

An open letter to the OEM's, Users and End-users of Servo Motion Control.

## **INTRODUCTION**

Motion Control is playing an ever increasing role within our machines and in many other machines to be servo-ed in near future.

Motion Control technology was innovation driven, the technology push phase resulted in non-standardisation.

Motion Control matures into a common technology, but is not yet standardised. More vendors will enter the market with user-friendly products, adding to the non standardised variety of systems.

Where servo technology is booming year by year, many people at all places will have to be educated in this new technology in next years.

Motion Control Software is of key value in our machines. Application technology is written in OEM-specific software.

Many End-users are requiring hardware of their choice to eliminate costs of training and spares. Scarce and expensive software engineering resources are captured per vendor platform to support the key-technology of OEM's.

To facilitate the acceptance of Motion Control, as well as the coming merge of the motion environment with the logic environment, we urgently need global standardization.

For this standardization, the association PLCopen has taken a valuable initiative in its Technical Committee 2: the Motion Control Task Force. This initiative is open to vendors, OEM's, Users and End-users requiring only PLCopen-membership.

The senders of this open letter are the (only) OEM's actively present in this initiative. Vendors are dominating the Motion Control Task Force, resulting in unbalance on the standardisation results up to now.

To make this work match our and your (future) needs, we need your support now.

## **INITIATIVE**

To reduce logic- and motion-control engineering costs for now and in the future, we need to realise in the end application standardised software that is re-usable across different vendor-platforms.

To reach this goal, a three stage approach is identified:

1. Accept only IEC 61131-3 compliant development environments (reference to the OMAC user group PackSoft);

2. Support the PLCopen Motion Control Library initiative in an active way, to merge the motion control environment,
3. And last but not least: put pressure on your vendors to make sure they implement this standardised library, and its future extensions. Implementation in a clear and transparent way, meaning: without unnecessary supplier specific extensions.

We do ask for your support, preferably as a written statement, to strengthen the presence of the user-opinion in this Motion Control Task Force versus the vendor-opinion.

Customers (End-users) have publicly expressed their interest in standardization in a general statement (for example OMAC), but yet fail to influence the level of standardization. Until now, the OEM's, the (future) Users and End-users of servo-motion-control did not raise their voice yet!

Without customer-action, OEM's, Users and End-users will be supplied shortly with new "standardized" products which do not optimally serve our future. Our demand for re-usability of code across platforms is not adopted yet by vendors. Our software creating capacity will still be captured in vendor specific software platforms!

Therewith it will still not be possible to serve End-users (our customers) with our key-technology in OEM-written-software playing on the hardware of End-users-choice, without any penalty. Possible benefits are not realised!

### ***End User BENEFITS by standardisation of Motion Control software***

1. The same resemblance of software-functions and corresponding servo-actions across vendor-systems, and therewith easier commissioning and troubleshooting
2. Easier vendor independent education of their people into this (new) technology
3. Less application program version handling issues. OEM's need to debug only one piece of software supplying the key-technology. Vendor specific issues are reduced dramatically. Software investment cost is reduced.
4. Easy application of specified hardware of your choice from any OEM
5. Easier changes made to software and easier building of extra functionality (years) after installation

Value the benefits yourself overseeing your company future!

### ***The STATUS with the PLCopen Motion Control Standardization***

Until now PLCopen is focused to step 1 and 2 described in the initiative above. This means that the conformance goals within the group have been focused on getting a standard – vendor to vendor- on:

- Common graphical look and feel

- Common function block data structure and typing
- Common function block functionality
- Conformance certification means

However, the present status of agreement is not completed yet:

- There is no vendor-adoption of the re-usability demand of OEM's
- There is no agreement on a restricted basic set of Motion Functions which shall be unconditionally re-usable across vendor platforms
- There is no agreement to name vendor specific functions different from the standardised re-usable functions

This leaves us to our opinion with “would-be-standardisation” in new products to come, not bringing you or us the maximum profit we could achieve!

### ***OEMs and Users – IT IS TIME TO ACT !***

For reaching the end goal (re-usable code), we need support from OEMs and Users and End-users by supporting our mission by replying with the attached form.

“Non-re-usability” requires the intelligent line by line translation into new code. We define “Re-usability” as the possibility to re-use code (written in standardised calls) on a different set of PLCopen compliant hardware by a simple automated translation and a hardware specific header in the program.

### ***WE CALL FOR SUPPORT ON THE ITEM “RE-USABILITY OF CODE”.***

(We would also like to hear your motives if you disagree...)

Questions –if any- can be sent to either:

Managing Director PLCOpen

Manager Technology Klöckner Tevopharm

Informations Management IWKA Pacunion

Technical Advisor Automation Tetrapak R&D

[evdwal@plcopen.org](mailto:evdwal@plcopen.org) or

[b.veltman@tevo.nl](mailto:b.veltman@tevo.nl) or

[gebhard.selinger@iwka.de](mailto:gebhard.selinger@iwka.de) or

[Istvan.Ulvros@tetrapak.com](mailto:Istvan.Ulvros@tetrapak.com)

February 4th, 2003

IWKA Pacunion,

Klöckner Tevopharm,

Tetrapak R&D AB,

Stutensee BRD,

Schiedam NL,

Lund SWE,

Dr Gebhard Selinger

Bob Veltman

Istvan Ulvros

Annexe

STATEMENT, to reply to PLCopen and to inform your vendors.

Coordination of this action

PLCopen, Zaltbommel NL, Eelco van der Wal

## **STATEMENT**

Yes, our company does support this Motion Control Standardisation Initiative.  
We see the need for global software standardization in motion control and logic control.

For this reason we strongly urge the vendors worldwide to include mentioned "RE-USABILITY OF CODE" within their specification.

Date and Place: \_\_\_\_\_

Signature: \_\_\_\_\_

Company name: \_\_\_\_\_

- OEM or,
- User or,
- End-user

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Country: \_\_\_\_\_

Email address: \_\_\_\_\_

We have relayed this message also to next vendors: .....

Please fax back to PLCopen - +31 -418 - 516336 ,  
or email to [initiative@plcopen.org](mailto:initiative@plcopen.org).

Your reply before February 12th will be mentioned at next OMAC meeting,  
February 13 and 14, where the Call for Action will be presented.

Your reply before March 8th will directly influence next Motion Control Task  
Force meeting March 10 and 11, to be held at Klöckner Tevopharm, Schiedam  
NL.