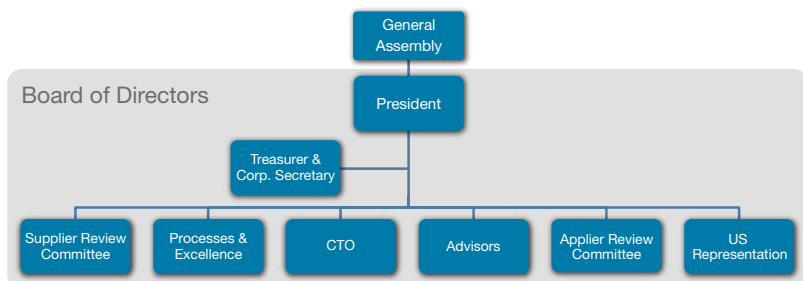


SiLA Organisation



Current Membership Status (as of January 2010)

Actelion Pharmaceuticals Ltd.	www.actelion.com
Agilent Technologies/Velocity11	www.agilent.com
BMG LABTECH GmbH	www.bmg-labtech.com
Boehringer Ingelheim Pharma GmbH & Co KG	www.boehringer-ingelheim.com
Corning B.V. Life Sciences Europe	www.corning.com
CTC Analytics AG	www.ctc.ch
Cybio AG	www.cybio-ag.com
EQUIcon Software GmbH Jena	www.equicon.de
F. Hoffmann-La Roche Ltd., Pharma. Division	www.roche.com
Hamilton Bonaduz AG	www.hamilton.ch
Infoteam Software AG	www.infoteam-software.ch
Merck Serono S.A.	www.merckserono.com
Mettler-Toledo International Inc.	www.mt.com
Novartis Pharma AG	www.novartis.com
Pass Technologies AG	www.pass.ch
Perkin Elmer Inc.	www.perkinelmer.com
Qiagen Instruments AG	www.qiagen.com
Repado Ltd.	www.repado.com
Roche Diagnostics Ltd.	www.roche-diagnostics.ch
RTS Robotic Technology Systems PLC	www.rts-group.com
Seyonic S.A.	www.seyonic.com
Thermo Fisher Scientific Inc.	www.thermofisher.com
Tecan Schweiz AG	www.tecan.com
Weidmann Plastics Technology AG	www.weidmann-plastics.com
Xavo AG	www.xavo.com
Xeromics AG	www.xeromics.com

How to Become a Member

SiLA is operating as a not-for-profit-membership organisation based on the organisational platform provided by the Toolpoint for Life Science association. SiLA offers different membership models suited to a wide spectrum of interests, needs and involvement possibilities. Corporations and organisations interested in signing up for membership are invited to contact us at:

SiLA Consortium

Dieter Speidel
 c/o Toolpoint
 Eichthal
 CH 8634 Hombrechtikon
 T +41 55 264 14 47
 F +41 55 264 14 48
 M +41 79 420 30 73
dieter.speidel@toolpoint.ch

Standardisation in Lab Automation

Flexible and rapid device integration in lab automation systems.

an initiative by



www.sila.coop

Challenges in Lab Automation

Pharma companies are under growing pressure to integrate automated systems for new applications in shorter time and to be able to adopt technological innovations provided by instrument suppliers more easily and rapidly. However, they are restricted in their flexibility of choosing specific instruments to make use of technological innovations provided by

instrument suppliers in the extent they would like to. Furthermore, adaptation of hardware and software to new workflow requirements is too time consuming. The new SiLA standard shall allow flexible and easy integration and replacement of instruments in automated lab systems.

SiLA Consortium

The SiLA consortium for Standardisation in Lab Automation, managed by Toolpoint (a Swiss association of life science instrument suppliers), develops and introduces a new interface standard allowing rapid integration of lab automation systems. Leading system manufacturers, software suppliers, system integrators and pharma/biotech corporations have joined the SiLA consortium and contribute in different technical work groups with their highly skilled experts.

SiLA is a not-for-profit membership corporation with global footprint and open for institutions, corporations and individuals active in the life science lab automation industry. The SiLA consortium continuously extends the scope of its standardisation activities and offers professional training, support and certification services to their members.

