

General Information

Issue: To ensure drivers are informed of varying speed restrictions around schools.

Solution: High speed cellular router communicating to traffic management centre.

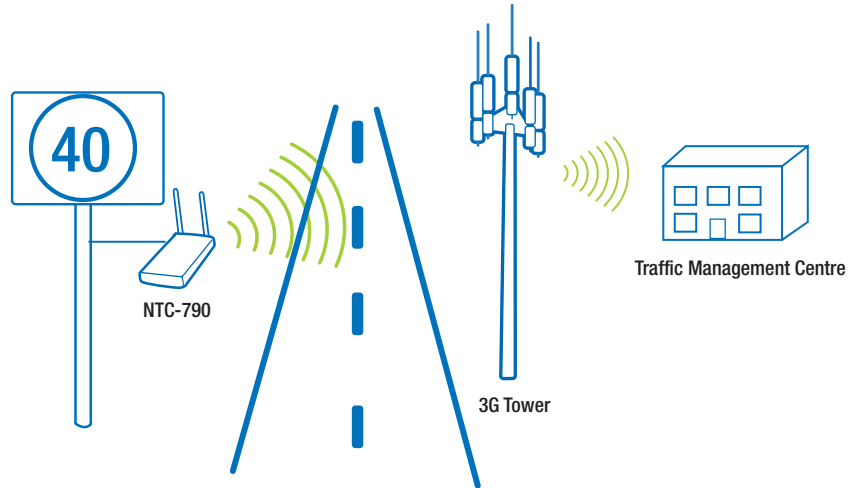
Benefits:

- Cost savings

Hardware: NetComm NTC-790

Partners:

- Roads / Traffic authorities



Speed limits which vary according to time or circumstances are becoming more common. The best examples are lower speed limits at regular times around schools or motorway speed limits that alter according to weather, road works or traffic density.

Attracting the attention of motorists to these changing limits can be a challenge and traffic authorities are relying on increasingly elaborate illuminated signs and flashing lights to warn of a changed speed zone.

The challenge is to make sure that these groups of warning lights are all functioning appropriately. Across a metropolitan area this could involve thousands of individual units. Visually checking all of these every day would be an impossibility. Moreover, in cases where speed limits may need to be varied on different days or adjusted regularly to accommodate holidays or daylight savings, reprogramming would be similarly difficult.

Providing each light unit with a hardwired connection to carry communications back to the traffic management centre would be similarly impractical in terms of cost and roll-out logistics.

The solution is to use a cellular network and an advanced wireless router such as the NetComm NTC-790. With its inbuilt computing platform, this router has the ability to combine monitoring software and a modem for communicating back

to base. Each light unit could be automatically checked and its operating status reported. Temporary variations in speed could also be updated from base. By utilising solar power each light station then becomes self-contained. This is simple with the NTC-790, thanks to its ability to accommodate a wide range of voltage inputs.

Better still, the NTC-790 has been purpose designed for extreme environments. Its ruggedized metal case and industrial strength components make it ideal for mounting in situations that would quickly disable a standard router. In particular, the ability to operate in a wide temperature range (from -30°C to 70 °C) makes the unit ideal for deployment in outdoor applications.

The NTC-790 also has an integrated 'Keep Alive' system monitor that periodically checks the full status of the network connection by pinging an IP address. Should the unit determine that the connection has been lost, it automatically restarts itself to re-establish connection. This feature is vital in unmanned locations such as would be the case with traffic signage.

By taking advantage of a high speed cellular network and the abilities of a device such as the NTC-790, multiple and varying speed restrictions can be made more practical to monitor and the roads made safer for both pedestrians and drivers.

