Update and The Way Forward

Jörg Freitag

PI Chairman

- Figures
- Organization
- PROFINET
- PROFIenergy
- FDI

Business figures

PROFIBUS

Figures
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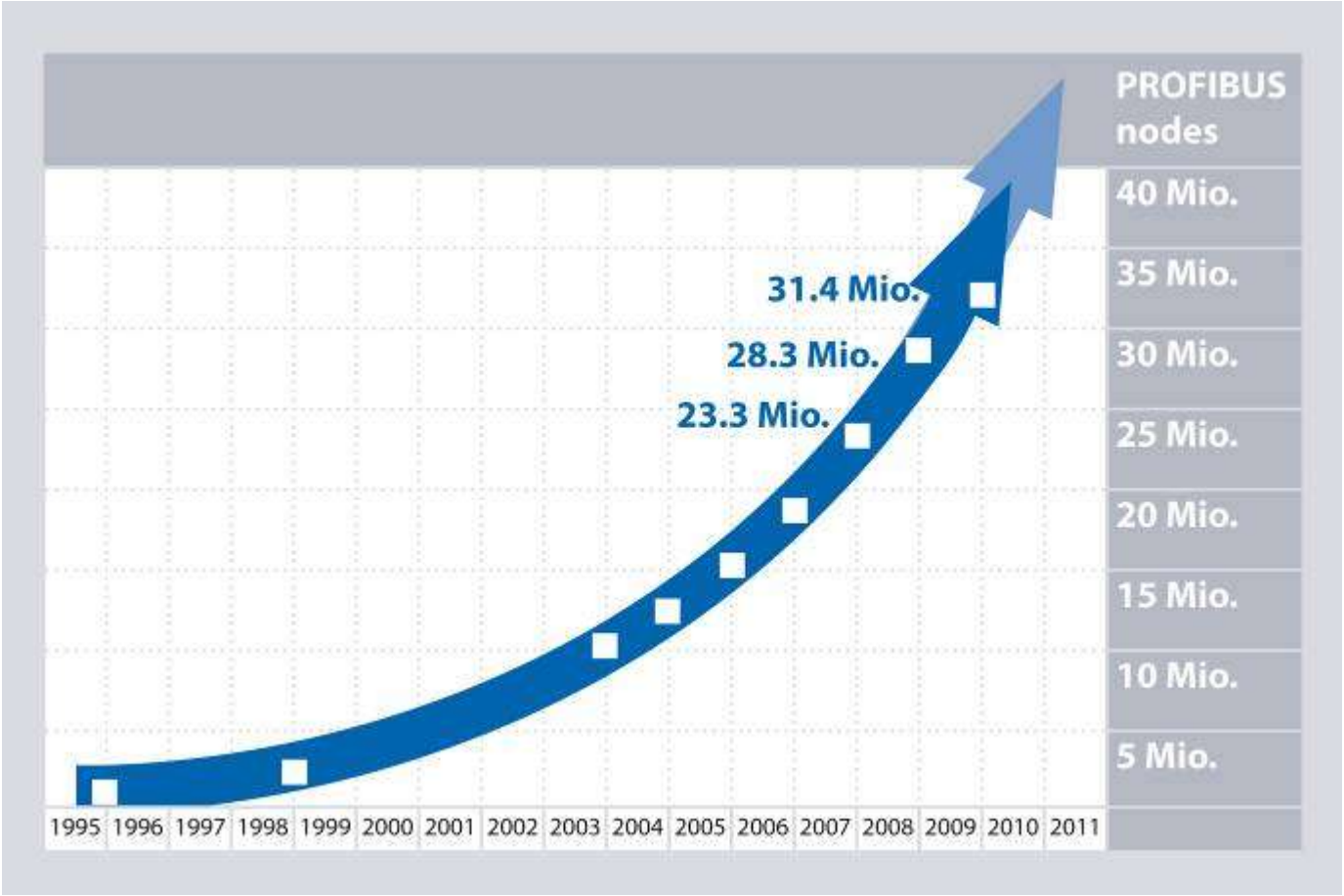

PROFIBUS in PA

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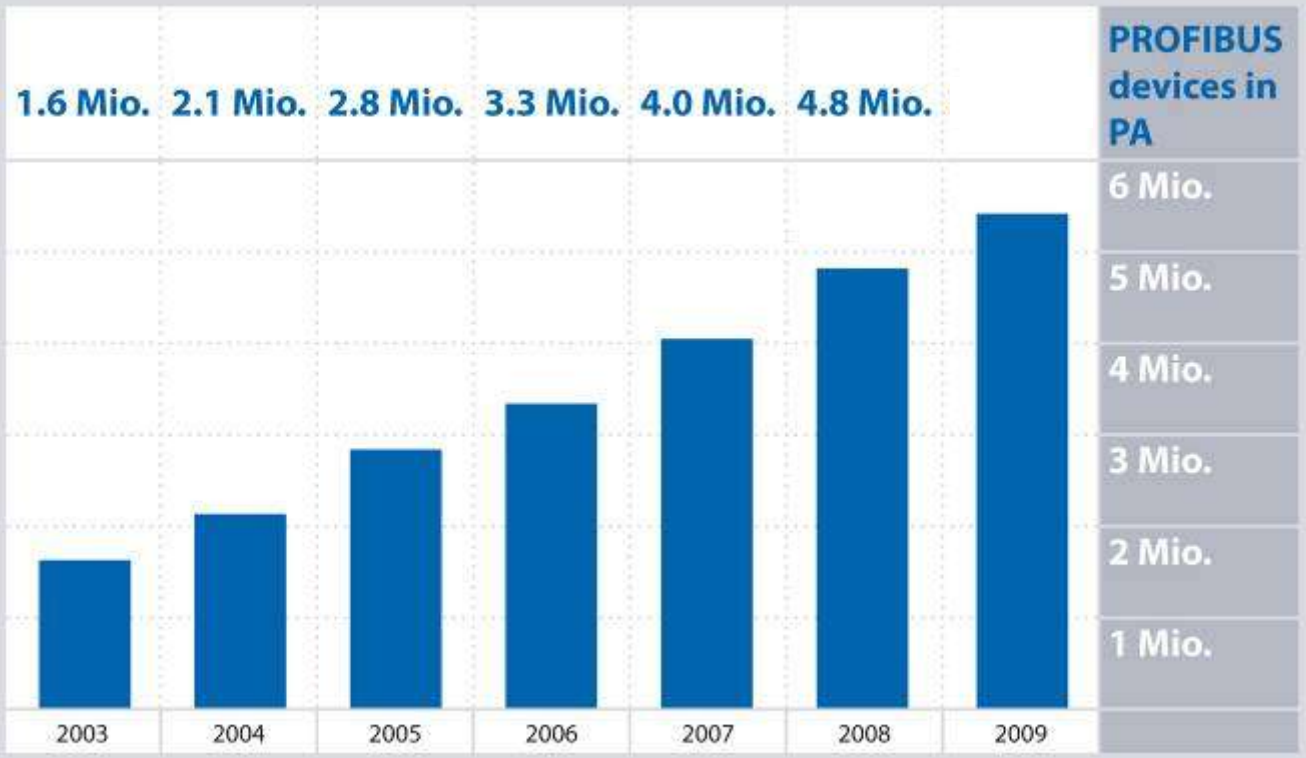

