

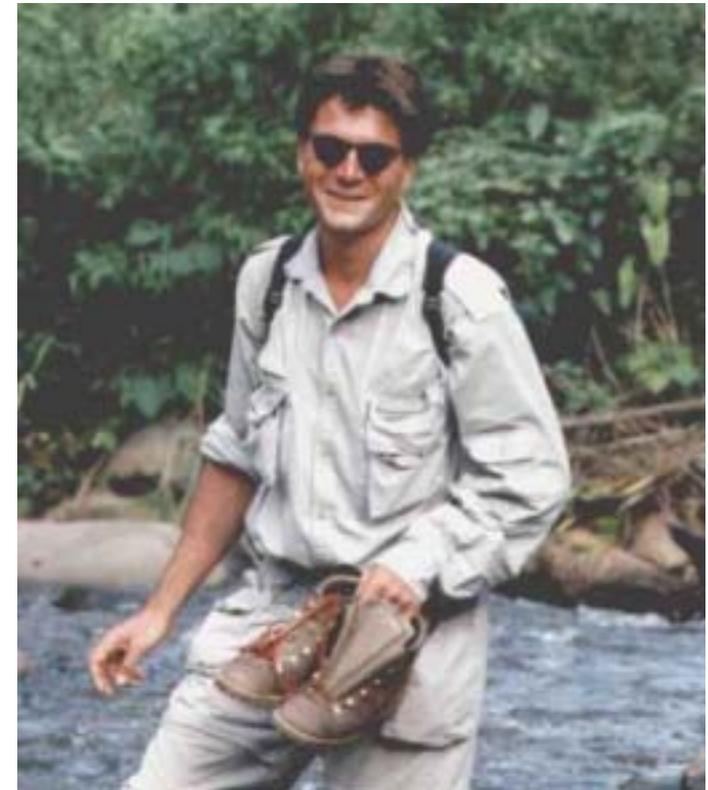
**ISA03-S048**

**PLCopen adds independent  
XML Schemes to IEC 61131-3**

**Eelco van der Wal  
Managing Director PLCopen**

## Who am I ?

- Eelco van der Wal – world citizen
- Out of the Netherlands
- 17 years in control
- 7 years with PLCopen



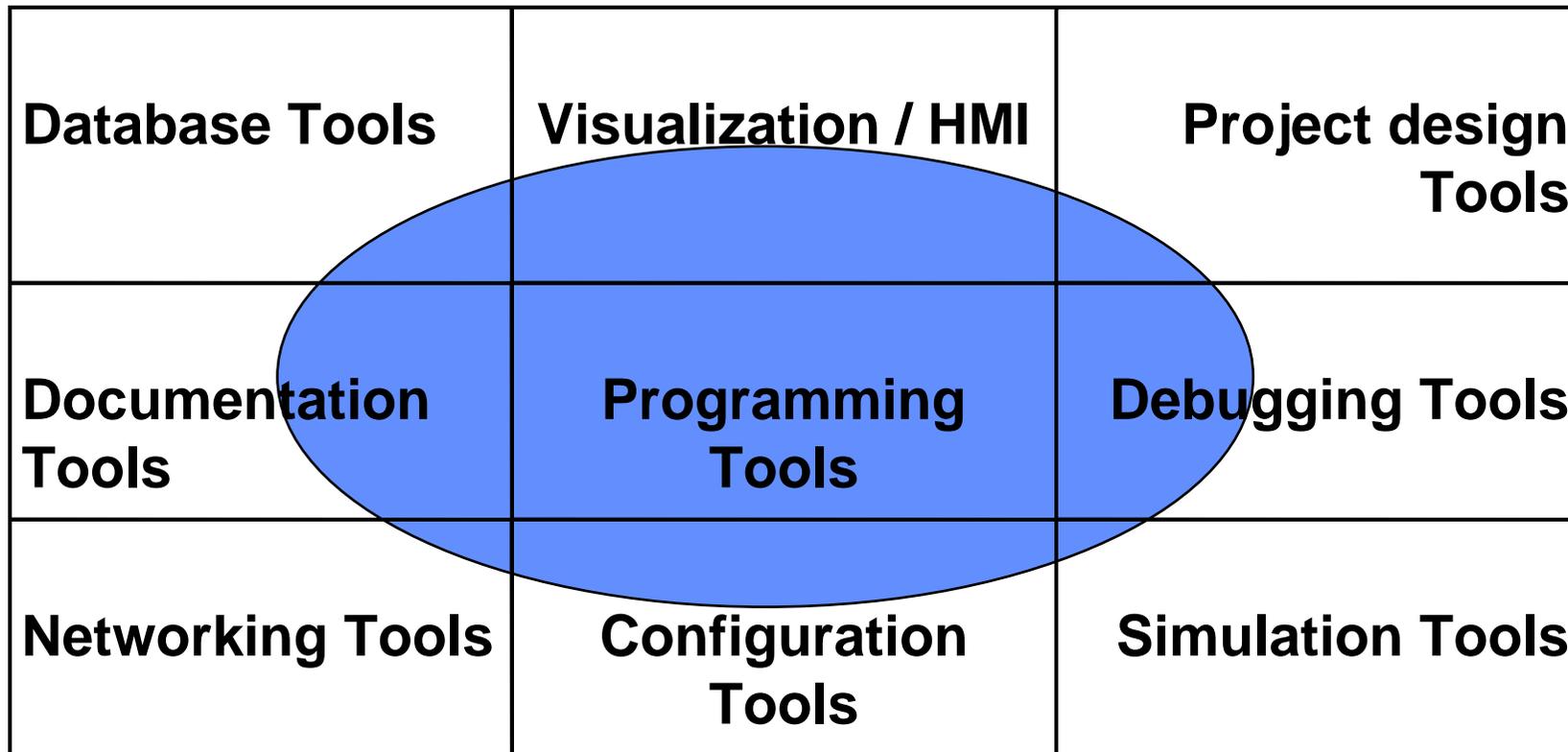
# What is PLCopen ?

