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RPA CHAIRMEN MEET IN KARLSRUHE



Acting PI Chairman Mike Bryant led the strategy discussion.

Twelve Regional PI Associations (RPAs) were represented during the special RPA Chairmen Meeting held on January 17, 2008, in Karlsruhe during which Acting Chairman Mike Bryant introduced the new Deputy Chairman Jörg Freitag.

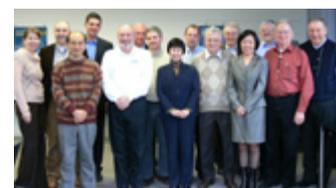
Agreeing and further developing the worldwide PI Strategy was one of the main goals of this meeting. Bryant took his colleagues through a brand new strategic plan for the organization, explaining several new initiatives. This newsletter

- PROFINEWS - is to be more widely distributed and a revised web site will be developed to better reflect the immense global organization that PI has become. A strategic PI White Paper is being prepared now to position PROFIBUS and PROFINET together as a complete and 'all encompassing' automation solution. At the request of PI members, an 'image brochure' clearly identifying the twin technologies of PROFIBUS and PROFINET and their individual performance capabilities will be developed, with publication planned for May during the next



New Deputy Chairman of PI Jörg Freitag addresses the meeting.

200 delegates attended and over 30 presentations were delivered. One, by Christian Diedrich of ifak, (see right) overviewed the latest PROFIBUS PA developments, including version management and fast parameterization. 45 companies exhibited alongside the conference. The PNO booth let visitors find out more about the worldwide PI organisation and the latest process automation news.



Delegates from as far afield as China and South Africa attended.

PI meeting in Tokyo.

Jörg Freitag welcomed attendees from across the world and spoke about the exciting challenges that lie ahead. "PROFINET will real soon now reach the same level of acceptance worldwide that PROFIBUS has," he said. "The worldwide PI organization is one of the reasons for our success and meetings like this demonstrate the talent and enthusiasm that is ultimately going to make PROFINET even more successful than PROFIBUS."

Technical presentations were also given, including one on the performance of PROFINET (Page 2). Dieter Dilchert from South Africa talked about his important training initiative (see **PROFINET 59**).

PROCESS MANAGEMENT ACADEMY SUCCESS

January 30th saw this year's Process Management Academy (PMA) take place in Düsseldorf, Germany, organized by ARC Advisory Group. PMA is a platform for experts from the process industry offering a trend-setting conference program, intensive know-how transfer and informal contacts. More than



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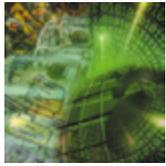
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PI News

PROFIDRIVE STANDARDIZED



The PROFIDrive profile for PROFIBUS and PROFINET is now an international standard.

IEC 61800-7 defines device profiles for electric variable speed drive systems and their mapping on existing communication systems by applying a generic drive interface.

IEC 61800-7-303 specifies the mapping of the PROFIDrive profile defined in IEC 61800-7-203 on the communication systems of PROFIBUS DP (chapter 4) and PROFINET IO (chapter 5).

The PROFIDrive profile can be used on both PROFIBUS and PROFINET, with many common features making engineering and operations easier. The separation of application and communication makes it possible for device manufacturers and users to easily use PROFIDrive applications on either PROFIBUS or PROFINET

and to freely select the optimal communication system for their needs.

The PROFIDrive profile has six application classes, covering scenarios from simple frequency converters to highly dynamic servo drives. This encompasses virtually all kinds of applications including high-performance synchronous applications.

The standardization of PROFIDrive under IEC 61800-7 is of significant importance to the economic success of the user, says PI. The stability and openness of the drive interface are important deciding factors in which technology to use.

PROFIsafe DEMONSTRATOR

ifak Magdeburg, a PROFIsafe Competence Center has added the PROFIsafe multivendor application formerly owned by PI to its equipment range. Wolfgang Stripf, head of the PROFIsafe PI Working Group, and the ifak team re-assembled and commissioned the multivendor application. ifak will use the demonstrator for PROFIsafe



training and workshops as well as for research projects. Integration into lectures and hands-on practice in co-operation with local universities is also planned. ifak will be responsible for keeping the PROFIsafe application up to date and making it available to the PI community for integration tests and measurements.