PROFINET

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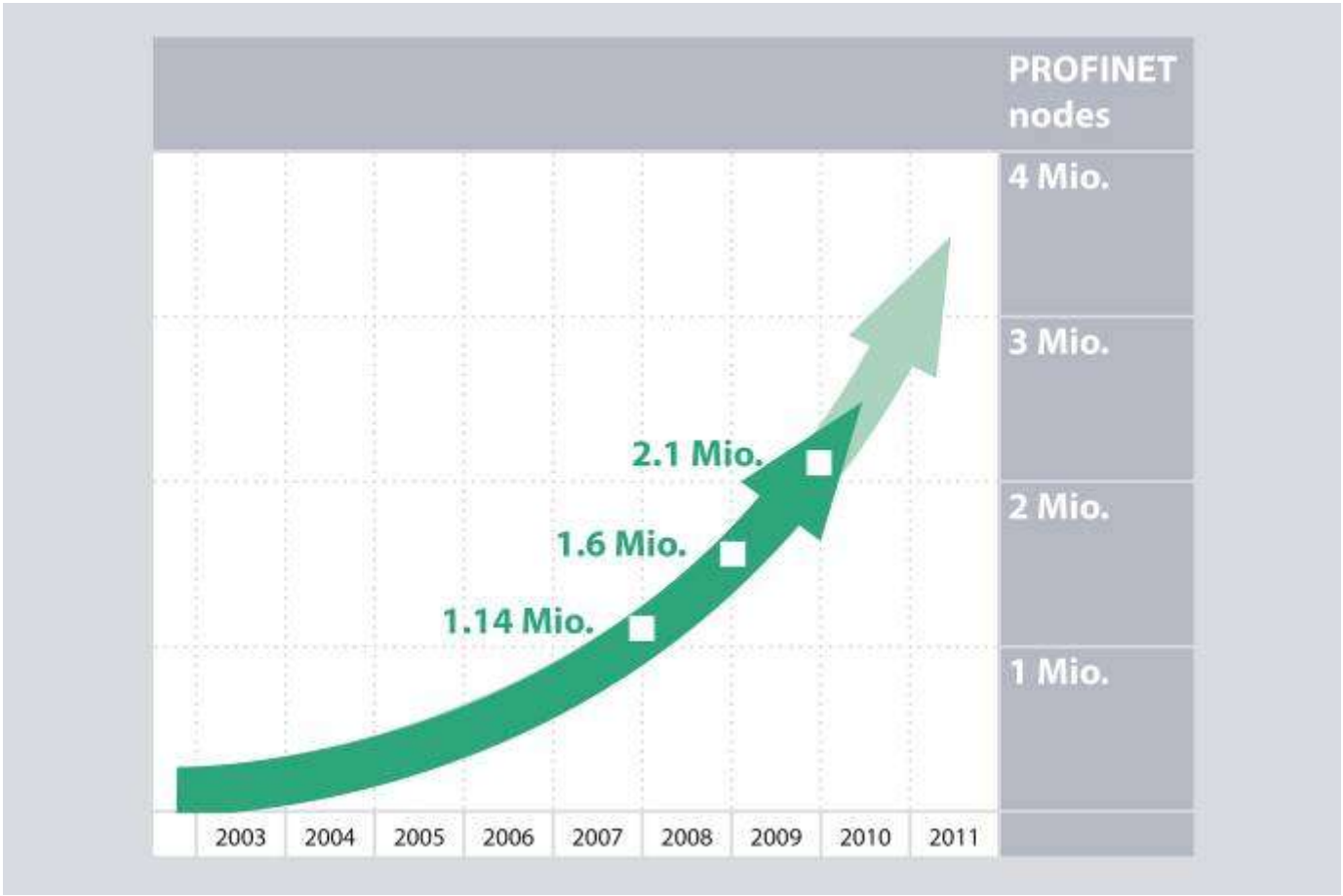

PROFINET on the rise

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2007: Every 15th device sold with PI technology (PB/PN) is PROFINET

2008: Every 12th device sold with PI technology (PB/PN) is PROFINET

2009: Every 7th device sold with PI technology (PB/PN) is PROFINET

PROFIsafe

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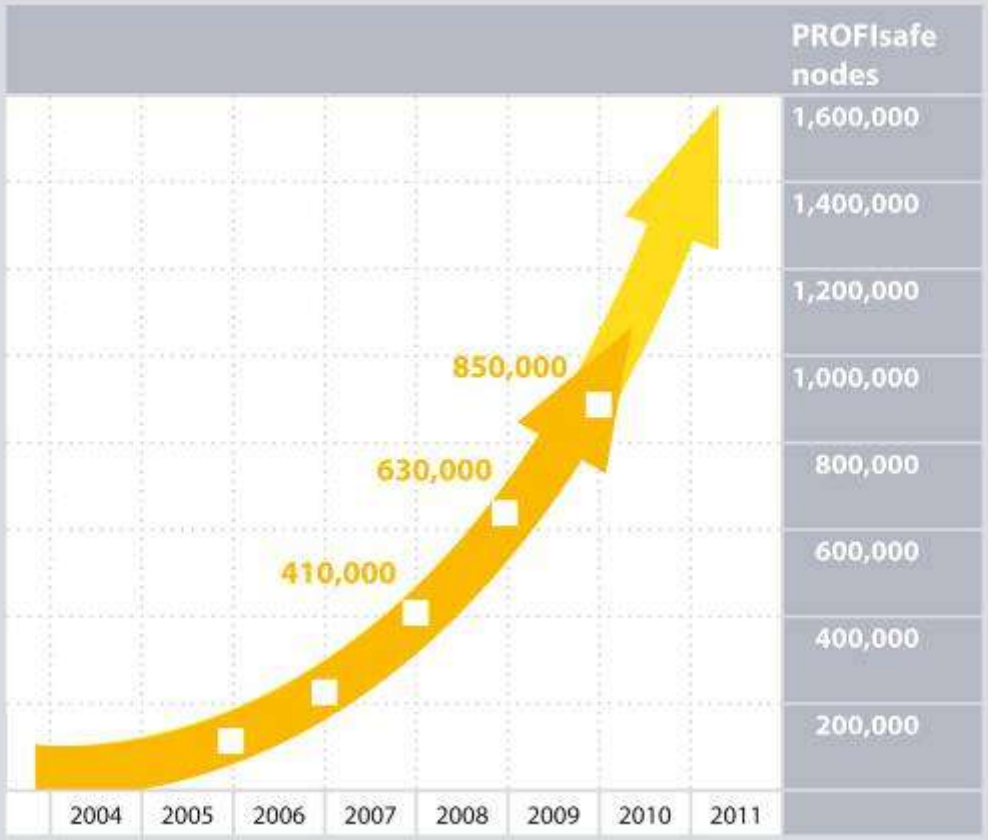

