way. Some photocells are mounted on constructions with shields around them so that they only receive light reflected from the surface nearby. This makes them act like luminance meters and, provided the reflectance of the surface remains constant, they can be set up to follow the illuminance of that surface.

2.2.5 Advanced Lighting Control Systems

Some new advance lighting control systems can help to control 24-hour, 7-days a year thousands of light points. In combination with astronomical timers it is possible to dim and to take care about threshold adjustments when used in conjunction with computerised control stations. Additional manual override can be provided in case of emergency or if maintenance is on-going.

In case of new systems a centralized solution may be implemented as this requires less equipment and may allow for a simpler installation than a pole-based standalone solution. Figure 128 shows a simple system sketch of a centralised lighting control system. Depending on the system and the manufacturer the control signals can be distributed through a power bus system (signal is modulated on the power-cables supplying the cabinets and lights) or through IP addresses with IP interfaces at each pole or if simpler systems are applied at the control cabinets.

Such solutions could have following features:

- Central control
- Complete monitoring
- Dimming
- Remote metering
- Power quality metering
- Voltage stabilization
- Control room installation

Following Cost Savings could be achieved:
A centralised lighting control solution that can perfectly combine cost saving and less emission without compromising quality and safety issues. Energy and cost savings may result from:

- Dimming at off-peak traffic hours
- Reduced maintenance costs
- Burn hour optimization
- Accurate switch on/off
- Real-time control
- Load balancing and Load shedding
- Area-specific settings
- Fast reaction to special traffic or weather conditions