



# **23<sup>rd</sup> Annual Meeting of Members**

## **March 20, 2025**

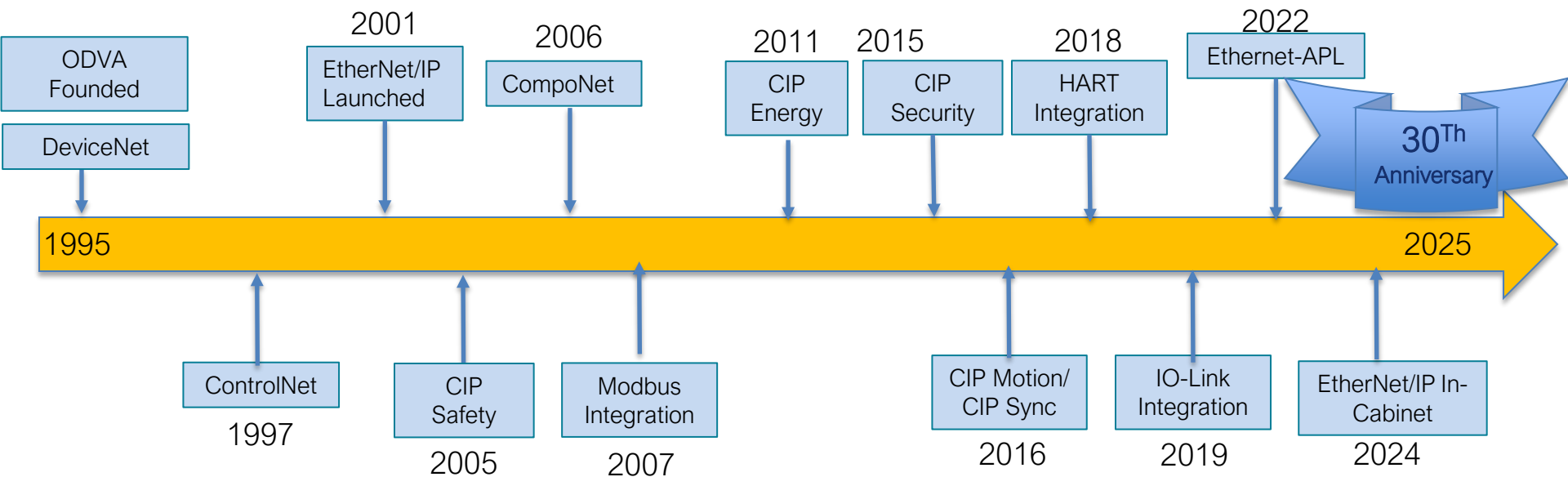
- Call to Order
- ODVA's 30 Year Journey
- Key Activities and Membership Update
- Technology Update
- Key Trends in Smart Manufacturing and Operational Resilience to Help Navigate Digital Transformation
- Introduction to Candidates for Election by the Regular Membership
- Election and Break
- Industry 4.0 Security: Protocols, Risks, Trends and Challenges
- Looking Ahead to the 24th Term
- Adjourn



## ODVA's 30 Year Journey

**Al Beydoun**  
**President and Executive Director**  
**ODVA**

## 30 Years of Advancement in Technology



# Behind ODVA's 30 Year Journey

## Core Technologies and Continuous Enhancements:

- Core technologies that have provided solutions for Industrial Automation
- Evolving specifications that remained relevant in addressing industry challenges
- ODVA's robust certification and compliance process have facilitated global interoperability

## Worldwide Adoption:

- Global membership contributing to the advancement of industrial automation across diverse sectors and regions.

## Partnerships and Collaborations:

- ODVA's strategic collaborations and partnerships with other standard development organizations have enriched our initiatives and expanded our reach.

## Members Contributions:

- Collective efforts of our members, whose commitment to innovation and interoperability have driven the widespread adoption of ODVA standards.



## Leadership in the 23<sup>rd</sup> Term

## Board of Directors



Dr. Rolf Birkhofer  
Endress+Hauser



Mr. Jon DeSouza  
HARTING



Mr. Toshiyuki Shigehisa  
OMRON



Mr. Davis Mathews  
Phoenix Contact



Mr. Scott Miller  
Rockwell Automation



Mr. Thomas Petersen  
Danfoss



Mr. Brian Reynolds  
Honeywell



Mr. André Uhl  
Schneider Electric

## Technical Review Board

- Mr. Joakim Wiberg, Chair, ODVA (ex-officio)
- Mr. Raj Bandekar, Honeywell
- Mr. Torben Bertelsen, Danfoss
- Dr. Vivek R. Dave, HARTING
- Mr. Arulkumar Karuppanagounder, Schneider Electric
- Mr. Gregory Majcher, Rockwell Automation
- Mr. Kai Michel, Hilscher
- Mr. Toshiyuki Ozaki, OMRON
- Mr. Jörg Reinkensmeier, Endress+Hauser
- Dr. Al Beydoun, ODVA (ex-officio)
- Ms. Adrienne Meyer, ODVA (ex-officio)