IMS Research: Industrial Ethernet

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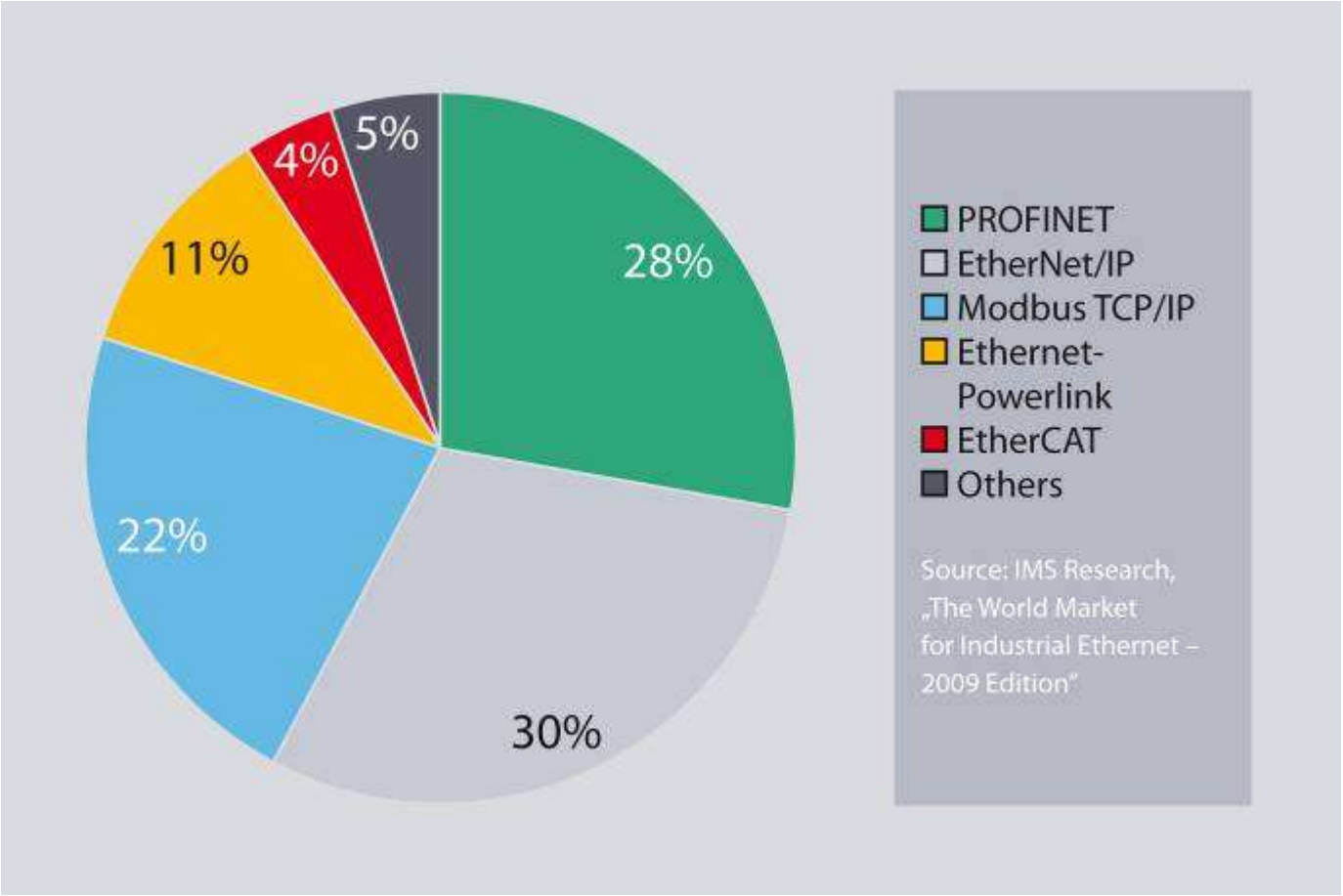

Organization

PI Worldwide Support

- 27 Regional PI Associations (RPA)
- 40 PI Competence Centers (PICC)
- 18 PI Training Centers (PITC)
- 10 PI Test Laboratories (PITL) for Certification Tests

Figures
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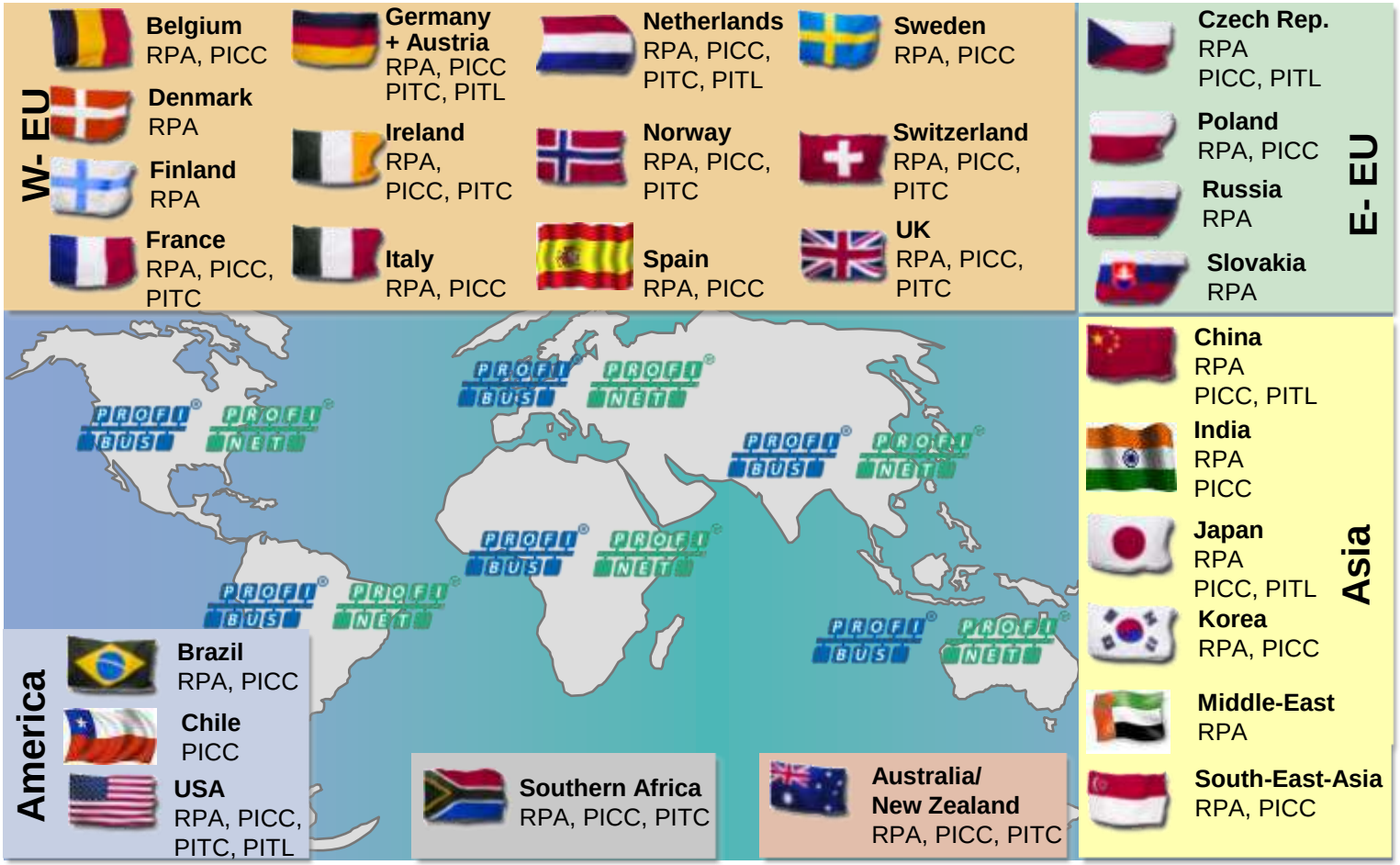

IO-Link in PI

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TC6
IO-Link
Joachim Lorenz

- **WG 1**
  Technologie
  Frank Moritz
- **WG 2**
  Marketing
  Christian Gemke
- **WG 3**
  Integration
  Jürgen Maul
- **WG 4**
  Profile
  Jürgen Maul

- Omission of admission fee
- Since 1 Jan 2010, annual PI member fee only

New Corporate Design

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PROFINET

Key Markets for PROFINET

Figures
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Factory Automation

- Automotive Industry
- Machine tool industry
- Logistic & Transportation & Material Handling
- Electro Industries
- Textile Industries

Motion Control

- Wood-, ceramic-, glass processing machines
- Plastic injection molding machines
- Packaging machines
- Printing presses

Process Automation

- Oil & Gas, Energy
- Chemicals
- Pharmaceutical
- Mining & Metal
- Food & Beverage
- Water & Waste Recycling