... AND TEST LAB

ifak's PI Test lab is now available to test the PROFIsafe profile for PROFIBUS and PROFINET. Audits by TÜV and PI were successfully carried out recently. ifak aims to use its 10 years of experience of PI certification in helping PI expand the scope of PROFIsafe. **ifak:** +49 39203 810 0 or info@ifak.eu

[FIND OUT MORE
ABOUT PROFIsafe](#)

EDD CERTIFICATION STARTS

In January 2008, PI accredited itm in Munich, Germany, as the first EDD test laboratory. At the same time the first EDD Certificate was issued. Accredited EDD test laboratories, among them ifak and itm, will offer the EDD accreditation service alongside existing PROFIBUS certification tests.

itm's PROFIBUS EDD Tester first checks EDD conformity, then its compatibility with the device. Finally, it automatically derives a test suite which can be used in test laboratories.

PI has also commissioned ifak to implement a new EDD import library, to ease the development of device descriptions by making it easier to adapt to device characteristics. The library will provide electronic device descriptions for PROFIBUS PA profile conformant blocks, which can be composed to a device EDD. For PI members, the new library will be available free of charge.

PROFINET PROMISES MOST ACROSS ENTIRE AUTOMATION SPECTRUM

A project supported by the German Federal Ministry of Education and Research, has confirmed that the individual Ethernet frame methodology of PROFINET offers the biggest performance potential in real machine and plant structures in automation.

In the field of complex machine / plant structures where tree and branch structures predominate, PROFINET's performance

was shown to be typically 50% better than other systems. In all but simple line structures where small data volumes per subscriber and simple sensor/actuators are typically encountered, PROFINET is already the fastest Industrial Ethernet technology. As networks get more complex it exceeds its nearest competitor by a wide margin. It was also confirmed that the PROFINET specification has room for optimization to

improve its performance in simple line structures. Work has begun on this optimization and a demonstration of the results will be a key feature of the booth at Hannover Fair in April. The measure involves optimising the isochronous real time mode of PROFINET and once complete will ensure PROFINET develops into the best performing Ethernet system in all types of industrial automation system.

The project, entitled 'Real-time Ethernet in sensor / actuator networking' was undertaken by

the Institute Industrial IT of the University of Applied Science of Lippe and Höxter (inIT). It was sponsored by the Federal Ministry of Education and Research and included partners MAZET GmbH, Phoenix Contact, Siemens and the Technical University of Berlin.

The following can be **downloaded here:**

- Potential Analysis
- Project Description
- Slides Realtime Ethernet
- IEEE - Limits of Increasing the Performance of Industrial Ethernet Protocols.



New Products

EMBEDDED PLC

A PROFIBUS interface is one of the features of the latest embedded SODIMM-PLC module. Equipped with direct IO and communications and programmable in Step7 this module can provide fast, deterministic and reliable hardware PLC control in a small form factor. It offers up to 32 digital inputs and 24 digital outputs directly on-chip. The IO interface is configurable to provide high level user functions like hardware counter modes. It's equipped with an interface that can easily share data with external devices using the PROFIBUS DP Slave interface.

PROFICHIP: +49 (0) 9132 744 200



SIPOS 5 FLASH

SIPOS 5 Flash actuators now come with integrated PROFIBUS DP-V2 services, including the 'standardized redundancy concept' according to RedCom, and 'time stamping'. A mixed mode operation of 'classic' hard wiring for actuator control and PROFIBUS for observing, diagnosis or service is possible. The VPC3+ chip from Profichip is used. The actuators are programmable and easily upgraded.

SIPOS: +49 (0) 9187 9227 0



HUMIDITY TRANSMITTER

Two Testo humidity measurement transmitters are now available with PROFIBUS interfaces. Series 6651 and 6681 are designed for monitoring critical climates in atmospheric processes as well as in compressed air. Parameterization can take place via PROFIBUS. Properties which are new for this class of instruments include the intelligence required for self-monitoring, so that early warnings of sensor drift can be transmitted, considerably increasing the availability and reliability.

TESTO: +49 (0) 7653 681 126



PROFINET I/O

The Inline installation system from Phoenix Contact has been extended to include the new IL PN BK DI8 DO4 2TX-PAC bus coupler, which acts as the link between an I/O station and PROFINET networks. Up to 61 standard and function terminals from the Inline automation kit, such as I/Os, counters or power switches, can be connected. It has eight digital inputs and four digital outputs.



