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**For Immediate Release**

**FieldComm Group, ODVA and PI Provide Joint Update on an Advanced Physical Layer for Industrial Ethernet**

***Base Standards approved as Emerson Joins APL Project group promoting developments for Industrial Ethernet to expand use of EtherNet/IP™, HART-IP™ and PROFINET™ into hazardous locations in the process industry***

Nuremberg, Germany — 26 November 2019 — The FieldComm Group, ODVA and PI (Profibus & Profinet International) announce that Emerson has joined the APL Project as an industry partner. Emerson joins 11 other industry partners to support the Project’s goal of developing an advanced physical layer for Industrial Ethernet, suitable for use in demanding applications in process instrumentation, named “Ethernet-APL”. In addition to the industry partners, APL Project members include the three leading standards development organizations Profibus & Profinet International (PI), FieldComm Group (FCG) and ODVA.

Significant updates in the development of “Ethernet-APL” have been achieved this month. First, the IEEE Std 802.3-2019 (10BASE-T1L) standard, which is the basis for Ethernet-APL and defines 10Mbit/s over one single twisted pair Ethernet with optional power delivery, was approved as an IEEE standard on Thursday 7 November 2019 with publication of the standard expected in the coming months. This enhancement to the IEEE 802.3 standard for long-reach, single pair Ethernet will be the basis for the integration into the Ethernet protocol specifications, which is anticipated to be completed within organizations PI, FCG and ODVA in 2020.

Also, to ensure that Ethernet-APL supports intrinsic safety in hazardous areas, the IEC PT60079-47 technical committee is working on a technical specification for the 2-Wire Intrinsically Safe Ethernet (2-WISE). The technical committee agreed during the TC31 meetings in Nanyang (CN) that the principles defined in the Fieldbus Intrinsically Safe Concept (FISCO) are also suitable for the 2-WISE technical specification, including some adaptations for the new physical layer. The perception is supported by successful tests executed at DEKRA Testing and Certification GmbH. The final technical specification (IEC TS 60079-47) is expected by the end of 2020.

Finally, Ethernet-APL technology has been tested successfully at BASF, incorporating first prototype devices from different industry partners. The following topics were in the focus of the tests: integration and configuration of the field devices, installation and commissioning of an Ethernet-APL network, mixed/multi-protocol operation, redundancy, device exchange and export of device diagnostic and configuration data in parallel to cyclic data exchange. All tests concluded successfully and demonstrated the advantages of Ethernet-APL as a physical layer in the field of process automation and an enabling technology for higher-level applications.

Users can learn more about Ethernet-APL by visiting the websites of Profibus & Profinet International (PI), FieldComm Group (FCG) and ODVA to download the white paper “Ethernet to the Field.”

**About FieldComm Group**

FieldComm Group is a global standards-based organization consisting of leading process end users, manufacturers, universities and research organizations that work together to direct the development, incorporation and implementation of new and overlapping technologies and serves as the source for FDI™ technology. FieldComm Group’s mission is to develop, manage and promote global standards for integrating digital devices into automation system architectures while protecting process-automation investments in HART® and FOUNDATION™ Fieldbus communication technologies. Membership is open to anyone interested in the use of the technologies. For more information, visit their web site at www.FieldCommgroup.org.

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**About ODVA**

ODVA is an international standards development and trade organization with members from the world’s leading automation suppliers. ODVA’s mission is to advance open, interoperable information and communication technologies for industrial automation. Its standards include the Common Industrial Protocol or “CIP™,” ODVA’s media independent network protocol – and the network adaptations of CIP– EtherNet/IP, DeviceNet, CompoNet™ and ControlNet™. For interoperability of production systems and their integration with other systems, ODVA embraces the adoption of commercial-off-the-shelf, standard Internet and Ethernet technologies as a guiding principle. This principle is exemplified by EtherNet/IP – one of the world’s leading industrial Ethernet networks. Visit ODVA on-line at www.odva.org.

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**About PI**

PI is a wide spread automation community in the world represented by 25 different Regional PI Associations and is responsible PROFIBUS and PROFINET, the two leading industrial communications protocols covering all industries. The common interest of PI’s global network of vendors, developers, system integrators and end users lies in promoting, supporting and using PROFIBUS and PROFINET. Regionally and globally over 1,400 member companies are working closely together around the world to the best automation possible. The organization’s global influence and reach is unmatched in the world of automation. For more information, please visit the website at [www.profibus.com](http://www.profibus.com).

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