Executive Summary

a. Opportunity the proposed system seeks to address. Hilbert Communications (HC) has identified a significant demand for broadband service in rural markets where consumers do not have access to certain technologies to properly meet their needs. Within Hilbert’s proposed Funded Service Area, there are approximately 491,948 residents living in rural and predominately unserved and underserved communities. HC is committed to providing broadband services to those rural customers – satisfying an increasing demand and serving customers no one else is serving.

b. A general description of the proposed funding service areas. Hilbert Communications’ proposed funding service areas are located in Central and Northern Wisconsin. Details of HC’s aggregate proposed funding service areas is as follows:

- Total # of service areas: 5
- Total # of counties: 27
- Total # of municipalities: 560
- Total # of businesses: 13,423
- Total # of households: 190,709
- Total # of community anchor institutions: 1,106

c. Proposed services and applications for the proposed funded service areas and users. HC will provide fixed and wireless broadband, mobile voice, mobile data messaging and VoIP home phone services to end users. Prices will vary depending on the speed of broadband and phone/ data plans selected by consumers. Services may be purchased individually or together in a “bundle” package. The entry level fixed broadband offering will provide broadband at a download speed of 1 Mbps for $29.95 per month. Other plans will offer broadband with download speeds at 3 Mbps, 5 Mbps and 7 Mbps. The network can ultimately provide speeds of up to 14.4 Mbps.

d. Approach to addressing the non-discrimination and interconnection obligations. The fiberoptic division of HC participates in a competitive environment that requires adoption of interconnection practices that are non-discriminative. These practices are necessary to keep a neutral approach to HC’s wholesale customers. HC assists customers encountering interconnect issues during activation. These issues usually arise due to programming inconsistencies and can be corrected by any network location with an add/drop optical node installed. HC has implemented network operation center that is staffed 24/7. The network operation center is designed to monitor the network for any connectivity or congestion problems and also to investigate any infractions in right of use policies. HC has posted a use policy that is accessible from the company’s website. The web address for the internet policy is http://www.spiralightnetwork.com/legal.html.

e. Type of broadband system that will be deployed (network type and technology standard). Hilbert Communications, LLC is proposing, as a last-mile solution, to deploy an Alcatel-Lucent UMTS HSDPA/HSUPA network that will support both fixed wireless broadband connectivity at 14.4 Mbps as well as mobile broadband and voice connectivity at similar speeds. An end-user will receive a 5” X 7” desktop device that allows the connection of two computers (Ethernet ports); one VoIP line (standard phone connection) and a USB port for data transfer. The device proposed is an Options GlobeSurfer III and will cost approximately
With a 3G UMTS network, each base station has independent routing capability and is connected to a data core via standard transmission methodologies such as high capacity microwave, T1 or fiber optic transmission. Hilbert intends to use a combination of high capacity 20 Mbps to 100 Mbps digital microwave systems to connect to hub points on towers that connect to Hilbert’s proposed SONET fiber optic transmission network utilizing CISCO 15454 devices. The CISCO 15454 devices will run parallel with a Sorrento DWDM network for long-haul into the Chicago Internet hub. The SONET and DWDM networks will be open interface to provide leased capacity, light channels and other services to other providers. In rural areas, network assets are often sparse and as such Hilbert will be constructing a number of tower facilities as well. The towers are U.S. manufactured by SABRE Tower. Hilbert also may utilize existing tower structures and has historically utilized grain elevators, agricultural silos, church steeples and other existing structures that can be used covertly to avoid landscape clutter. As an alternative to the Alcatel-Lucent UMTS system and as a hedge to supplier shortages, Hilbert may also utilize some HuaWei UMTS HSDPA/HSUPA sites with a LEMKO 4G switch that allows IP traffic to transit at local interconnection points versus traversing to a centralized data hub. f. Qualifications of the applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband services provider. Hilbert Communications’ qualifications are demonstrated in two key areas: 1) an experienced management team with a proven track record and 2) a sound, proven business model. 1) Experienced Management Team – Proven record of accomplishment Hilbert’s leadership has a proven record of building rural communication firms. The management team prides itself on knowledge of rural markets and access to industry resources. Hilbert’s management team is composed of industry veterans with extensive experience building rural communication firms. The management team has completed approximately $400 million in telecom transactions and the combined team has over 50 years of executive level experience in the rural business environment. Hilbert was initially formed to provide “white space” services in areas where AT&T Mobility, Cingular and T-Mobile could not cost-justify providing services. As such, Hilbert’s wireless subsidiary moved very quickly to deploy sites to meet the specific needs of AT&T. Hilbert has constructed 167 sites previously in a 3 year period with a staff of 9 people. Hilbert’s system consistently receives good grades for reliability in cold Wisconsin winters and survivability during moderate thunder storms. Hilbert also operates an 1100 mile fiberoptic system and provides a portion of the Internet service to two University of Wisconsin campuses and St. Norbert College. Hilbert is also a broadband connectivity provider to Integrys, the electric utility in much of Northeast Wisconsin. 2) Solid Business Model HC’s approach to addressing the needs of rural communities is truly innovative. HC utilizes an advantageous network cost structure that allows it to capture opportunities not pursued by other providers, while promoting a creative and collaborative platform to serve the unserved or underserved rural customer. HC partners with rural communities in a manner that allows for efficiency and low cost capital deployments. Using this strategy, HC’s infrastructure costs are estimated at 25-40% below the national average. HC is hoping to serve as a model for other broadband providers to replicate. HC will leverage off the fiber backbone and sites erected through BTOP funding to provide affordable broadband access to community anchor institutions. With other providers also using BTOP funding to put broadband infrastructure in place, other broadband providers should likewise be able to replicate the HC model as contemplated herein. g. Overall infrastructure cost of the broadband system. Hilbert is proposing to build 410 broadband sites in 26 counties in Wisconsin at a total cost of approximately $38,000,000. Hilbert also proposes to build
1,659 miles of fiberoptic plant in Wisconsin for a total cost of approximately $36,000,000. To support both the fiberoptic middle mile project and the last mile wireless broadband project, a total of 295 towers at a cost of $38,220,000 and 218 connecting microwaves at a cost of $7,600,000 would be constructed. The Company will have fees related to preparation of this application of $225,000 and will be contributing spectrum to operate on at a value of $6,740,000. Hilbert will also be submitting a Computer Center and Broadband Sustainability Application that will include municipal computer centers at a cost of $4,700,000. h. Overall expected subscriber projections for the project. Hilbert expects to activate approximately 50,000 subscribers in the first five years of operation with the capability of supporting approximately 500,000 subscribers on a wholesale and roaming basis for other carriers and providers. Hilbert also expects to service approximately up to 560 public computer centers (one per municipality with the municipality providing the location) with free broadband access for the rural poor. These public community centers will be partially administrated by local townships and villages or community anchor institutions. i. Number of jobs estimated to be created or saved as a result of this project. Hilbert currently employs 35 people and anticipates adding a minimum of 217 sustainable jobs over the next 5 years with over 100 hired in the first 12 months of the project. Hilbert also projects 149 short-term contractor jobs during construction.