The traffic light turns 100

August 6 2014

100 years ago, on August 5, 1914, the first electric traffic light was installed on a city street in Cleveland, Ohio. Siemens entered the business ten years later, when the first traffic light tower from Siemens was installed on Berlin's Potsdamer Platz. Every year, Siemens produces around 22,000 traffic lights and 2,000 controllers.

Since 2010, Siemens produces only LED signaling devices. They consume up to 90 percent less energy and have a longer life expectancy than traditional incandescent bulbs. A city operating about 700 intersections can save more than one million euro in energy cost by converting traffic lights to LED technology. LED lights must only be replaced every ten years, while traditional incandescent bulbs need to be replaced every half year. In addition, LED traffic lights are much more visible in direct sunlight, improving traffic safety.

In 1914 the Cleveland traffic light was controlled by a traffic policeman who operated the lights from a small nearby hut and rang a bell to notify people of the signal change. This system allowed for constant contact with fire and police services and the ability to clear crossings for emergency vehicles. Today optical signalling systems are small wonders, evaluating unlimited amounts of signals in real time. Modern traffic management takes into account the current traffic situation and optimizes traffic flow, for example, by allowing "green waves" or by prioritizing emergency vehicles, buses, and trams.

Since March 2014, traffic lights have gone online. Thanks to a new control device from Siemens, cities can manage their traffic lights from

a private "cloud" and correct problems without turning traffic lights off - and this from any location in the world, via smartphone, tablet, or computer. New technology also allows for remote maintenance. The Siemens Support Center in Munich already assists 255 cities worldwide, from Abu Dhabi to Würzburg, in the event of any problems with traffic computers or traffic lights. In the future, experts working in Munich will be able to fully service traffic light systems remotely, guaranteeing safe and trouble-free operation.

The next big innovation will be interconnected communication between people, infrastructure and vehicles of all kinds. If there is a traffic jam in the city center, the smart phone would recommend using the train instead of the car in order to reach a destination in the fastest way. And the traffic light will not only take an active role in this communication, it will be one of the most important parts. Soon, our smart phone could let us know at what speed to drive to hit a sequence of green lights, or could request a green light at an intersection ahead. Also, the traffic light could warn individual road users of possible hazards

Provided by Siemens

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