Sensoneo smart waste management

Title	Sensoneo smart waste management
Description of the technology	Sensoneo is a global enterprise-grade smart waste management solution provider that enables cities and businesses to manage their waste cost-efficiently, be more environmentally responsible and improve the well-being of people. Through its unique smart waste management technology, Sensoneo is redefining the way waste is managed. The solution combines unique ultrasonic Smart Sensors (Single, Double, Quatro and patent-pending Micro-sensors) that monitor waste real-time with sophisticated software (Smart Analytics, Smart Route Planning and Smart Waste Management System) providing cities and businesses with data-driven decision making, and optimization of waste collection routes, frequencies and vehicle load. This results in overall waste collection cost reduction of at least 30% and carbon emission reduction up to 60% in cities. Sensoneo smart waste management has attracted cities and business around the world and the solution is installed in numerous locations across Europe, North America, South America, Middle East, Australia and New Zealand. For more information about how Sensoneo can help you manage your waste smarter, please visit www.sensoneo.com.

Further information	Sensoneo is redefining smart waste management. Its leading enterprise-grade waste management solution provides cities and businesses with a robust, scalable, secure and easy to deploy solution hosted in MS Azure cloud, enabling high availability and redundancy. As such, Sensoneo can scale its solution according to customers' needs and can connect any number of sensors per customer. Payload and network communication is encrypted on two levels ensuring that Sensoneo Sensors can't be misused for DDOS attacks. The hardware is equally high quality using ST Micro and U Blox electronic chips and deploying recyclable polyimide optical fibers for the casing. Sensoneo's smart waste management technology uses a variety of Sensoneo Smart Sensors (Single, Double, Quattro), including patent-pending Micro-sensors, where the beams of the sensor can be positioned in the most optimal way; open APIs, advanced analytics and leveraging mesh network topology. It's this unique combination that provides the intelligence of the solution so that it is easily customizable for any network (GSM, NB-IoT, LoRaWAN, SIGFOX or 4G LTE wireless technologies) and through real-time data monitoring and analysis provides better decision making to avoid collecting empty or half-empty waste bins. Sensoneo's software solution cost-efficiently manages the waste collection. Through its real-time monitoring, Smart Analytics and Smart Route Planning, cities and businesses are offered data-driven decision-making, but more importantly, the collection routes and frequency and vehicle load are better optimized, resulting in overall collection cost reduction of at least 30%. Sensoneo's smart waste management solution improves the environment and the well-being of people in several ways. The real-time data monitoring, Smart Analytics and Smart Route Planning ensure more efficient waste collection resulting in less cars, less noise, less traffic, and carbon emission reduction up to 60% in cities and most of all – a litter-free city. Additionally, the sensors are equipped with replaceable batteries and are made from recyclable polyimide optical fibers that provide not only an eco-design, but also help with recycling. Sensoneo's Citizen App informs people of the nearest available empty bin, enabling them to be more environmentally responsible. By providing real-time feedback, citizens can help reduce overflowing and messy bins, making their city greener, cleaner and free of litter.
Keywords	waste, waste management, smart waste, smart waste management, smart solution, sensors, waste monitoring, waste sensors, internet of things, iot, iot sensors, fill-level sensors, ultrasound sensors, ultrasonic sensors, big data, data-driven waste management, waste analytics, route optimization, waste collection, waste collection optimization, smart cities, smart city, citizen app, sigfox, lorawan, catM, wireless
Stage of Development	Sale to end user Possible to use since 01. 05. 2014
Language of communication	English, Slovak
More information	www.sensoneo.com

Contact point	alena.kojdiakova@cvtisr.sk
Notice	*Project co-funded by European Union funds (ERDF and IPA)*