Diagnostic LEDs provide support for quick startup and easy maintenance. In addition to standard functions like LLDP, PDEV and I&M the device supports the creation of redundant network structures (ASR). The GSDML description file required to configure the device can be downloaded:

PHOENIX CONTACT

PROFINET FOR TOSHIBA & MITSUBISHI DRIVES

ICC DESIGNS has announced PROFINET interfaces for Toshiba VF-AS1 and G9 adjustable speed drives and Mitsubishi 700 Series inverters. Flash-Enabled Embedded Web Servers allow unit configuration and real-time parameter monitoring/control with



direct data access and control via standard web browsers. Configuration files are stored in XML format and can be transferred to/from a PC using FTP. Configuration files can also be viewed and edited via standard text editors, XML editors and web browsers. As new firmware becomes available, the unit can be upgraded.

ICC DESIGNS: +1 608 831-1255

PCI-EXPRESS PROFIBUS

PROFIBUS DP board DF PROFI II will soon be available in a PCIe version for use in PCs. The board supports DP-V0 Master class 1 and DP-V1 Master class 2 as well as DP Slave modes. The watchdog function with physical

PROFIBUS line disconnection for Master class 1 redundancy concepts provides a seamless switch over to a redundant stand-by system. A full graphical configuration tool minimises configuration. Extensive download, analysis and control functions permit an efficient check of the network. An OPC Server, LabVIEW PROFIBUS VISA Driver and FDT 1.2 Communication DTM extend the board's field of application.

COMSOFT: +49 (0) 721 9497 0



LEVEL GAUGE

Prosonic S is an ultrasonic level measurement device with up to 6 output relays and 4 digital inputs. The PROFIBUS DP version is able to function like remote IO for small remote control applications. All relays and digital inputs of the unit are controllable by PROFIBUS DP via standardized function blocks independent of the measurement signal. The device is fully certified to PROFIBUS Profile 3.

ENDRESS + HAUSER: Andreas Möller



PN/PB PROXY

COMSOFT has a powerful new PROFIBUS proxy for PROFINET IO. The hat rail module has one PROFIBUS DP interface and four PROFINET IO interfaces, plus an RS232 port for commissioning and diagnosis. The proxy integrates PROFIBUS DP devices without modification or adaptation into a PROFINET IO network. It implements PROFIBUS diagnosis functions and has additional features such as a configurable PROFIBUS DP Master.

COMSOFT: +49 (0) 721 9497 0



MORE PRODUCTS ON-LINE

Our on-line Product Guide now has over 2500 product entries. Search on keywords, text or profile.

PI World

NEW PI TRAINING CENTER FOR USA

RC Systems, in Johnson City, Tennessee, USA, has been accredited as a PI Training Center for PROFIBUS DP and PA.



RC Systems is owned by Ron Mitchell, who recently retired after twenty-four years with Texas Instruments and Siemens, where he was involved in automation product development and marketing. He has over fifteen years of communications experience and for his last ten years with Siemens was a member of the PROFI Interface Center (PIC) in Johnson City, actively involved in PROFIBUS promotion and support.

Working in conjunction with the PTO, he has given dozens of PROFIBUS seminars in North America. Ron was one of the original developers of the PROFIBUS Certified Engineer Class, which is now offered around the world. He taught this class for the PIC for six years. He is also the author of the ISA book 'PROFIBUS: A Pocket Guide'.

RC Systems offers a wide range of services for PROFIBUS vendors and users, including:

- > Product development advice
- > Network architecture design
- > On-site certification training
- > On-site maintenance & troubleshooting training
- > Network analysis and troubleshooting.

RC SYSTEMS

PI World

SOUTH EAST ASIA

The PROFIBUS booth at CIA 2007 in Singapore attracted over 400 visitors, who



were shown that PROFIBUS is the leading fieldbus in South East Asia. Apart from awareness of PROFIBUS, there was also much awareness of the benefits of PROFIBUS membership in the area. A new demo system was on display, showing a multi-vendor combination of PROFIBUS DP devices. The PROFIBUS



Association also presented 4 papers during the conference on the following topics: PROFIBUS Diagnostics Tools; Solutions for the World of Automation; Asset Management; Safety Life Cycle.

