EnOcean's Wireless Technology is International Standard

The International Electrotechnical Commission (IEC) has ratified a new standard – ISO/IEC 14543-3-10 – for wireless applications with ultra-low power consumption. It is the first and only wireless standard that is also optimized for energy harvesting solutions and, therefore, for EnOcean's self-powered wireless technology. Together with the EnOcean Equipment Profiles (EEPs) drawn up by the EnOcean Alliance, this international standard lays the foundation for fully interoperable, open wireless technology comparable to standards such as Bluetooth and WiFi. The standard can be downloaded from www.iso.org [1]. The new standard is geared to wireless sensors and wireless sensor networks with ultra-low power consumption. It also includes sensor networks that utilize energy harvesting technology to draw energy from their surroundings – for example from motion, light or temperature differences. This principle enables electronic control systems to be used that work independently of an external power supply. EnOcean, which develops energy harvesting wireless technology, is a pioneer in this field. The company has been producing and marketing maintenance-free wireless sensor solutions for use in building and industrial automation for more than ten years. EnOcean-based products are currently installed in over 250,000 buildings around the world. **New market potential for energy harvesting** International standardization will accelerate the development and implementation of energy-optimized wireless sensors and wireless sensor networks. It will also open up new markets and areas of application for energy harvesting solutions. In addition to the already established markets for home and building technology, there will be further uses ranging from the smart home, smart metering and the smart grid to solutions for industry, logistics and transport. "EnOcean supported the development of the new standard from day one. The ratification is a milestone in our company history and validates the success and the potential of energy harvesting technology. Standardization will boost the demand for energy harvesting sensors and wireless modules and step up their implementation. At the same time, we anticipate the development of even more efficient energy harvesting solutions that use a wide range of energy sources," says Laurent Giai-Miniet, CEO of EnOcean. **Field proven standard for maximum interoperability** Members of the EnOcean Alliance have already introduced more than 850 EnOcean-based, interoperable products, all of which comply with the new standard. Developers and manufacturers can therefore benefit from the Alliance's extensive practical experience, huge product range and installed base, and many years of user education. The EnOcean Alliance draws up the specifications for the applications based on the standard. These EEPs (EnOcean Equipment Profiles) ensure the interoperability of products from different vendors. They are optimized for ultra-low energy consumption and are therefore the ideal, tried and tested complement to the new wireless standard. This means that smart, energy-efficient automation solutions can be realized that are non-proprietary and industry-neutral. "EnOcean wireless technology is already a firmly established

technology for green, smart buildings and applications. The EnOcean Alliance sees the ratification of the international ISO/IEC 14543-3-10 standard as one of the key prerequisites for expanding the already highly successful, fast-growing EnOcean ecosystem. As an independent, open organization, the Alliance is keen to inform potential product manufacturers and users about the benefits of the standard and to ensure the interoperability of EnOcean-based products," says Graham Martin, Chairman of the EnOcean Alliance. **Technical specifications** The standard covers OSI (Open Systems Interconnection) layers 1-3, being the physical, data link and networking layers. The full title of the standard is: ISO/IEC 14543-3-10 Information technology -- Home Electronic Systems (HES) -- Part 3-10: Wireless Short-Packet (WSP) protocol optimized for energy harvesting -- Architecture and lower layer protocols.

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[1] http://www.iso.org