PROFINET in process automation

Figures
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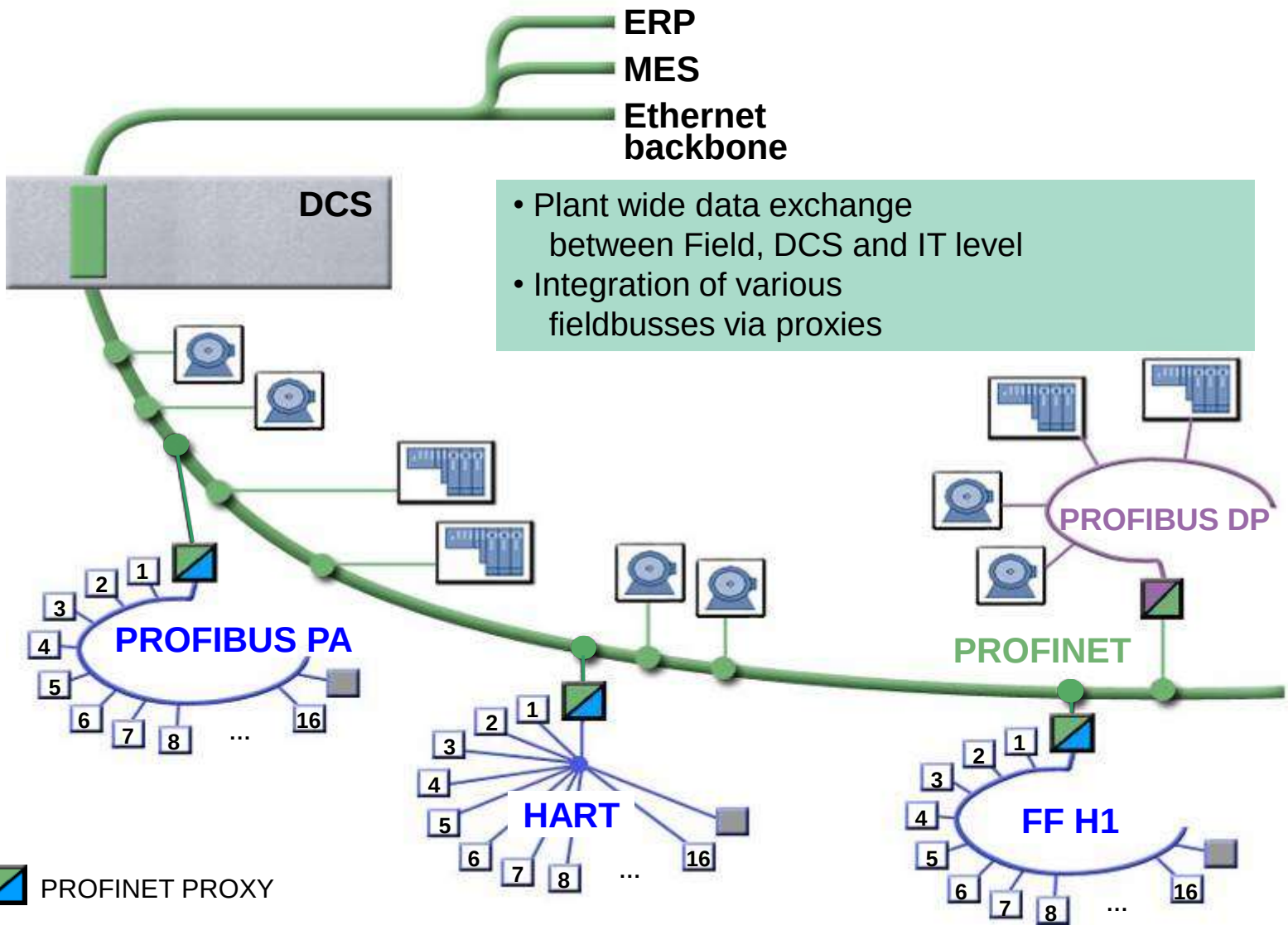

The simple way to PROFINET

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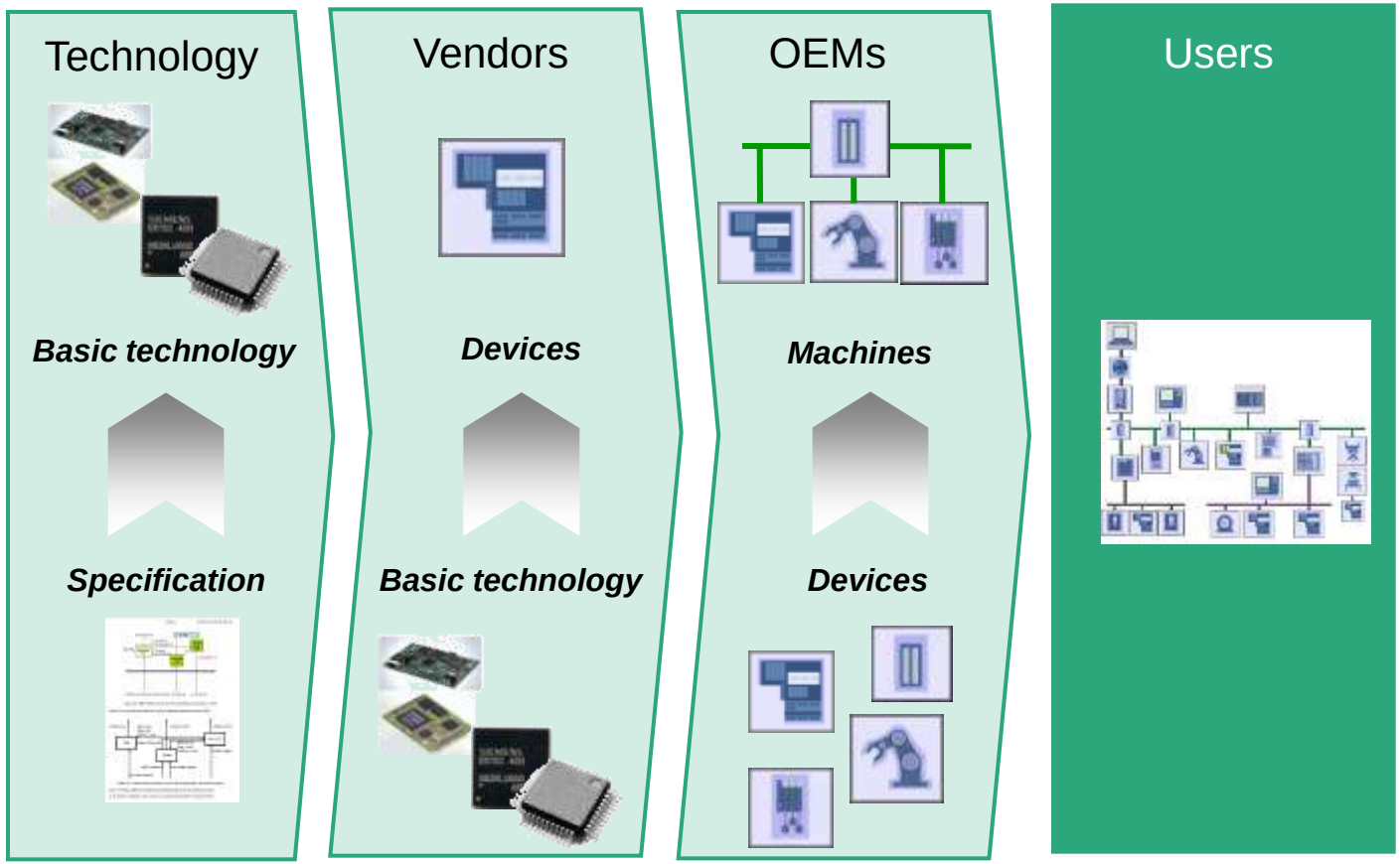

All basic technologies are available

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Software stack
for different operating systems

ASICs
for an optimum integration

PC boards
for the implementation on a PC

Modules & boards
completely executable hardware for end devices

PROFINET technology provider

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Hans-Jürgen Hilscher
Geschäftsführer
Hilscher Gesellschaft für Systemautomation mbH

Michael Volz,
Geschäftsführer
HMS Industrial Networks GmbH

Wolfgang Hopfes
Head of Product Marketing
Softing AG

Klaus-Peter Willems
Geschäftsführer
TMG Technologie und Engineering GmbH

„Die TMG Technologie und Engineering GmbH ist Dienstleister in der industriellen Kommunikation und unterstützt die Technologien Profinet, Profibus und IO-Link aber auch andere Feldbus- und Ethernet-Systeme auf der Basis von eigenen Protokoll Stacks und Engineering Tools. Wir integrieren die Technologien in die Geräte unserer Kunden. Insbesondere für Profinet realisieren wir Profinet-Geräte mit RT-Protokoll auf kleinen Microcontrollern auch mit zwei Ethernet-Boards."