CHINA 1

The first Certified PROFINET Engineers course in China was held in December 2007 in Beijing, China. After 3 days of intensive training by PROCENTEC the participants faced a tough exam which all of them passed with more than average points. The first PROFINET Engineers are now ready to serve the Chinese market with this exciting new automation technology. More PROFINET sessions will be organized in China during 2008. **List of certified engineers.**

UK

The PROFIBUS Group in conjunction with the PI Competence Center at Manchester Metropolitan University (MMU) and PROCENTEC of the Netherlands is organising the first ever Certified PROFINET Engineer Course to be held in the UK at MMU on 12 to 14 May. It will provide a detailed technical appraisal of PROFINET technology and the advantages it offers over other network systems. At the end of the training sessions there will be an exam. Participants who pass gain the title 'Certified PROFINET Engineer' and are awarded an official certificate. Successful participants will be able to design a proper application. More information from the PROCENTEC

website. A registration form can be **downloaded here.**

FREITAG FOR KEYNOTE: Jörg Freitag, the new Deputy Chairman of PI, will deliver the keynote speech at the 2008 PROFIBUS conference in June.

POLAND

A 2 day conference in Krakow in January was attended by 65 engineers from across Poland. Chairman Dariusz Germanek presented the forthcoming activities of PROFIBUS PNO Poland. On the first day, participants also took part in practical demonstrations by the Polish PICC of the diagnostics capabilities of PROFIBUS DP and PA. Next day, members – currently there are more than 20 – presented their own products and solutions. The Technical University showed its projects and ideas in support of the common effort in Poland. The popularity of PROFIBUS



and PROFINET is constantly increasing in Poland. **More information.**

NORTH AMERICA

A major announcement about a major USA vendor making a strategic committing to PROFINET as its Industrial Ethernet backbone is expected shortly. An even bigger program of nationwide Road Shows, Workshops and Training Classes then 2007 has kicked off for 2008. **Details here.** Meanwhile Executive Director Mike Bryant has taken up his duties as acting Chairman of PI (see report Page 1) by introducing new Deputy Chairman Jörg Freitag at a special meeting of PI Chairman held in Karlsruhe in January. Bryant is expecting to lead some exciting new initiatives, including a brand new web site. PROFIBlog continues apace after a Christmas lull - the latest hot topics are Anniversaries and Lighthouses. See what these have to do with **automation here.**

CHINA 2

The Chinese RPA, is organizing 'Chinese PROFIBUS and PROFINET Experts Days 2008' during March and April. These are Road Shows taking place in 3 cities within 1 week! The

goals are to promote PROFIBUS and PROFINET technology in China and generate business opportunities between the participating companies and the audience. Presentations will be given by expert speakers and there are opportunities for RPA vendor



members to show their products and services in a table top exhibition. The dates of the Road Shows are 31 March, 2 April and 4 April 2008. **Dennis van Booma** has more information.

BRAZIL

During the ISA Show Brazil in November 2007, the Brazil Latin America RPA organized another Case Study Seminar, aimed at showing successful applications of PROFIBUS. Cesar Cassiolato, Director of Smar and the President of Brazil Latin America RPA, opened by explaining PROFIBUS technology and its installation. The first Case Study, presented by Dionísio Vieira of Altus, highlighted the modernization of the Petrobras Pargo Platform using PROFIBUS and AS-i. The second was presented by Paulo Lattaro from Atma about the automation solution used at the Alto Alegre Sugar and Alcohol Mill, Unit Santo Inácio. The third Case Study, by Carlos Henning of Coester, was related to a PROFIBUS application in Explosive Atmospheres. The last Case Study presented by Marcus Vicinius Ribeiro was about the use of PROFIBUS in the Sugar and Ethanol Industry, involving the System302 of Smar. It showed the importance of ethanol in the energetic market and the importance of ethanol worldwide and the PROFIBUS technology in this market.

STORIES ALWAYS WELCOME

If you're a member of a Regional PI Association you can have your PROFIBUS and PROFINET stories published free here in PROFINEWS.

In 2008, the distribution list is being considerably extended. We particularly welcome product news, and case studies. RPAs can have their successes and achievements reported here also.

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Published by: PNO
Haid-und-Neu-Str. 7
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