

Broadband USA Applications Database

Applicant Name: Regional Optical Comm. Inc

Project Title: Rahall Broadband Initiative

Project Type: Middle Mile

Executive Summary

This grant application, the Rahall Broadband Initiative is being filed by Regional Optical Communications, Inc. ('ROC'), a new non-profit corporation formed to bring middle mile fiber to eleven counties in West Virginia. This new company is owned equally by the Region 1 Planning and Development Council and the Region 4 Planning and Development Council of West Virginia. The primary issue addressed by this proposal is the lack of bandwidth in this region today. The incumbent providers have not invested in sufficient fiber to bring much-needed bandwidth to customers in the region. ROC is proposing to build a middle mile open access network and has already identified four retail partners who will lease fiber capacity on the system to reach end user customers in the region. ROC believes this network will attract additional retail providers in the future. We propose to build 482 miles of fiber and associated electronics for a cost of \$42.1 million. The proposed network consists of: \$37.5 million of new fiber, \$2.9M of fiber electronics to light the fiber, \$1.5M for repeater and POP huts, and \$200,000 of other equipment needed to make the network operational. ROC will initially be lighting one fiber pair with DWDM. This one fiber will initially be lit with 100 Gbps in bandwidth and can be upgraded as needed to 400 Gbps. ROC can light additional fiber pairs in the future for additional capacity. The network will be constructed with 144 fibers. The proposed network is designed with three rings, to create route diversity and redundancy. There are 20 POPs on the network giving access to all parts of the region. This grant application clearly meets the criteria of the ARRA for the following reasons 1) Large portions of the 11 counties are unserved today. This network terminates in a number of unserved areas. 2) These are some of the poorest counties in the United States. McDowell County is the 36th poorest County in the country and Webster, Summers, Fayette and Wyoming Counties are among the 300 poorest counties. 3) The proposed fiber network will bring economic development projects to the region. Businesses today require a secure and constant Internet network connection and this route allows businesses in the whole region to compete on an equal footing with other businesses in the country. 4) ROC is a non-profit business and profits are automatically reinvested back into the region. 5) ROC has already found four retail partners to lease capacity on this network, ensuring financial success and sustainability. 6) This project creates new jobs. This project benefits the following Counties in West Virginia: Fayette, Greenbrier, McDowell, Mercer, Monroe, Nicholas, Pocahontas, Raleigh, Summers, Webster, and Wyoming. These counties have 143,000 households, 350,000 population and 7,400 businesses. ROC has identified 191 anchor institutions within these counties that will benefit from this fiber including 37 K-12 schools, 8 universities and places of higher education, 21 health related facilities, 20 public safety facilities, 9 libraries and 45 government buildings. The area also includes other key locations like incubator sites for economic development, state and national parks, dams, airports, fairgrounds, a

nuclear weapons storage facility and an astronomical observatory. ROC is asking for a waiver to get 100% financing for this project. The economic development people in this region call this the most important project contemplated in their lifetime. These counties need the economic development and the associated jobs that can be enabled by bringing fiber to the region. The citizens of this area need the competition that can come with bringing new competitive service providers to the area. ROC is a new start-up company with no resources to supply matching funds. It is a non-profit corporation formed by two other non-profit corporations, whose main mission is to bring economic development to the region. We believe the poverty level of the region and the need for economic development justify granting a waiver for 100% funding. This network qualifies for full funding because it is designed to bring fiber to the whole region including unserved territory. ROC fears the mapping requirements for this grant may not convey the whole story of how this fiber will benefit the region. In terms of area, most of the 11 counties are unserved today. This area is typical of the way broadband has been deployed in rural America. The incumbent providers, in this case Verizon and Frontier as well as some cable providers, have brought limited bandwidth to the County seats and few other towns. Such hub towns qualify as 'served' by the FCC definition of broadband since they have speeds of several Mbps. However, the broadband in these towns is inferior to the broadband available in places like Washington DC. In the urban areas Verizon has built FiOS and offers 10 – 50 Mbps connections into homes and huge data pipes to businesses. In West Virginia, Verizon and Frontier have deployed first generation DSL with few or no upgrades. This area suffers a huge broadband gap. The hub towns in the region have first generation DSL while the places we compete against for jobs already have fiber. The areas outside our hubs towns still have no broadband and have been left behind. Verizon recently sold the state network in West Virginia to Frontier. We fear that Frontier will suffer a lack of the capital needed to bring real broadband to this area to bring us to parity with the rest of the East Coast. We cannot afford to cross our fingers and hope that Frontier invests in the area. For this region to survive and to keep and attract new jobs we need fiber and big bandwidth. The ROC fiber network is the way for this region to control its own destiny and to correct the bandwidth gap that exists between this region and places like Washington DC. This region will be marginalized if we are stuck with first generation DSL while the rest of the east coast has moved on to fiber. This network is the culmination of a plan to get the fiber and bandwidth that will close the fiber gap and make us competitive. We don't want to fight with the FCC, but we think everybody agrees that DSL is inadequate as an economic development tool to bring bandwidth to businesses. The FCC and these grants define broadband as 768 Kbps download and 200 Kbps upload. We are one of those regions of the country where our existing broadband is just barely above that meager definition of broadband, and this puts us at a huge economic development disadvantage when most employers on the east coast can get fiber and high-capacity bandwidth at affordable prices. We fear that the scoring scheme of this grant does not look at the big picture and we ask we be judged by our goals and mission and not by analyzing segments of our fiber or counting the number of places where we will get fiber to 'unserved areas'. In our mind the entire region is unserved by the real broadband we need to be able to survive economically. This fiber network will let us get the broadband we need to be relevant for the rest of this century. Another reason we deserve to get full funding is that the proposed ROC fiber network is going far beyond the minimum required in setting aside bandwidth for anchor institutions. ROC is setting aside 24 fibers across the entire network for the use of public entities. These 24 fibers represent a huge amount of bandwidth and will allow these entities to develop plans to take advantage of strategies and

programs that use bandwidth. We don't have specific plans yet for these fibers but one of ROC's priorities is to work with entities in the region to best take advantage of the opportunity presented by the fiber. We fear that we might be penalized in this grant process for not already having specific plans and partnerships in place. But we know that this fiber is a once-in-a-lifetime opportunity for the anchor institutions in this region to reinvent themselves and we are taking the time needed to plan this right. We could probably increase our grant scoring by claiming partnerships that don't yet exist. Instead, we are working with the anchor institutions of this area to get this right, and that is going to take a few years of planning. We understand that we need time to shift the paradigm of our way of thinking about broadband and to figure out how to best use the fiber asset that ROC is offering for free to the region. We don't think there will be many grants applications presented that will be as altruistic as ours. ROC is a non-profit owned by other non-profits. ROC understands that competition is the best way to make progress in the region. ROC will be operating a 100% open access network and bringing in several retail providers to this network. The funding from these partners will give us the resources we need to use this network for the bigger picture, which is to make sure that everybody in the region gets broadband and to make sure that we do economic development right so that this region is not left behind. ROC will meet all of the non-discrimination obligations set by this grant. This network is intended to be open access and there will be at least four retailers operating on the network when it goes operational. We believe that the RUS and NTIA will see many middle mile projects that that pay lip service to open access – this project is one that will deliver open access and all services delivered on this proposed network will be done by retail last-mile partners. ROC believes it can build more than 67% of the network within two years as required by the grant. The project is going to create jobs during the construction of the network and the installation of customers. The project will create 40 man-years of new construction jobs for two years to get the network constructed. The jobs created are good jobs that pay high salaries. The construction jobs will all pay the prevailing wage or higher.