The lighting control system shall be capable of being controlled via a hand held remote control, and by a networked PC.

The manufacturer shall liaise with the relevant third party companies and submit for approval shop drawings and demonstration systems to confirm compatibility and functional requirements.

**Low Level Integration Options**

The lighting control system shall be capable of integrating with third party systems by instigating and detecting the closure of dry contacts using relays, bus coupling or auxiliary input devices. It shall also be capable of integration by producing and measuring voltage variations in the range of 0-10 V DC.

**Building Management System**

The lighting control system shall communicate load status information to the building management system (BMS) to enable it to compile energy usage data.

The lighting control system shall provide individual load control as requested by the BMS.

The lighting control system shall initiate specific load control events via scenes in response to triggers from the BMS.

The installing contractor and BMS or third party software provider shall liaise with the lighting control system manufacturer to confirm the most suitable integration path.

**Remote Access and Control**

The lighting control system shall allow multiple sites to be linked and monitored for the purpose of logging energy consumption information. It shall be possible to reconfigure a multiple site lighting control system from one physical location. Multiple sites shall be linked by Ethernet over a virtual private network (VPN).

VPN establishment and between-site cabling infrastructure shall be the responsibility of the nominated electrical/data contractor and shall not be provided by the lighting control system manufacturer. The lighting control system manufacturer shall provide the termination equipment to connect the lighting control system to the VPN. Any line rental contracts and charges for the VPN shall be the responsibility of the client.

**Monitoring**

The lighting control system shall be capable of integration with a BMS, providing information on load states and system status. This shall allow the BMS to compile reports on energy usage patterns and system outages.

**Uninterruptible Power Supply**

The lighting control system networks shall remain active during a mains power failure event to maintain communication with the BMS. An uninterruptible power supply (UPS) circuit shall be used to provide power to the system. Power supply units for the lighting control system shall receive their power from the UPS circuit. Loads controlled by the system will receive their power from a non-UPS circuit.

The UPS circuit and UPS equipment shall be supplied by the nominated electrical contractor.

**Emergency Override**

Lights controlled by the lighting control system shall be capable of being simultaneously switched on manually or automatically in the event of a lighting control system communications failure whenever mains power is available. This shall be switchable through the lighting control system network cable irrespective of whether the network is powered and functional.