ATTACHMENT A

Purposes of Grant; Budget, if Applicable

**Purpose of Grant:** To develop a remote management interface for the Kea DHCP server.

**Project Details**

*Milestone 1: Groundwork, remote configuration*

This milestone enables remote management of Kea through manual creation of JSON structures and sending them using 'socat' or a similar existing tool.

* Design management API
* Extend parser to support remote management format (JSON)
* Add 'set-config' command

Projected completion: January 2017

*Milestone 2: Local mgmt client, additional configuration commands*

This milestone creates a dedicated command line client that will allow sending commands and receive responses, and which can be scripted or called by other systems.

* Create management client which can send configuration commands and receive and display responses using command channel.
* Add four more commands for manipulating the configuration: test-config, get-config, write-config, reload-config.

Projected completion: April 2017

*Milestone 3: Remote client with security*

This milestone creates a remotely-accessible API with authentication, confidentiality and integrity.

* Design approach - perhaps TCP + TSIG like signatures, HTTPS or some similar form.
* Provide security - either a shared secret (similar to TSIG in DNS) or maybe certificate based (as in HTTPS).

Projected completion: July 2017
Milestone 4: Lease management

This milestone extends the API to allow lease management as well as configuration management.


Projected delivery: September 2017