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## I. Policy Statement

The Imperial Valley Telecommunications Authority (“IVTA”) was created to provide a high-speed network infrastructure to facilitate robust, reliable network services throughout Imperial County. It is the intent of this policy to provide a clear understanding of how excess dark fiber may be allocated when requested by a member agency to ensure the reliability of the network.

## II. Definitions

- **Network Infrastructure** – IVTA’s network infrastructure is the physical hardware used to interconnect agency demarcation sites. This infrastructure includes, but is not necessarily limited to, fiber optic cable, termination devices, conduit, poles, pole attachments, wireless antennas, electronic equipment (radios, servers, routers, switches, uninterruptable power supplies, etc.), generators and other devices that enable network connectivity, communications, operations and management of the network. The network infrastructure provides the communication path and services both between agency sites and to other external networks to include the commodity Internet. IVTA owns the network infrastructure and manages and operates it for the benefit of its members.
- **Backbone System** – The IVTA Backbone system is the high-speed network infrastructure that connects the various communities within Imperial County. The Backbone system is a set of fiber optic or other telecommunication lines or systems, such as point-to-point wireless connections, to which local area networks from member agency sites connect for wide area connectivity. Connections to the backbone take place at a mutually agreed upon location that provides for the connection of the IVTA backbone network to the member agency’s facilities.
- **Demarcation Point** – The Demarcation Point is that point at which operational control or ownership of communications facilities changes from one organizational entity to another. The Demarcation Point includes the network interconnections and equipment necessary to provide access to the network.
- **Site** – The Site is the location of a member agency from the network demarcation point (see definition in BP03) inward to the agency facility. The demarcation point can be at the agency’s building, usually at the entrance facility or telecommunications room, or at a point outside the building at a communications pedestal or a fiber junction box located on a communications pole or other suitable location.
- **Dark Fiber** – Dark fiber is unused optical fiber that has been laid but is not currently being used in fiber-optic communications. Fiber-optic cable transmits information in the form of light pulses; a "dark fiber" refers to those fibers through which light pulses are not being transmitted. The unused dark fibers are usually spares or reserves to accommodate future demand or to replace a fiber strand when it fails



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- **Lateral Build** – This refers to the physical fiber optic connection from the member agency’s demarcation point to the backbone system or community aggregation point.

### **III. General Information**

The IVTA network is an effective communications system for the delivery of services by the local public agencies. The majority of sites are connected by fiber optic cable for which one pair of fiber is being used (one strand for transmit and one for receive) to connect a member agency’s site to the Internet or to another site that belongs to the member agency. In most cases, more than one pair of fiber may be available for a given site. This policy intends to provide guidance when a member agency would like to interconnect several of their sites in order to improve service delivery and do so in a private network topology that may require the use of additional dark fiber than what they currently use to connect to the IVTA network.

### **IV. Conditions for Granting Dark Fiber to Member Agency**

A member agency may obtain conditional use of dark fiber strands when the following conditions are met:

- The IVTA Network Administrator has determined that there are additional dark fiber strands available for the use by the requesting member agency.
- The Network Administrator has secured two pairs from each segment of the backbone for future or emergency use.
- The Network Administrator has secured two pair of dark fiber in the lateral build that connects the member agency’s site to the next connection point.
- The member agency sites to be connected via the dark fiber are declared demarcation sites.
- The member agency has explored one or two alternate solutions to interconnect their sites and has deemed that dark fiber is the best and most viable option.
- The member agency accepts the responsibility of construction costs incurred by IVTA to provide access to the dark fiber.
- Requesting member agency will provide the IVTA with a projected timeline for connecting and lighting the dark fiber, as well as, a proposed time period for the need or use of the fiber. At no time does this time period provide the requesting member agency a guarantee as to the use of the fiber and shall be based solely on meeting the needs of the IVTA as determined by the IVTA Board.
- Based on the recommendation from the Network Administrator, the IVTA Board approves the use of excess dark fiber strands by the requesting member agency.

### **V. Process for Requesting Dark Fiber**

A member agency may obtain conditional use of dark fiber strands through the following process:

- Any member agency in need of dark fiber presents a formal request to the IVTA Board.
- The Network Administrator shall evaluate each request for additional dark fiber from a member agency, and will provide a recommendation to the Board based on this policy.
- Based on the recommendation from the Network Administrator, the IVTA Board will approve or disapprove the request by the member agency.



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## **VI. Conditions for Reclaiming Dark Fiber**

If the Network Administrator has a need to reclaim dark fiber from a member agency, it shall make a best effort to provide the affected member agency with advance notice, to minimize possible service disruption. The Network Administrator shall have the authority to reclaim dark fiber strands that have been allocated to a member agency under the following conditions:

- A need to reestablish service to other member agencies using a dark fiber pair assigned to the member agency.
- Where growth of the network requires the additional fiber strand(s) to accommodate the increased demand.

## **VII. Agency Responsibility**

- The member agency granted the use of IVTA dark fiber must comply with IVTA's policies and agreements regarding the type of traffic allowed on IVTA's network.
- Under no circumstance will traffic from a non-public agency be allowed over the IVTA network.
- The member agency may use granted dark fiber for its internal communications use and for purposes of public agency communication needs. At no time shall the fiber be used for commercial use, resale or lease.
- The member agency is responsible to provide any electronic or optical equipment necessary to operate the dark fiber.
- The member agency will be responsible for any costs incurred to accommodate this request.
- The member agency acknowledges and agrees that they have no right to use any fibers other than the granted dark fibers.
- The member agency shall not use the granted dark fiber in a ways that physically interfere or adversely affect the use of adjacent fibers, cable or conduit.
- The member agency is responsible for reporting to the Network Administrator possible outages related to physical damage to the granted dark fiber. The Network Administrator does not actively monitor the additional fiber strands provided to the member agency.

## **VIII. IVTA Responsibility**

- The IVTA Network Administrator is responsible for reviewing the request from a member agency to use excess dark fiber pairs and make a recommendation to the IVTA Board based on this policy.
- The IVTA is responsible for maintenance of the fiber optic cable.
- The IVTA is responsible of securing a minimum of two fiber pairs from each affected segment of the backbone.
- The IVTA is responsible of securing a minimum two pair fiber between a member agency site and the next connection point to the backbone.
- The IVTA Network Administrator shall keep records of all dark fiber requests and present a report of granted requests to the IVTA Board annually in the month of June.