IEC and USB-IF Expand Cooperation to Support Next-Generation High-Speed Data Delivery and Device Charging Applications

GENEVA, Switzerland and BEAVERTON, Ore., U.S. – December 8, 2014 – The IEC (International Electrotechnical Commission) and the USB Implementers Forum (USB-IF) today announced that they have expanded international standards cooperation to include the latest USB-IF specifications for high-speed data delivery and enhanced usages for device charging. In particular, the USB-IF has submitted to the IEC the USB Power Delivery (Rev. 2.0, v1.0), USB 3.1 (SuperSpeed USB 10 Gbps), and USB Type-C Cable and Connector specifications.

USB Power Delivery was developed with a vision of delivering universal charging to extend ease of use for consumers and reduce electronic waste by offering an alternative to proprietary, platform specific chargers. The USB Power Delivery specification defines features that support the global adoption of interoperable external power supplies, including:

- Increased power levels from existing USB specifications up to 100W
- Bi-directional power capabilities to enable either a host or device to be either the provider of power or the consumer of power
- Optimized power management across multiple peripherals to allow each device to take only the power it requires
- Intelligent and flexible system level management of power
- USB Power Delivery and USB performance capabilities can be delivered over a single-cable

The new USB Type-C specification, built on existing USB 3.1 and USB 2.0 technologies, was developed to facilitate thinner and sleeker product designs, enhance usability and provide a growth path for performance enhancements for future versions of USB. Key characteristics of the USB Type-C connector and cable solution include:

- An entirely new design tailored to work well with emerging product designs
- New smaller size – similar in size to the existing USB 2.0 Micro-B
- Usability enhancements – users will no longer need to be concerned with plug orientation/cable direction, making it easier to plug in
- The USB Type-C connector and cable will support scalable power charging
- Scalability – the connector design will scale for future USB bus performance

USB 3.1 delivers speeds up to 10 Gbps, providing support for audio/video that can drive Ultra-HD (4K) displays. USB hosts, hubs and devices can be built to support a range of USB Power Delivery and performance capabilities to meet the needs of OEMs. Along with the new USB Type-C cable and connector, USB 3.1 and USB Power Delivery will bring enhanced applications for a truly single-cable solution for data and power delivery, building on the existing global ecosystem of USB / IEC 62680 series of International Standards compliant devices. Devices supporting these new specifications are expected to come to market in 2015.

These new standards are also expected to advance global action on reducing e-waste and improving re-usability of power supplies with a range of electronic devices. IEC’s approach for ongoing standardization work in this space is driven by the ultimate goals of increasing...
external power supply re-usability, supporting consumer convenience, maintaining product reliability and safety, and providing for future technology innovations. In addition, widespread adoption of the resulting International Standards will help to reduce the encroachment of poorly designed or manufactured aftermarket substitutes which may affect the operation of electronic devices in compliance with regulatory requirements.

The three USB-IF specifications have been submitted to the IEC TC (Technical Committee) 100: Audio, video and multimedia systems and equipment, to be considered for inclusion in the newly approved IEC International Standard IEC 62680 series, Universal Serial Bus interfaces for data and power in support of the stated goal.

"IEC has a longstanding relationship with the USB-IF and believes in the benefit of aligning with USB specifications because of the strong worldwide and cross-industry support behind the technology," says Frans Vreeswijk, General Secretary and CEO of the IEC.

"IEC recognizes the importance of evaluating the new USB Power Delivery, USB 3.1 and USB Type-C specifications for inclusion in the IEC International Standard as they are clearly the right specifications to support the next generation of ICT and consumer products," explains Mr. Shuichi Matsumura, Manager of IEC TC 100 TA (Technical Area) 14 and Senior Standards Expert of the Intellectual Property and Standards Strategy Division at Fujitsu Limited.

"The USB-IF fosters high-quality, consumer-friendly products and innovative USB technology," says Jeff Ravencraft, USB-IF President and COO. "Adoption of USB Power Delivery, USB 3.1, and USB Type-C is growing fast and we are working closely with IEC to promote the benefits of these USB specifications to enable the goal of a common external power supply for electronic devices."

Resources
- To learn more about IEC, visit http://www.iec.ch/.
- To learn more about USB-IF and USB specifications, visit www.usb.org.

About the USB-IF
The non-profit USB Implementers Forum, Inc. was formed to provide a support organization and forum for the advancement and adoption of USB technology as defined in the USB specifications. USB-IF facilitates the development of high-quality, compatible USB devices through its logo and compliance program recognized around the globe and promotes the benefits of USB and the quality of products that have passed compliance testing. Further information, including postings of the most recent product and technology announcements, is available by visiting the USB-IF website at www.usb.org

About the IEC
The IEC (International Electrotechnical Commission) brings together 166 countries, representing 98% of the world population and 96% of world energy generation, and close to 15 000 experts who cooperate on the global, neutral and independent IEC platform to ensure that products work everywhere safely with each other. The IEC is the world's leading organization that prepares and publishes globally relevant International Standards for the whole energy chain, including all electrical, electronic and related technologies, devices and systems. The IEC also supports all forms of conformity assessment and administers four Conformity Assessment Systems that certify that components, equipment and systems used in homes, offices, healthcare facilities, public spaces, transportation, manufacturing, explosive environments and energy generation conform to them.

IEC work covers a vast range of technologies: power generation (including all renewable energy sources), transmission, distribution, Smart Grid & Smart Cities, batteries, home appliances, office and medical equipment, all public and private transportation, semiconductors, fibre optics, nanotechnology, multimedia, information technology, and more. It also addresses safety, EMC, performance and the environment. www.iec.ch