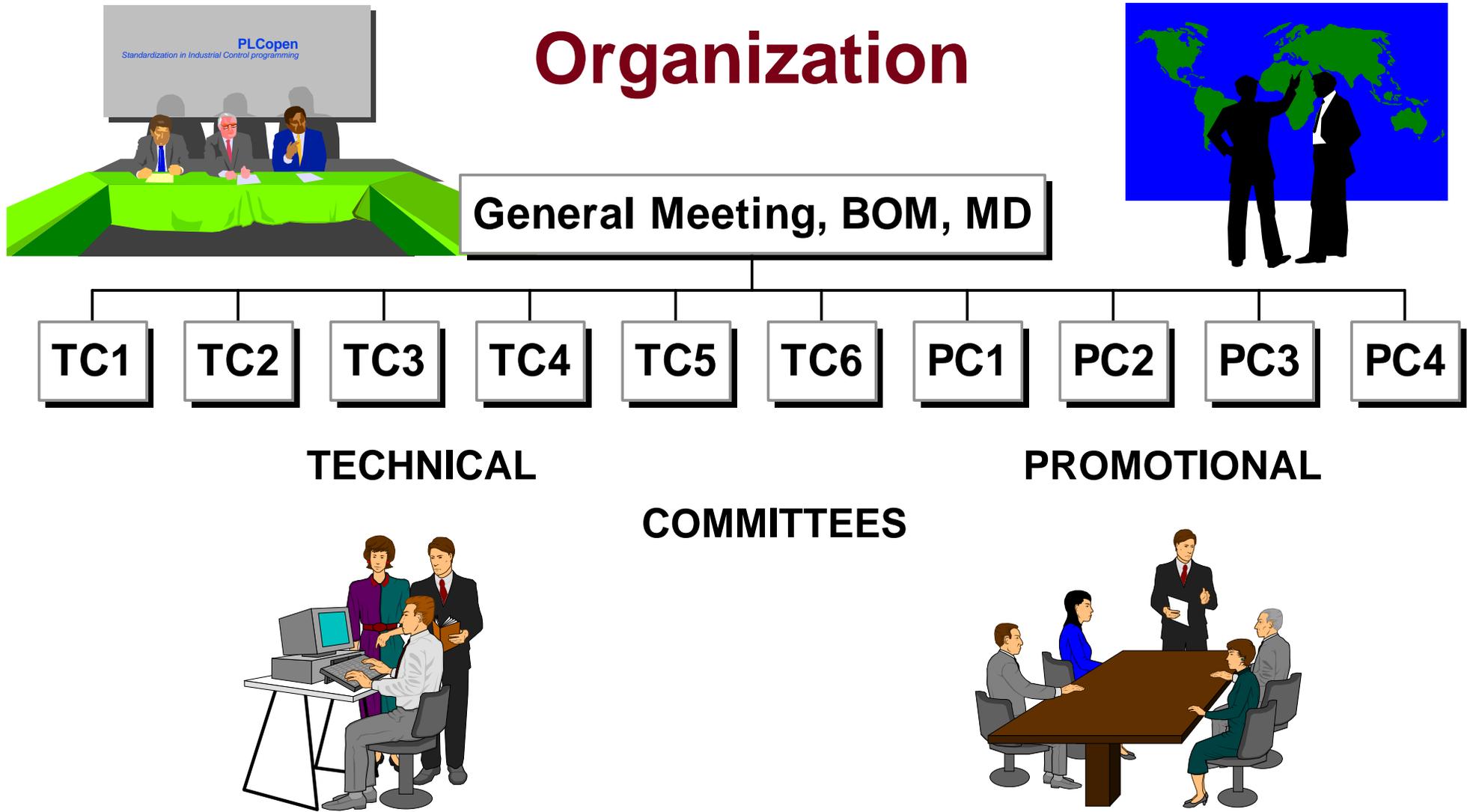
## The Association PLCopen

Harmonizing the way people look to control

*providing you support for multiple platforms..*

# Programming in its environment



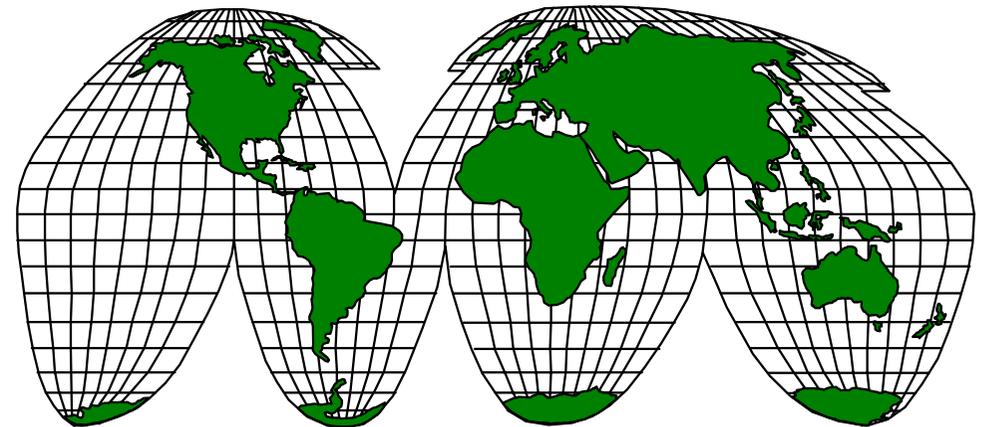


## TC6 – XML

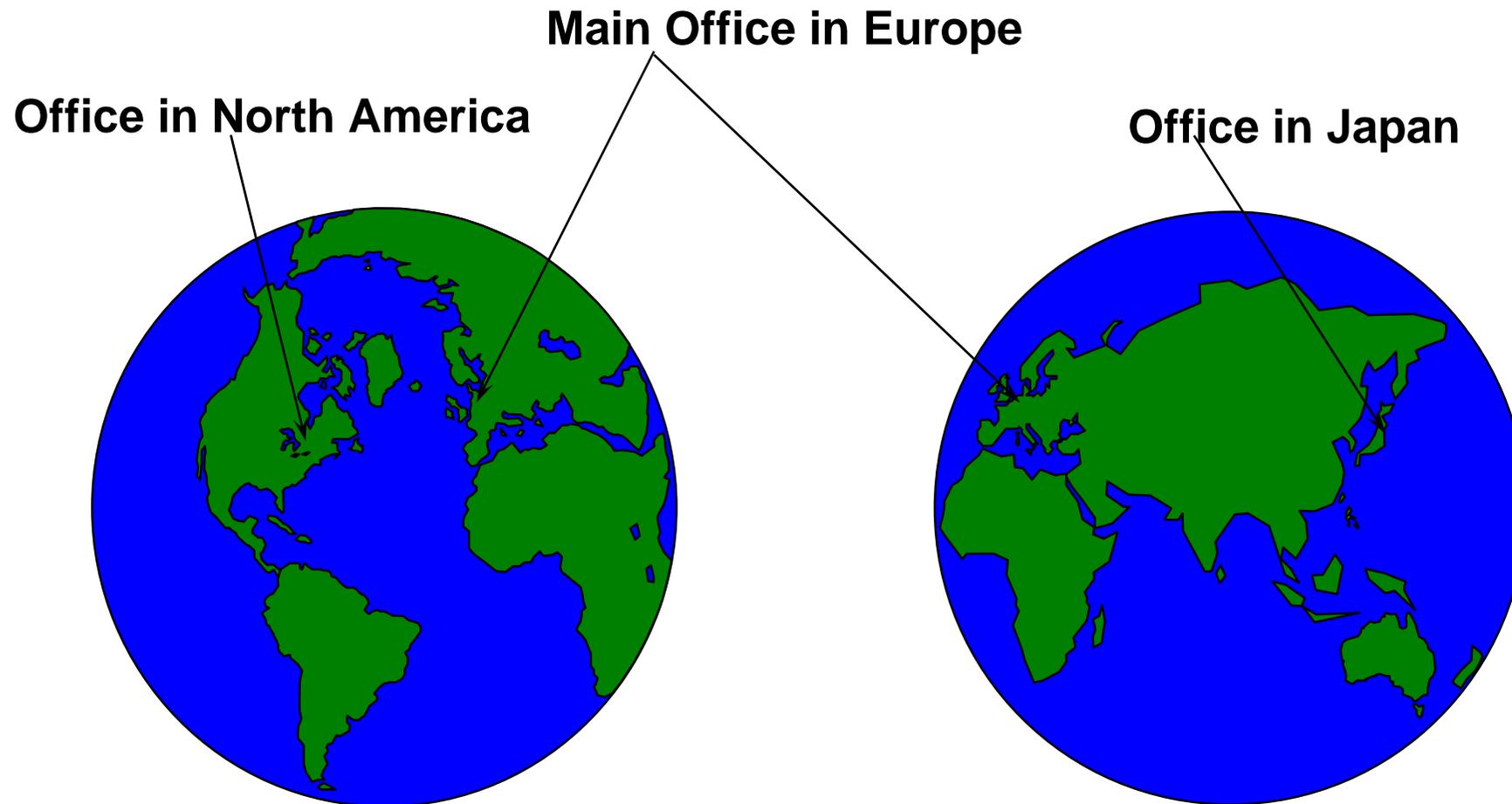


# PLCopen as a World-wide association

- > 100 members (May 2003)
- from 21 countries all over the world
- Suppliers, institutes and users
- See newsletter / website for up-to-date list



# PLCopen as a World-wide association



# **PLCopen adds independent XML Schemes to IEC 61131-3**

## Short introduction into XML

- XML = eXtended Markup Language
- Provides the basis for HTML (Hyper Text Markup Language)
- More info: [www.xml.org](http://www.xml.org)

## **Advantages XML**

- 1. Extendable**
- 2. The data included can be checked for consistency with the scheme provided**
- 3. Different schemes provide a possibility to check the incompatibilities**

## Features of XML

**By separating structure and content from presentation, the same XML source document can be written once, then displayed in a variety of ways:**

- **on a computer monitor**
- **within a cellular-phone display**
- **translated into voice on a device for the blind**
- **and so forth.**

# TC6 – XML

***Opening up the development environments  
by specifying XML formats for IEC 61131-3***

## **TC6 – XML : status**

- **Kick off June 26, 2002, Schneider Electric, Seligenstadt**
- **First publication planned for Dec. 03**
- **Release as Version 0.99 – for comments**
- **Final release (Version 1.0) in 2004**
- **Available on [www.plcopen.org](http://www.plcopen.org)**

# TC6 – XML : Participating Companies

- ***Suppliers:***

ABB, Beckhoff, B&R Automation, Bosch Rexroth, Invensys, Keba, Matsushita, Rockwell Automation, Schneider Electric, Siemens

