Industry Leaders Aim to Redefine Power as Smart and Wireless

IEEE, the world's largest professional association for advancing technology for humanity, today announced a community of global industry leaders are joining forces with the intention to form the Power Matters Alliance (PMA) under the IEEE Standards Association (IEEE-SA) Industry Connections Program. The PMA is dedicated to remaking consumers' daily interaction with power as wireless, environmentally sound, and smart.

"IEEE has been a leader in the advancement of power since its earliest days, when electricity was just beginning to become a major force in society, to today where we have more than 100 active standards or standards in development specifically related to power," said Judith Gorman, managing director, IEEE Standards Association. "Enabling world-changing technologies to enrich the lives of people globally is what IEEE is about, and playing such an integral role in the formation and development of the Power Matters Alliance will speed the progress of this revolutionary effort."

"The wireless revolution of recent years has highlighted the need for a new approach to power," said Ran Poliakine, CEO Powermat Technologies. "The only thing preventing us from enjoying the freedom of a truly wireless world is the power cord. Powermat Technologies is pleased to be collaborating with the IEEE to develop a new paradigm for power."

"Our smartphones are becoming universal devices that are both smarter and more power hungry than ever," said Stassi Anastassov, president of Duracell. "A charge that used to last a week, today barely gets us through the afternoon. Continued advances in electronics, therefore, are dependent on a fundamental rethinking of how devices are powered. The PMA is about defining a 21st century approach to power, and Duracell – and our parent, Procter & Gamble – are committed to the PMA."

Building on existing wireless-power technologies, PMA will flesh out the suite of standards that will be needed to provide advanced power, to be known as Power 2.0, to devices at home and on the move. The PMA will reference existing standards, and define gaps that new standards will address. Power 2.0 is planned to cover the entire consumer power ecosystem, such as mobile, computing, in-car, consumer electronics, smart batteries, household power, and power-in-public-places. Additionally, Power 2.0 will enable interaction of software and services with power.

"We can all agree with the notion that sticking three bits of metal into a wall is outdated," said William A. Stofega, program director of mobile device technology and Trends at IDC. "Power's ability to communicate a problem should be more

subtle than blowing a fuse, and power should have a whole lot fewer problems to start with. The PMA has set itself the goal of defining the next generation of protocols for smart power, and it has the backing to deliver on this promise.”

Power 2.0 aims not merely to be wireless, but also smart. This requires defining a digital layer above today’s wireless power, enabling software and services to interact with power intelligently.

“As a part of its partnership with Procter and Gamble, Facebook is committed to working with Duracell, Powermat and the PMA to develop applications and user interfaces for use in the Power 2.0 ecosystem,” said Sean Mahoney, lead client partner at Facebook. “Together, we will enhance consumer experiences and help people connect more effectively.”

Indeed Power 2.0 adopts concepts and architectures from the Internet, and enjoys the involvement of the person credited with inventing the Internet:

“The PMA aims to bring a layer of intelligence to the power distribution and consumption ecosystem," said Vint Cerf, chief internet evangelist at Google. "This idea has also been recognized in the Smart Grid effort launched by the US Departments of Commerce and Energy. Power 2.0 can play an important role in this new energy ecosystem."

“The PMA could open the door for managed power,” said Bruce Nordman, Lawrence Berkeley National Laboratory. “We can reinvent our electricity from the bottom-up, with "nanogrids" for a system architecture modeled on Internet principles. With Power 2.0, a table with embedded wireless power could act as a nanogrid, and so can a car.”

“General Motors is determined to ensure users complete their journey with more power in their devices than when they started it,” said Chris Thibodeau, Electrical Systems, 12V Energy, and UI Design at GM. “The Power 2.0 specification will enable developers to create applications and services atop our wireless power platform. We look forward to working with the rest of the industry to ensure that Power 2.0 becomes the standard across the automotive sector worldwide.”

Moving forward, the PMA will build partnerships, create consensus documents, and eventually utilize IEEE-SA’s formal open standards process in support of its founding vision. PMA will then promote the standards adoption and advancement. PMA will not manufacture, market or sell any product.

Through its Industry Connections Program, IEEE-SA facilitates like-minded organizations coming together quickly, effectively and economically to build industry consensus at strategic points in a technology's lifecycle.

IEEE-SA and IEEE ComSoc are exhibiting in Booth 35307 in the Las Vegas Convention Center and World Trade Center (LVCC) South Hall Upper Level during 2012 International CES in Las Vegas, 10-13 January.