOF. The Commission proposes that support recipients complete construction and commercially offer voice and broadband service to 40% of the requisite number of locations in a state by the end of the third year of funding authorization, and an additional 20% in subsequent years, with 100% by the sixth year.<sup>17</sup> However, should the Commission fund satellite subscriptions from satellite networks already deployed, it should require 100% compliance throughout the ten-year term.<sup>18</sup> Satellite providers should be able to comply by offering their service to all eligible locations won. In order to achieve the Commission's goals and bring consumers broadband availability, the Commission must enforce its deployment requirements.

In terms of requiring subscriptions, INCOMPAS does not believe that subscription requirements are necessary for new fixed networks. Typically, fixed providers are making their own investments (not just relying upon government support), are likely to have local ties to the community, and they have an incentive to market their services and win subscribers for their new network. New networks typically see a retail subscription take rate of 30-40%. In areas where they may be the only terrestrial provider, subscription rates may be higher. However, the proposed subscription rates, especially at the high end of 70%, may not be realistic and could (unintentionally) discourage potential participation in the bidding process by terrestrial, fixed providers who can bring robust, sustainable networks to rural areas with support from the RDOF.<sup>19</sup>

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<sup>17</sup> NPRM ¶ 28.

<sup>18</sup> Obviously, there may be consumers that cannot receive satellite service due to external factors such as local topography and the consumer's location that prevent the consumer from subscribing due to line-of-sight issues.

<sup>19</sup> *See id.* ¶ 42.

#### **IV. CONCLUSION**

For the reasons stated herein, INCOMPAS urges the Commission to consider the recommendations in its comments, as it further examines the issues raised in the Notice of Proposed Rulemaking.

Respectfully submitted,

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