



Contact person:
Barbara Weber
Barbara.Weber@profibus.com
☎ +49 (721) 9658-549

P R E S S R E L E A S E

PI standardizes Ethernet in the field of process automation

Nuremberg, November 29, 2017: NAMUR, the User Association of Automation Technology in Process Industries, has outlined requirements for the application of Ethernet in the field in its position paper “An Ethernet communication system for the process industry.” These requirements impact the physical layer, among other things. As a solution for this issue, a corresponding physical layer – known as APL (Advanced Physical Layer) – is being created for Ethernet-based communication in the field of process systems, as part of a joint project by well-known industrial companies and organizations, in which PI (PROFIBUS & PROFINET International) is taking a leading role.

This project is based on the new Ethernet standard whose specifications are currently under development by the IEEE 802.3cg working group, for 10Mbit/s via a two-wire system and for up to 1,000 m including optional power supply. The project’s aim is to define the necessary guidelines for the use of the new standard in hazardous areas, and to determine the requirements and tools for conformity tests and EMC tests. The solution is also set to be tested within the context of reference designs and pilot implementations.

As part of the further advancement of Industry 4.0 and IIoT, Ethernet (and thus PROFINET) will establish itself in process automation. PROFINET is fast, powerful, flexible, open and offers a host of functions for the specific tasks of the process industry. This includes optimum Redundancy mechanisms, “Configuration in RUN” for smooth device swapping during operation, and Time Stamping for the recording of event sequences, etc. With the market introduction of FDI as an integration technology and the deployment of the PA Profile 4.0, PROFINET has taken two more major steps toward process automation.



The only thing still missing is a solution with which PROFINET Devices can also be provided for use in hazardous areas and in two-wire technology including optional power supply over the data line (similar to PROFIBUS PA). And this is exactly the technological orientation of the APL project.

Eleven prestigious suppliers of systems and devices for process automation – namely, ABB, Endress+Hauser, Krohne, Pepperl+Fuchs, Phoenix Contact, Rockwell Automation, Samson, Siemens, Stahl, VEGA and Yokogawa – are cooperating with PI in this project, as are the organizations FieldComm Group and ODVA.

Press Contact:

PI (PROFIBUS & PROFINET International)

Support Center

Barbara Weber

Haid-und-Neu-Str. 7

D-76131 Karlsruhe

Tel.: 07 21 /96 58 - 5 49

Fax: 07 21 / 96 58 - 5 89

Barbara.Weber@profibus.com

<http://www.PROFIBUS.com>

The text of this press release is available for download at www.profibus.com.