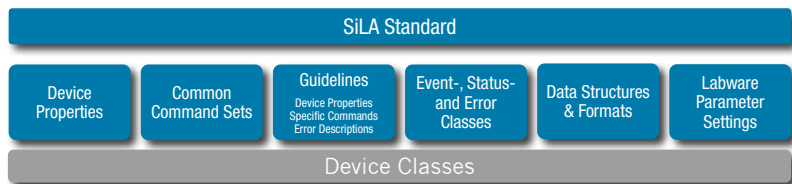
Technical Workgroups (status January 2010)

- ▶ General interface specification
- ▶ Device interface specifications
 - Washers
 - Readers
 - Incubators
 - Pipettors
- ▶ Common command pool for multiple device classes
- ▶ Data capturing
- ▶ LIMS
- ▶ Compound logistics
- ▶ Enterprise data management
- ▶ Labware specification parameters

Standardisation Concept

The SiLA Interface Standard eases and accelerates the integration and adaptation of systems through guidelines for the implementation of supplier-specific device commands and parameters and through generic Device Class Interfaces providing Common Command Sets. SiLA Common Command

Sets can be used to control and communicate with any device model belonging to a specific device class. Thereby SiLA allows system integrators and applies to choose from a wide range of devices offered by different suppliers without having to worry about integration and adaptation efforts.



Device Classes

SiLA defined device classes for the most commonly used device types in the lab automation environment.

Common Command Sets (CCS)

For each device class a common set of commands, event-, status- and error-classes is defined. All major device functions shall be programmable through common commands.

Specific Commands

All functions extending the Common Command Set can be provided by the device supplier as specific commands. Specific commands shall comply with the guidelines for command definition standards.

Device Properties

SiLA compliant devices shall be able to provide information about their device class, configuration, Common Command Set, and about their specific commands upon request.

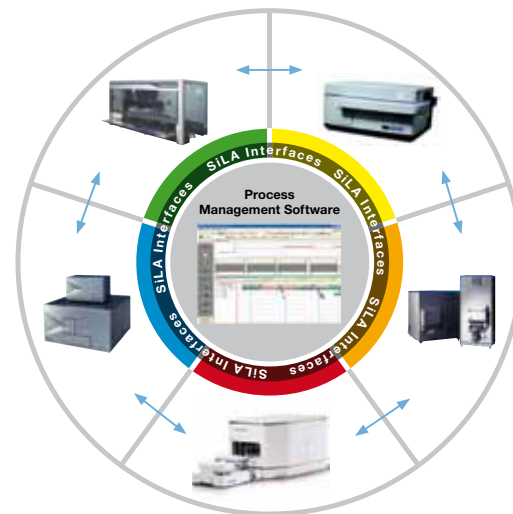
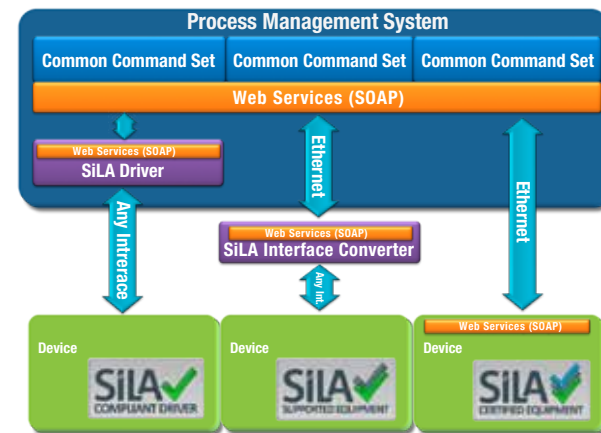
Data Structures & Formats

Devices shall provide data in standardized formats & structures.

Labware Parameter Settings

Device setup for applied labware shall be supported by standardised labware specifications provided by labware manufacturers.

Interface Architecture



The SiLA standard covers all ISO/OSI levels of the device control interface from physical to application layer. By supporting three different integration levels, SiLA provides a unique, standardised interface between lab automation devices and process management systems. SiLA compliance can be achieved by providing SiLA drivers, interface converters or native, directly embedded SiLA device interfaces.

Benefits using SiLA

Benefits for System Appliers

- ▶ Extended automation and application innovations through standardisation
- ▶ Reduced process costs and improved performance
- ▶ Improved business performance through overall process optimization

Benefits for Integrators

- ▶ Reduced integration and adaptation costs
- ▶ Wider choice of devices
- ▶ Fewer driver/device compatibility problems

Benefits for Device Suppliers

- ▶ Single interface for multiple integrators
- ▶ Extended market reach through standardisation
- ▶ Enabling lab of the future / lab automation enterprise networks