

## Press information

Dornbirn, September 2018

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“Digital Services” from ZGS in action

### **A lighting infrastructure that monitors air quality, cuts energy costs and optimises use of space**

**Lighting, air conditioning and ventilation – the facilities in modern office buildings are becoming ever closer, offering benefits for employees and facility managers alike. This has been perfectly demonstrated by Zumtobel Group Services (ZGS) in a pilot project with Nestlé in the Swiss town of Vevey, where the lighting infrastructure is responsible for much more than just light. The luminaires have been specially equipped with sensors that monitor the way the office is being used and measure the quality of the air, including factors such as ambient temperature. These metrics can then be used to improve the working environment and optimise space utilisation. A three-month test period started in February 2018, with the results showing that the ZGS solution can lower operating costs by up to 20 per cent.**

Dornbirn, Austria – A smart lighting solution for an optimized work concept: As part of a Swiss pilot project, Zumtobel Group Services (ZGS) is assessing how to improve work environment, especially in relation to flexible desk management and improved air quality and reduced operating costs.

#### **A pilot project with real savings potential**

ZGS has installed 15 customised free-standing luminaires for the pilot project in a test area with 30 workstations, where each fitting is designed to illuminate a double workstation. Integrated sensors collect anonymous occupancy data and general information about the environment – easily checked and interpreted via a web-based dashboard. Over the course of the three-month trial period, ZGS has carried out additional in-depth analysis of the information gathered and supported the customer with expert advice. *“The pilot project offered us not just the chance to test the practicality and implementation of the desk-sharing concept, but also to show our customer the potential for optimisation,”* explained Georg Terlecki-Zaniewicz, Project Manager IoT from ZGS. *“The results show savings of up to 20 per cent in terms of energy and overhead costs. At the same time office carriers can provide a pleasant and more productive working environment for their employees.”* The free-standing luminaires enable the sensors to be located close to the users, where they can directly track aspects such as air quality, temperature and ambient noise level. An integrated wireless module also increases the flexibility of the entire concept, as the luminaires do not require a separate cable to transmit the information.

#### **Intelligent automatisisation of heating, ventilation and air conditioning**

Light provides the perfect infrastructure for sensors that are programmed to monitor air temperature, humidity and air pressure, as well as carbon dioxide and VOC (Volatile Organic Compounds) values. The dashboard offers quick access to the collated air-quality data, while ZGS has also carried out detailed analysis to provide facility managers with valuable data and insights. These findings can then be used to automate and optimise the operation of the heating, ventilation and air conditioning (HVC) system as and when required, which in turn lowers energy costs. For example, when nobody is in the office, there is no need for the space to be ventilated. The added value for employees is optimum air quality and therefore a better and more productive working environment. Especially in winter, the air is likely to dry out faster with fewer people in the room. Taking the occupancy level into account means that the relative humidity can be maintained at a good level. *“The purpose of the pilot project is to demonstrate the reliability of the environmental data collected and to further improve its accuracy,”* revealed Tariq Hussain, Head of Strategic Partnerships at the Zumtobel Group. *“This will allow us to achieve better needs-based automatisisation and air control.”* Additional sound pressure sensors in the luminaires can also gauge the noise level and identify particularly noisy areas.

## Understanding how workplaces are really used

The pilot project provides extensive insights into how companies can make the most out of their offices. This means that a specific area could be used more efficiently to accommodate extra users or, in extreme cases, that whole offices could be rented out – cutting operating costs and perhaps even helping generate additional income. ZGS identifies and analyses the key performance indicators (KPIs) in terms of workplace usage and occupancy, enabling to answer a series of important questions: How many workplaces are being used on certain days at particular times? How often is full utilisation really achieved? Based on the information provided by ZGS, peak times can be patterned and compensated much more effectively. Additionally, space and operating costs can be optimised. With the information analysed by ZGS it is even possible that employees can find colleagues and locate vacant workspaces or meeting rooms in their vicinity using a dedicated app that is linked to the dashboard.

### Photos:



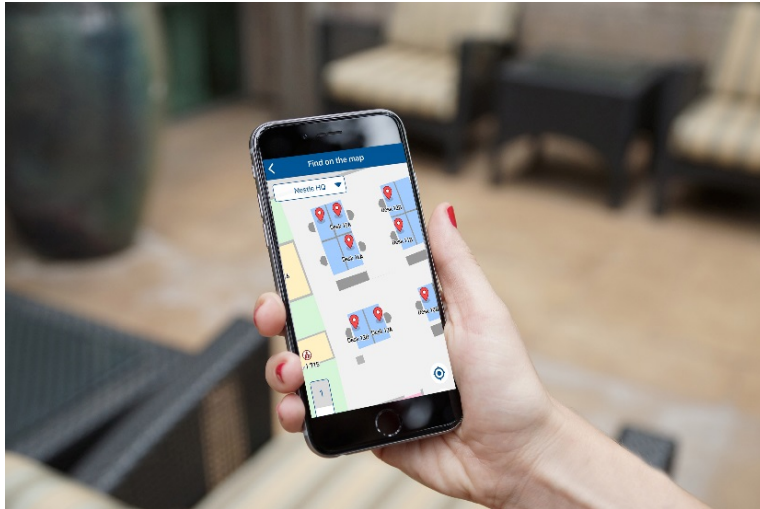
B1\_ In a pilot project ZGS has equipped luminaires with sensors that monitor the way the office is being used and measure the quality of the air, including factors such as ambient temperature. These metrics can then be used to improve the working environment and optimise space utilisation.

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B2\_ The pilot project provides extensive insights into how companies can make the most out of their offices. Easily by using a smart lighting infrastructure.

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B3\_ Customers can even profit further from the ZGS service and software know how: e.g. that employees can find colleagues and locate vacant workspaces or meeting rooms in their vicinity using a dedicated app that is linked to the dashboard.

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### **About Zumtobel Group Services**

The Zumtobel Group Services (ZGS) brand offers one of the most comprehensive service portfolios in the lighting industry. The spectrum of services ranges from project management for turnkey lighting solutions or financing models for lighting systems to providing advice on and commissioning lighting management and emergency lighting systems and worldwide technical and maintenance services. In the rapidly growing market of connected lighting, ZGS also offers its clients the use and analysis of 'Digital Services'. Zumtobel Group Services provides complete, customised and ready to use lighting solutions. The brand belongs to Zumtobel Group AG, which is based in Dornbirn, Vorarlberg (Austria). For further information, see [www.ZGServices.com](http://www.ZGServices.com)