- ***Independent Software Suppliers:***

3S, infoteam Software, Kirchnersoft, KW Software, Softing

- ***Users:***

SMS Demag

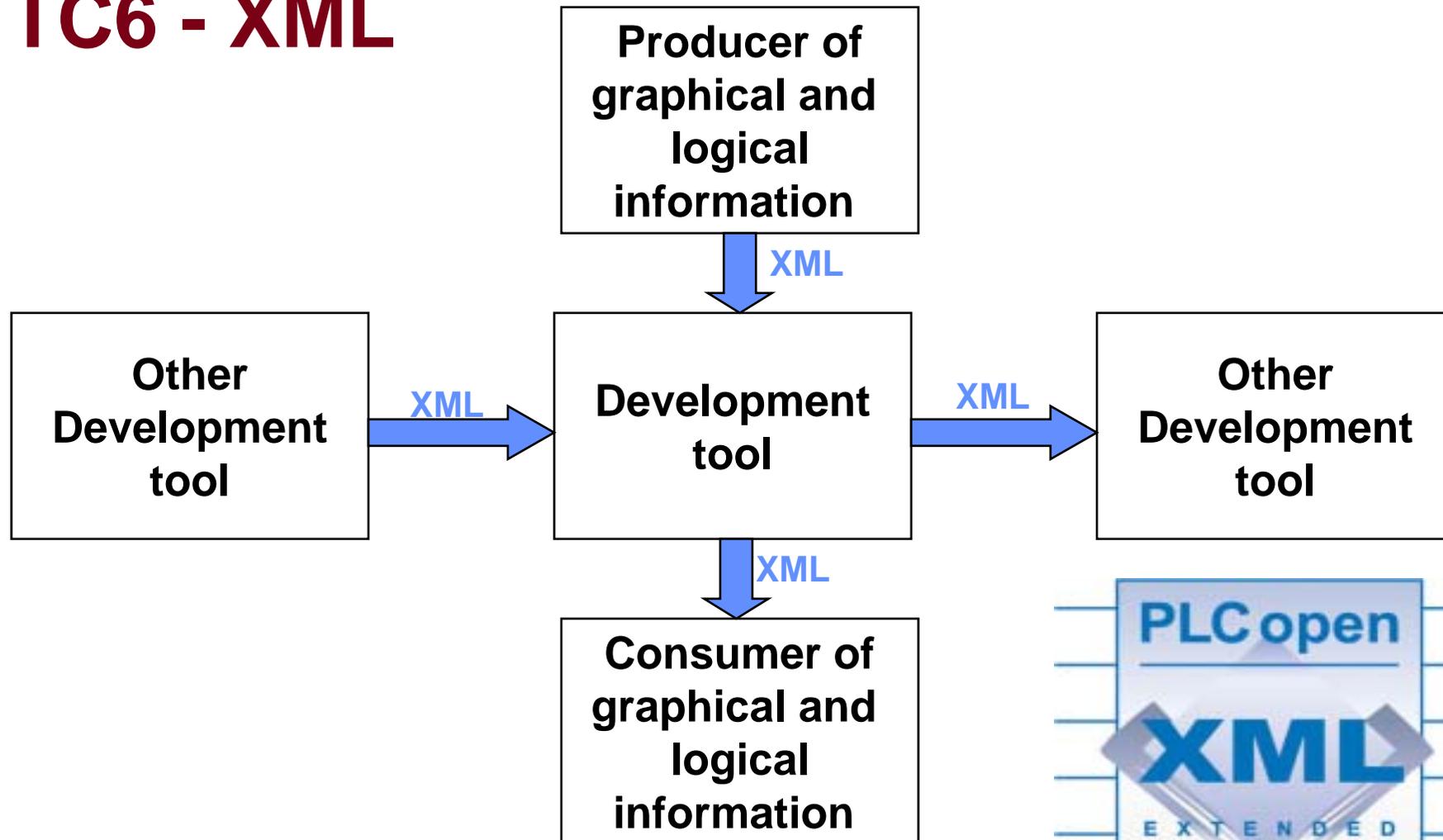
- ***Institutes:***

Ifak, IST

## **TC6 – XML : “use cases”**

- **Exchange format between all five languages**
- **Producers of graphical and logical information**
- **Consumer of graphical and logical information**
- **Documentation generator; document management; source code database, version control**
- **Distribution format for function block libraries**
- **Format for internal storage of projects and related files**

## TC6 - XML



## **What is included**

**In principle all.....**

- **Textual Programming Languages – IL and ST**
- **Graphical Programming Languages – LD, FBD**
- **Structural Language – SFC**
- **...continued....**

## **What is included**

- **Graphical Information, like ...**
  - **Place and position**
  - **Routing of connections**
- **Comments**
- **...continued....**

