

## Introduction

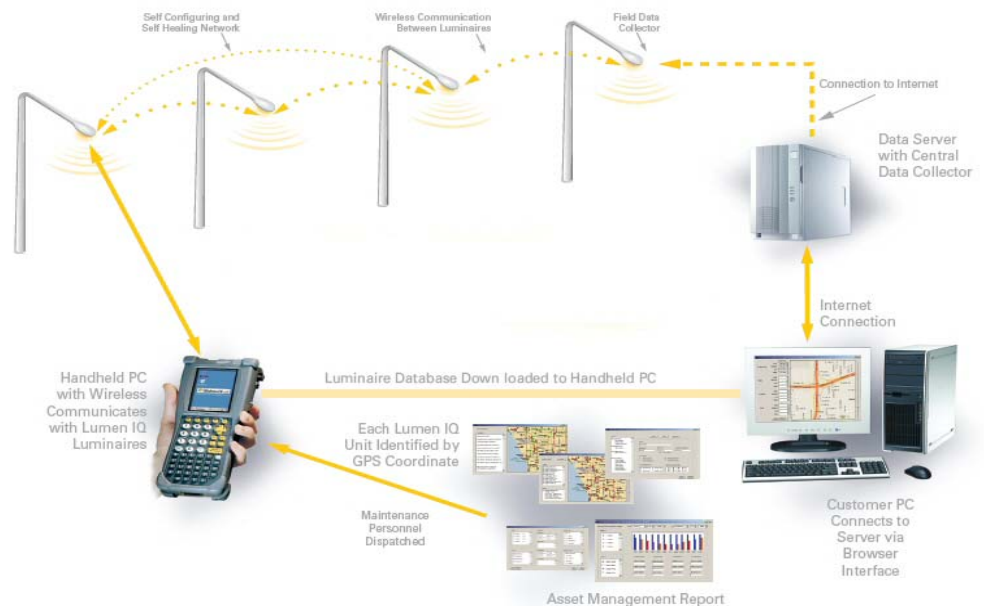
Recent blackouts in eastern North America as well as an increasing demand for power has opened all our eyes to what we often take for granted – reliable electricity. Unfortunately we can't continue using electricity at will without considering ways to conserve power. We must seek out new and innovative ways to reduce our power demands to ensure future generation can benefit from what we have enjoyed – uninterrupted delivery of reliable electrical power. In fact all communities should be strongly encouraged to find innovative ways to save power. Street lighting being a major consumer of power is a good place to start.

## Benefits

DMD have analyzed and tested new wireless technology which retrofits into a standard street light and has the potential to save 40% power each year through dimming street light lamps during non-peak periods. Operational savings can also be realized through the systems asset management feature which assigns GPS coordinates to each street light allowing for outages to be automatically reported and tracked. The web based reporting system also offers accurate mapping and service routing to problem street lights.

A common concern with dimming street lighting is whether it creates the potential for liability. However, this concern is unfounded as the IESNA recommended practice for roadway lighting allows for various light levels based on defined levels of pedestrian activity. So as pedestrian activity is reduced over the course of the evening, light levels can be reduced by up to 50%

while still achieving recommended light levels. Moreover, Canadian legal experts have stated that Canadian law is clear that when a municipal government makes a legitimate policy decision, such as dimming street lights, that they are exempt from liability. Indeed, some experts foresee the potential for liability in the case where a city that does not adopt technology that allows malfunctioning street lights to be identified and fixed in a timely fashion. They argue the city may be liable for failing to adopt the best practice maintenance technology.



## Conclusion

This technology has been installed on the street lights in-front of the DMD office in Surrey, BC. We would be pleased to demonstrate this technology to those who are interested. The street lighting can be viewed on full intensity or dimmed in 1% increments to a maximum of 50% of full brightness. DMD are committed to working with industry and assisting in research and applying new technologies. Contact Don McLean at DMD and Associates if you wish to view the Adaptive Lighting system.

DMD are committed to development and research of new technologies and design practices aimed at giving our clients the best value. For any further information on topics in this Advisor please contact Don McLean at 604-888-9010 or e-mail at don@dmdeng.com.