Experience the commitment®

Rijkswaterstaat, Netherlands

Providing a smart, sustainable solution for public space.

ABOUT RIJKSWATERSTAAT

Rijkswaterstaat (RWS) manages the main highways and the national water system in the Netherlands. Apart from protecting the Netherlands against floods and ensuring sufficient supply of clean water, RWS works to ensure that traffic can flow smoothly and safely along more than 6,000 km of highways and waterways. It operates on behalf of the Minister and State Secretary for Infrastructure and Environment.

ABOUT IBOR

IBOR involves the remote management of public space objects, for example to enable bridges and locks to be operated remotely and allow a faster and safer response in the event of accidents or emergencies. The CGI IBOR platform opens the way to safer, innovative and cost-effective management of public space. IBOR was developed by CGI and Microsoft to facilitate remote operation for cheaper and more environmentally sensitive management of public lighting, to use street lighting to indicate routes for emergency services in the event of accidents and to mark out pedestrian routes for events, with LED lamps indicating the route by means of different light intensities and colors.

THE CHALLENGE

Around 36% of RWS's electricity spend is on street lighting and traffic signals. This energy consumption generates substantial CO_2 emissions, and RWS aims to achieve sustainable reductions in both costs and environmental impact. Guaranteeing safety is also an important part of the organization's mission. Many parties both within and outside RWS play a role in maintaining that safety, such as highway authorities, the traffic control center and emergency services.

RWS wants a simple, economical solution for the control of street lighting. Various parties need to be able to manage the lighting in order to increase safety, for example by switching off power in road works or providing additional lighting for emergency services at the scene of traffic accidents. The parties must be able to do so through various channels, so that the lighting is 'on' only when it needs to be.

CASE STUDY

GOVERNMENT

Central and federal government

Key benefits

With IBOR we offer Rijkswaterstaat:

- Increased traffic safety with lighting controlled directly and remotely in case of an emergency
- A clearer view of the energy cost of the public lighting system
- A "greener" approach with lower energy costs and lower CO_2-emissions
- "Multiple actor functionality", with different parties having access with various roles and authorizations
- Lower maintenance costs.

Street lighting 'on' only when it needs to be.

Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

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OUR ANSWER

We are helping RWS with a smart and dynamic solution, using which street lighting can be managed remotely by a computer, laptop, tablet or a smartphone. The innovative IBOR platform enables street lights to be switched on and off easily when required. We are working with RWS to determine the parties and roles that are key to maintaining safe and sustainable public lighting.

Together with RWS, we conducted a pilot covering 1,000 street lights on the central reservation of the A50 motorway from Arnhem to Apeldoorn and the A1 from Hoevelaken to Barneveld in the summer of 2011.

In collaboration with Vodafone, we have developed a new and secure communication system enabling RWS to operate the highway lighting remotely. After a successful trial, RWS began using the system at the end of 2012.

A SUCCESS STORY

IBOR went live during the “Night of the Night”, an annual event promoted by environmental organizations to raise awareness of the benefits and energy savings made possible by reducing artificial light. The pilot was successful. With just a few simple operations the RWS personnel were able to switch off the lighting on the A50 and the A1 remotely.

The success paved the way for a rollout across 7,500 street lights in the east of the Netherlands. Together with our partners, we have shown RWS that IBOR is a platform for the future with huge potential for innovation.

RWS also has a much clearer view of the energy cost of the public lighting system. Provisional calculations show that IBOR is saving the organization €91 per lamp post per year and cutting CO2 emissions by 438 kg per lamp post per year.

With IBOR, RWS can allocate various roles to parties such as traffic controllers, highway inspectors, traffic managers and signage installers. The future is even more promising. In addition to a continued geographic rollout, RWS will be able to add more functionalities and groups to IBOR. That will allow an even faster, safer and more efficient response in the event of accidents and emergencies, as traffic signals can be managed to assist the emergency services, with roads in the vicinity being closed and reopened remotely and water pressure being increased temporarily, for example, to supply water to firefighters.

WHY CGI?

We provide the software and implementation of IBOR and:

- Are supplier-independent
- Offer a comprehensive platform in which all components can be integrated
- Use the latest cloud technology to ensure flexibility and provide a secure, scalable solution.

For more information, please contact us at government@cgi.com or visit www.cgi.com/government.

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Founded in 1976, CGI is a global IT and business process services provider delivering high-quality business consulting, systems integration and outsourcing services. With 69,000 professionals in 40 countries, CGI has an industry-leading track record of on-time, on-budget projects, aligning our teams with clients’ business strategies to achieve top-to-bottom line results.

The project referenced in this case study was delivered by Logica, which CGI acquired in August 2012.