

QUESTION 6: STATEMENT OF RESEARCH PROJECT

As part of its basic function, the GENI Program Office (GPO) intends to support the management and administration of the wireless feeder nets that provide user access into the GENI core. WiMAX is one of the technologies used in the feeder nets and so it's important to have direct access to a base station and several subscriber terminals on the premises at BBN Technologies

in Cambridge, MA. Our particular interest is in supporting the integration of the monitoring and troubleshooting of the wireless and wireline systems. To do this we envision a series of experiments involving transport layer protocols that

span wired and wireless subnets; experiments that are concerned with security in 4G networks; and experiments that concern information caching and media delivery.

The wired-only network configuration is inadequate to fully test this integrated system and hence we require the WiMAX wireless extension in Cambridge.