2010 – Year of the Tiger

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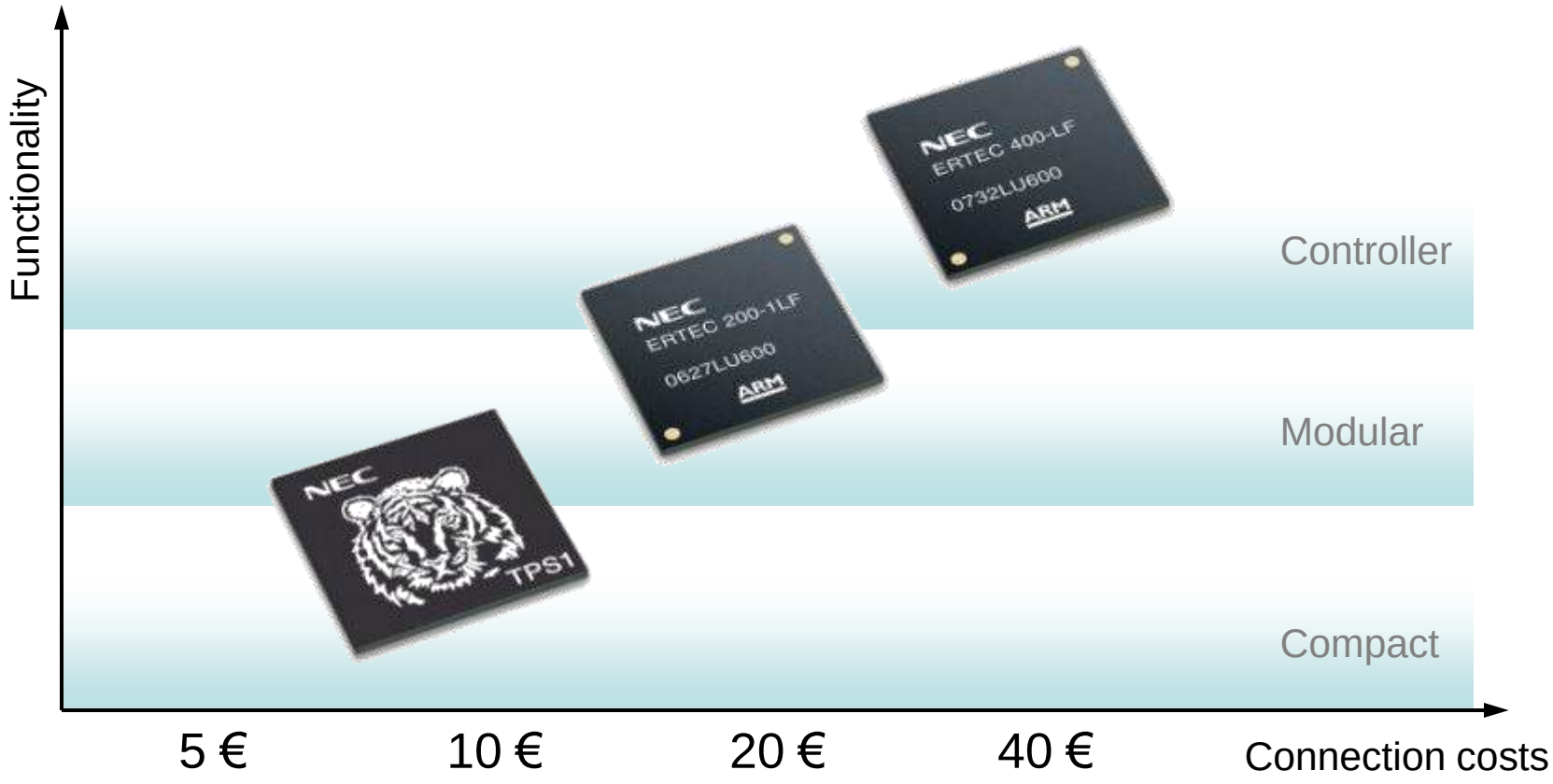
- Since February 14th, 2010 according to the Chinese moon calendar
- Other years of the tiger took place in 1986 and 1998
- Citation: „Years of the tiger are typically characterized by dramatic changes or even revolutions.“
- Besides impulsiveness and uneasiness the tiger is also characterized by energy, fortitude and optimism …

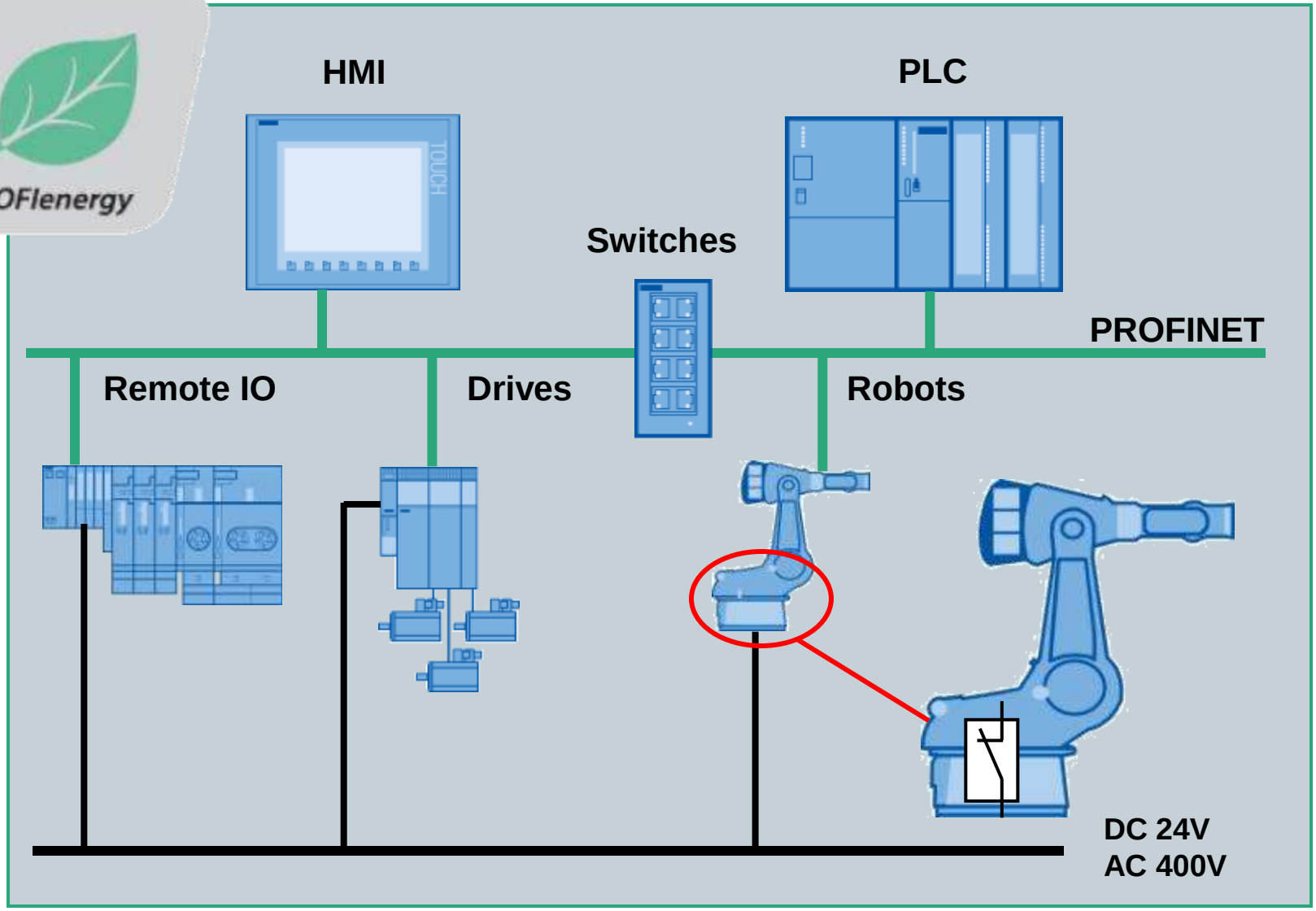
Source: Spiegel Online, February 17th, 2010, „Spekulanten wetten auf das Jahr des Tigers“, Author Claudia Wanner