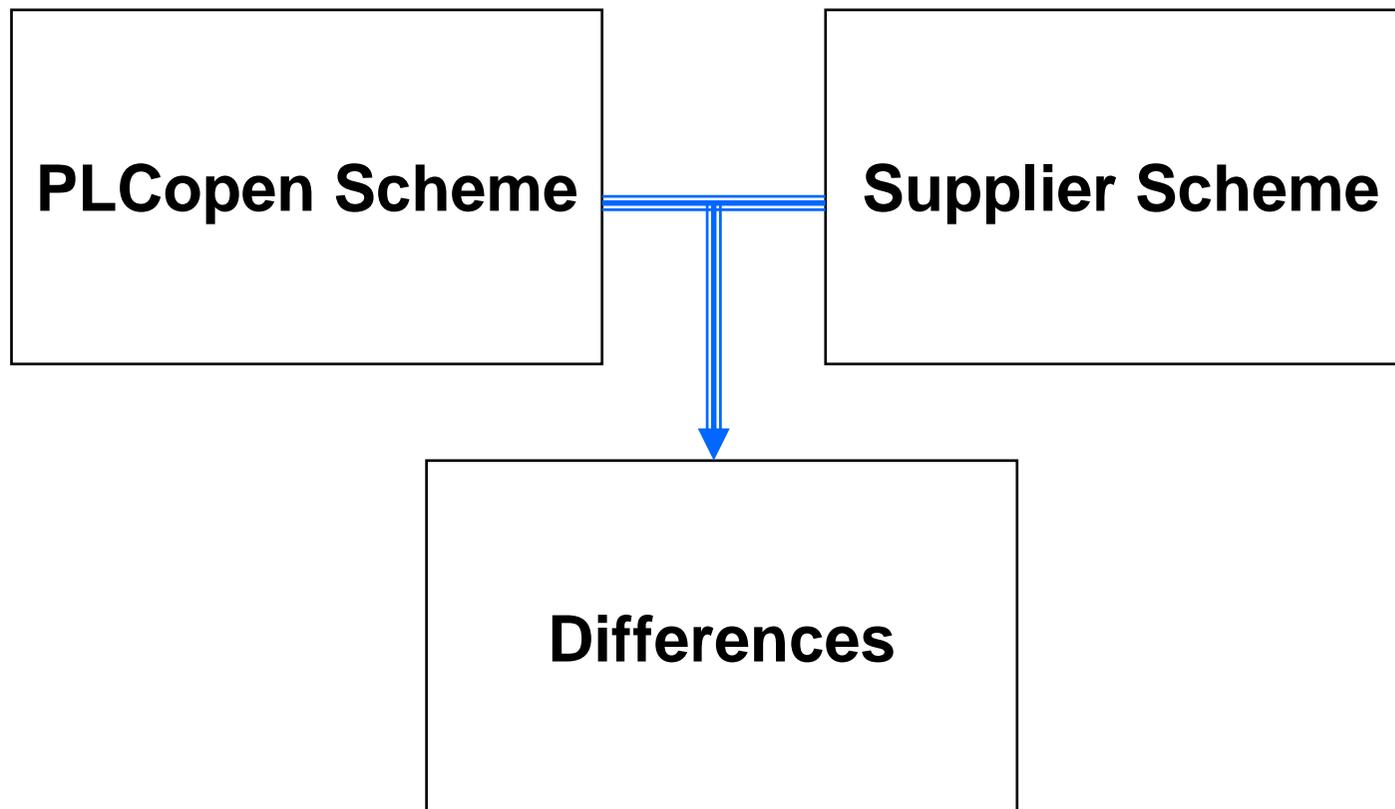
## **What is included**

- **Program Organization Units – (User Derived) Functions and Function Blocks, Programms**
- **(User Derived) Datatypes**
- **Project information (layered structure)**
- **Mapping information**

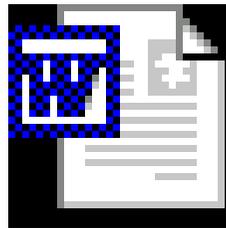
## **What is included**

- **The exported file contains ‘everything’**
- **Including supplier specific information**
- **The intelligence is in the parsing function during input**

# Coupling XML Schemes



# Current Status - document



Microsoft Word  
Document

## **TC6 – XML : status**

- **First ‘release for comments’ planned for December 2003**
- **Available on public website [www.plcopen.org](http://www.plcopen.org)**
- **Comments will be merged into final version for publication**
- **Will also be available on [www.plcopen.org](http://www.plcopen.org)**

# **The association PLCopen**

**Together we can make it happen:**

**Standardization in Industrial Control Programming**

**WE NEED YOUR SUPPORT FOR THIS !**

**Join the organization PLCopen**

## **More Information...**

**[www.plcopen.org](http://www.plcopen.org)**

- **Free-of-Charge electronic Newsletter 'PLCopening' (in english)**

**email: [evdwal@plcopen.org](mailto:evdwal@plcopen.org)**

**Thanks !**

**Questions ?!**

**End of this presentation**