Positioning of new TIGER ASIC



PROFIenergy

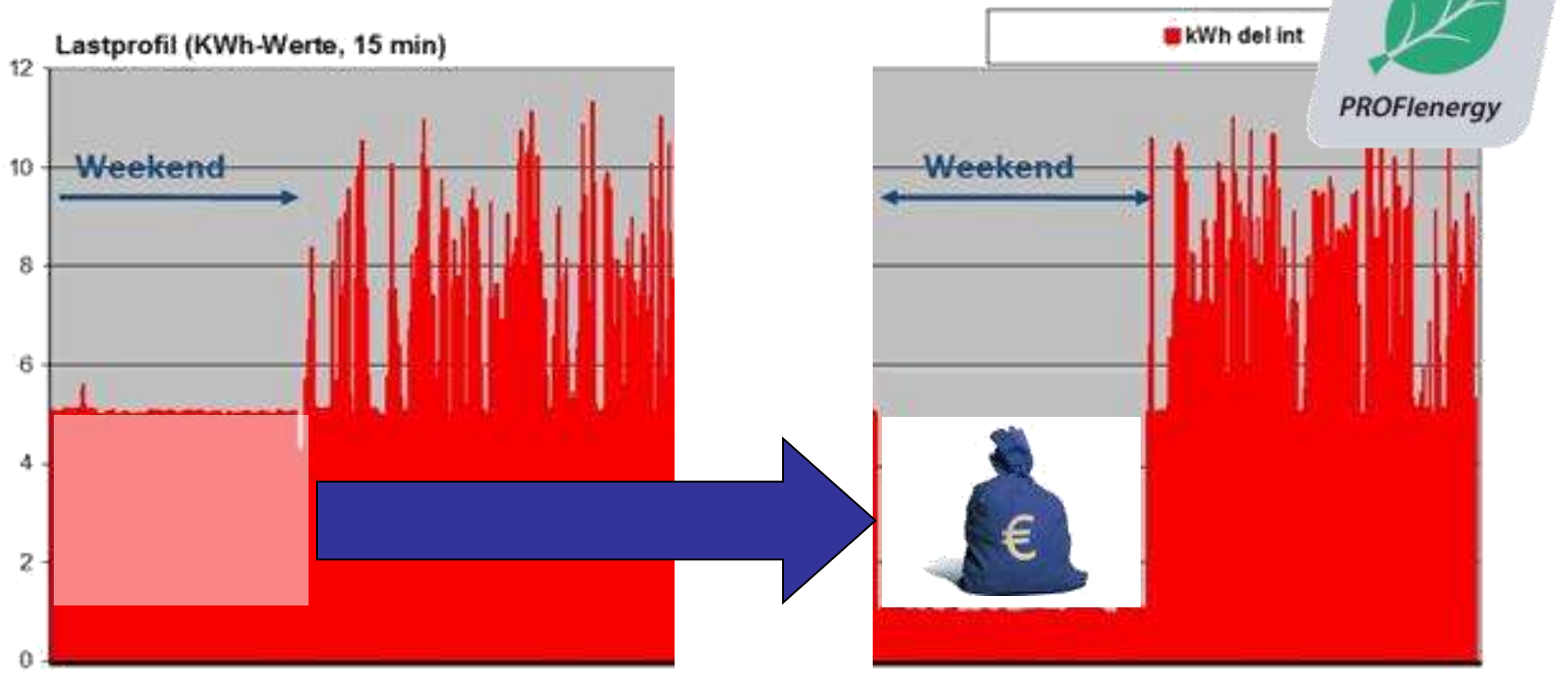
PROFIenergy Profile



Competitive edge with PROFIenergy

Energy consumption without PROFIenergy

Reduced energy consumption with PROFIenergy



Energy saving of up to 80 per cent during shutdowns!

The PROFIenergy working group

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SIEMENS

PHOENIX CONTACT

Rexroth
Bosch Group

MURR ELEKTRONIK
stay connected

Lenze

ABB

PROFIenergy

SEW EURODRIVE

BOSCH

Danfoss

SCA SCHUCKER

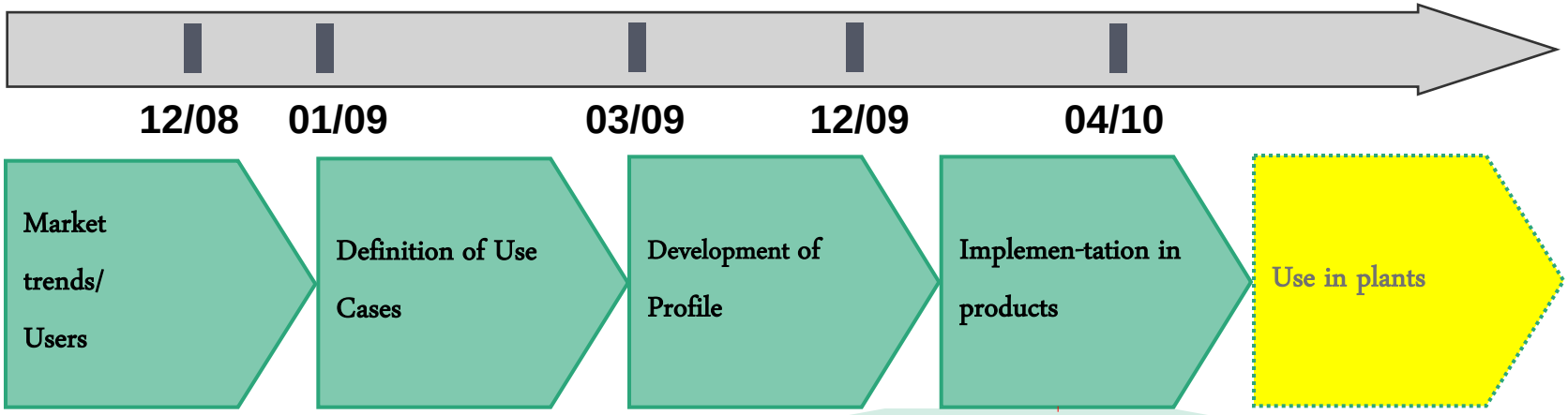
hilscher
COMPETENCE IN COMMUNICATION

AIT Institut für Automation & Industrial IT FH Köln

ifak

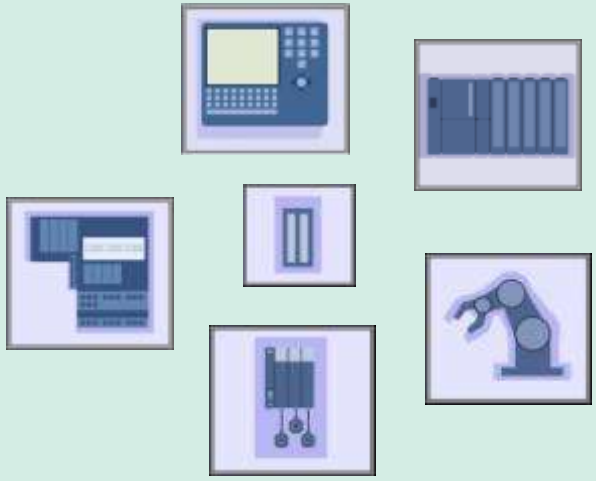
WZL RWTH AACHEN

Products with PROFIenergy



PROFIenergy

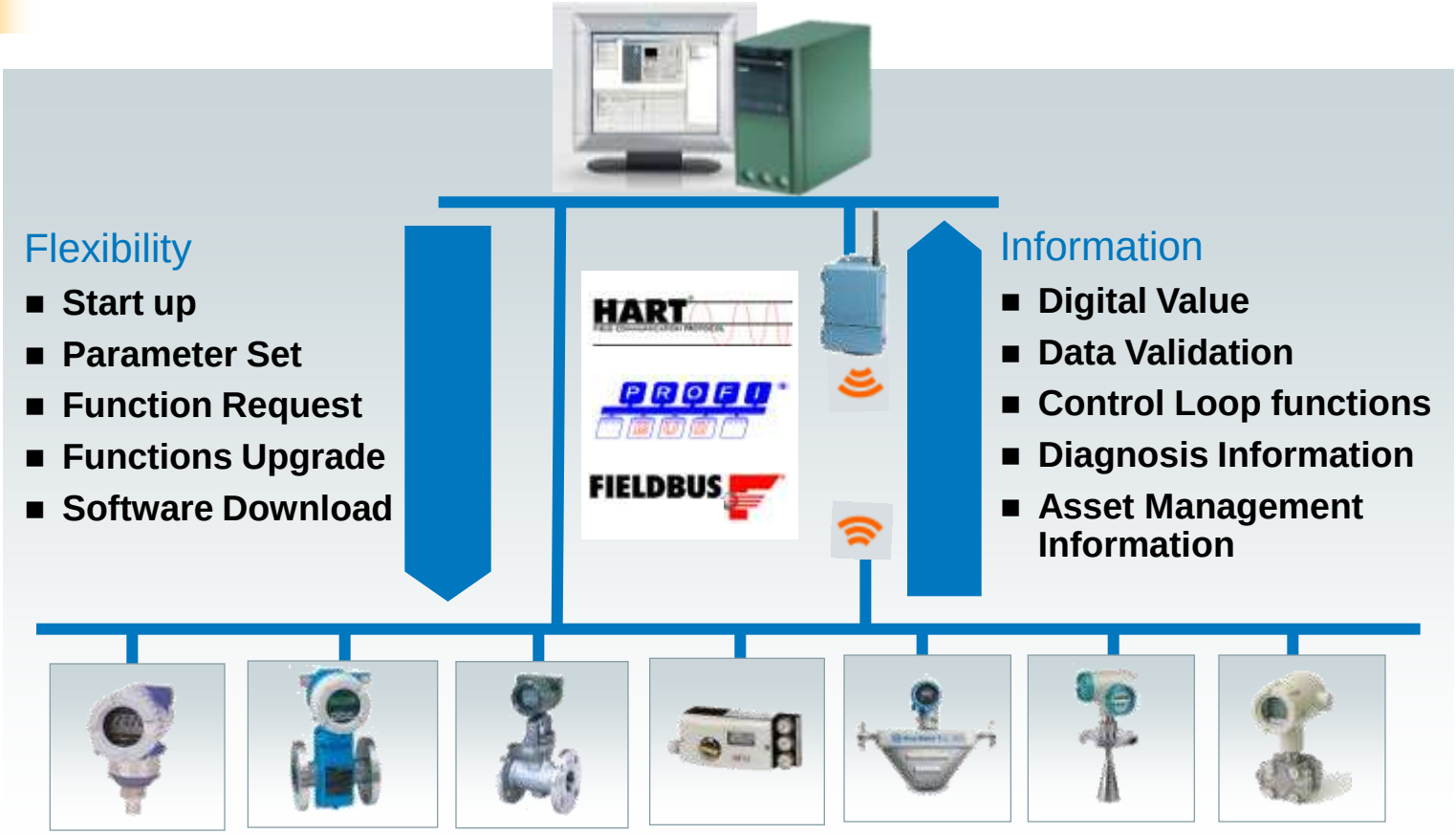
- Robots
- Drives
- Laser
- HMI
- Remote I/O



Products with "PROFIenergy" onboard will be available on the market in 2010

FDI Cooperation

Intelligent Sensor Systems communicate with the Automation System



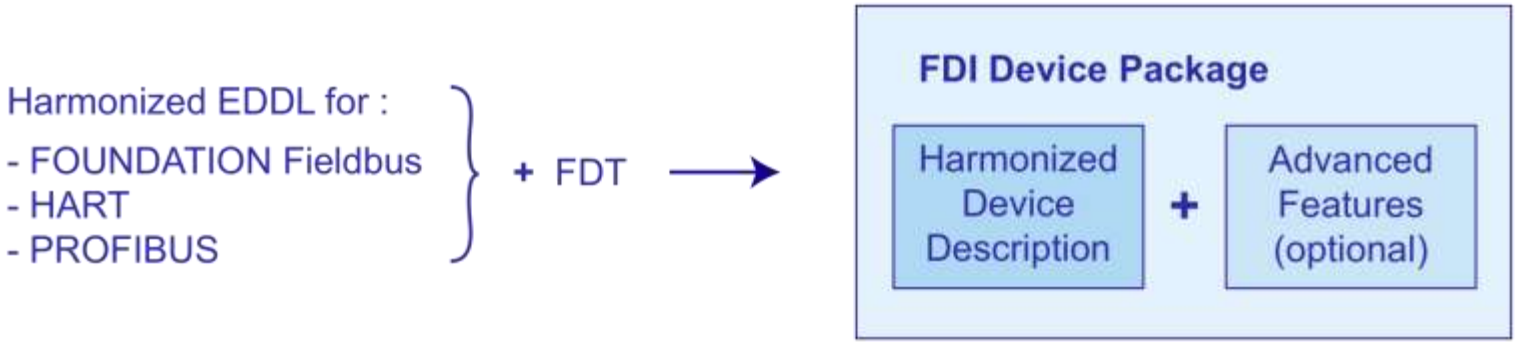
Field device Integration wired or wireless is crucial

Common Agreement to form FDI Cooperation

- Global automation suppliers unite to speed the harmonization of FDT and EDDL technologies for the benefit of all users

Common Agreement cont.

- Standardized integration of field devices based on a harmonized EDDL and FDT technology
- EDDL for HART, PROFIBUS, and FF will be harmonized
- Scalable for simple to sophisticated devices
- Compatibility with already installed devices
- Access to devices via FDI Device Packages



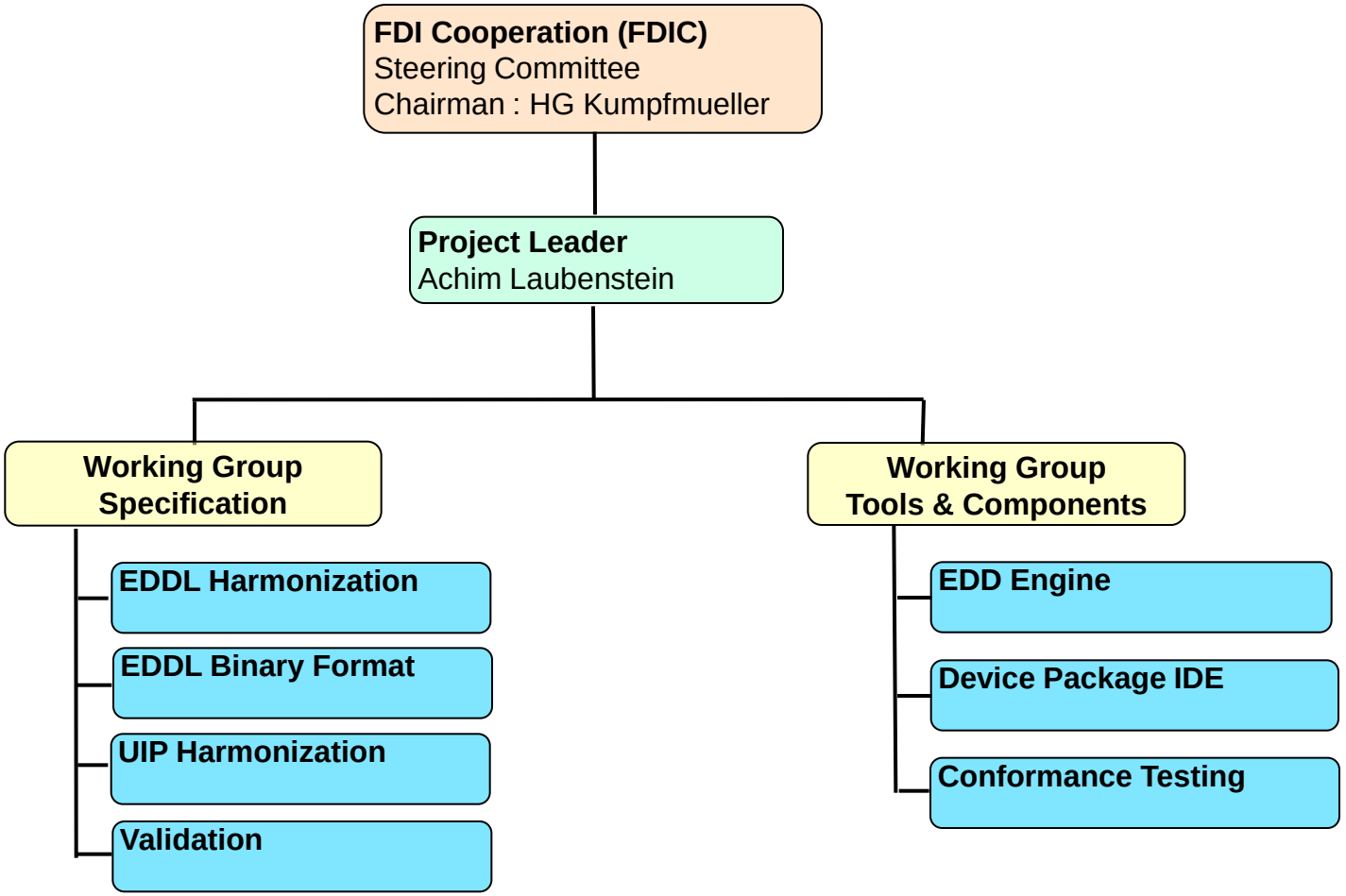
Technical Update

- Time schedule

Draft FDI specification:	now available
Final FDI Specification:	End of 2010
Common interpreter:	End of 2011
Development and test environment:	End of 2011

Project organization

More than 25 specialists of the international vendors are working on various subprojects



Summary

- FDI combines best of both worlds EDDL and FDT/DTM
- All DCS Vendors are committed to support FDI
- With delivering the FDI device package, device vendors have access to all major DCS systems
- Main Customer associations NAMUR and WIB welcome and support FDI
- From simple to complex : FDI supports the whole range of devices.
- FDI is Microsoft Operating system independent.

PROFIBUS & PROFINET online

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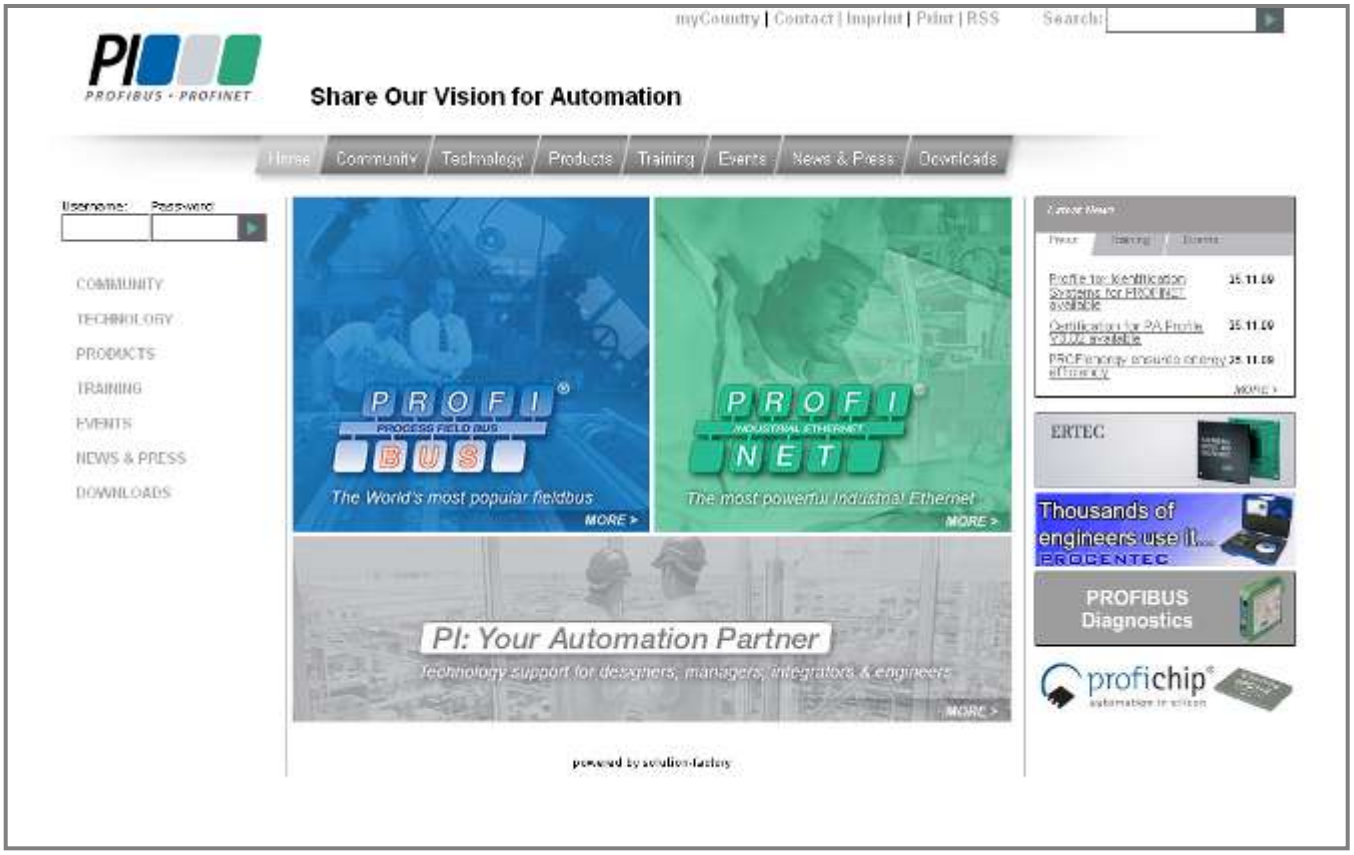
www.profibus.com **www.profinet.com**



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