## Market Advisory Committee

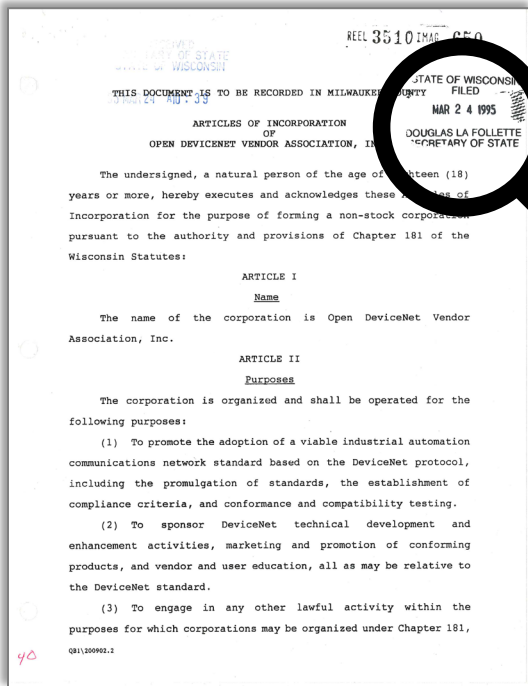
- Dr. Vivek Hajarnavis, Chair, Rockwell Automation
- Mr. Magnus Jansson, HMS Networks
- Mr. Arnold Offner, Phoenix Contact
- Mr. McKenzie Reed, HARTING
- Ms. Adriana Vargas, Honeywell
- Ms. Tonya Wyatt, Micro Motion (Emerson)
- Ms. Feiyan Zhao, Schneider Electric
- Dr. Al Beydoun, ODVA (ex-officio)
- Ms. Adrienne Meyer, ODVA (ex-officio)
- Mr. Steve Fales, ODVA (ex-officio)



## Key Activities and Membership Update

**Adrienne Meyer**  
VP of Operations and Membership  
ODVA

# Celebrating our 30<sup>th</sup> Anniversary!



Founded for the purpose of promoting the adoption of  
DeviceNet including the promulgation of **standards**,  
**establishment of compliance criteria and**  
**conformance testing.**

# DeviceNet™

**Founded March 24, 1995**

## DeviceNet News

Sep. 1997 Newsletter of the Open DeviceNet Vendor Association

**475+ Attend ODVA Summit in Detroit, SEMICON/W**

**235 for DeviceNet Tutorial**

**T**roy, Michigan was the site for the first of what could be many ODVA-sponsored DeviceNet Seminar and Product Demonstration Events targeted at local audiences. Local events may be more cost-effective than national trade shows in North America for promoting DeviceNet. 375 Participants attended the first day which featured the DeviceNet for Newcomers Exhibit and a Table-Top Exhibition with 34 Table-Top Exhibitors. ODVA Members Control, General Motors Control, Robotics and Welding Group also brought their multi-vendor interoperability demonstration to the exhibition. It was originally built for the International Automotive Manufacturing Show in May.

The following day, 126 ODVA Engineers participated in one or more Special Interest Groups (SIGs). Nine SIGs are preparing new device profiles which will be specified in the DeviceNet Specifications after review by the ODVA System Architecture SIG (see (Continued on page 2))

**inside...** 4th Annual Meeting May ODVA in OCA Pavilion GM Publishes Report on

## DeviceNet News

Nov. 1997 Newsletter of the Open DeviceNet Vendor Association

**Daylong Events on January 21, 1998**

**Big Crowd Expected for Portland Seminars and Exhibits**

**O**DA is organizing another daylong DeviceNet Seminar Schedule and table-top exhibit of DeviceNet products on Wednesday, January 21, 1998 at the DoubleTree Jantzen Beach Hotel in Portland, Oregon.

ODVA will sponsor the two free DeviceNet Seminars: "DeviceNet for Newcomers" by ODVA's Board of Directors, and "Implementing and Diagnosing a DeviceNet" given by Nick Jones, both of S&S Technologies. These Technologies will be given in both the morning and afternoon. A complimentary luncheon buffet will be available to all visitors who register for any of the day's events. Attendees can view side-by-side demonstrations of software tools, diagnostics, network configuration tools, and new DeviceNet products. ODVA has reserved five table-top spaces for ODVA Member Vendors.

ODVA Marketing Committee Members recommended that the (Continued on page 2)

**inside...** September '97 Catalog up to 220 Pro How do LonWorks and DeviceNet? "No DNS Entry" - Fixing Netscape 6

## DeviceNet News

Nov. 1999 Newsletter of the Open DeviceNet Vendor Association

**Introducing the New ODVA Web Page**

**H**ave you been to the ODVA/DeviceNet Web Site recently? On November 1, 1999, the new, redesigned site replaced the old, text-based design. A mysterious green splash page with an intriguing prephone welcomes visitors to the new ODVA Home Page.

History The old Web Site was a text-based design developed in early 1995 before the explosion of the Web. Looking back to 1995, catalog requests were 90% via phone or fax, and only 10% from e-mail or clicks from the Web. ODVA had a very early presence on the Web. Today, over 80% of requests for information from ODVA are from the clickable buttons on the Web. The original designer was IndustryNet, a publisher of regional business-to-business catalogs that was one of the first commercial Web Sites and service providers.

ODVA took over management of the Web Site content when IndustryNet Web Site went bankrupt in June, 1997. The text-based design inherited from IndustryNet was maintained, and ODVA just kept adding new content sections to the home page.

Then, at ODVA's 5th Annual Meeting in Orlando in early 1999, the marketing focus groups and Board of Directors all came to the same conclusion - it was time to do a makeover of the Web Site. Since over 80% of all first-time

Welcome to the DeviceNet website click here to enter

The Green Prephone introduced New, Redesigning ODVA/DeviceNet Web Site. The splash page is to grab your attention so that you're compelled to click to the next page or also has another purpose (see Green Prephone - page 2).

prospects are introduced to DeviceNet via the World Wide Web, the design was clear: make it more interesting, easier to use, improve the design, and add content.

Help from the Consumer Market World ODVA uses Matt Johnson, the director of Alamo Rental Car's Car Rental as their primary graphic designer. Matt designed the (Continued on page 2)

**inside...** November Case Study Winner 6th Annual Meeting Preview (March 6-8, 2000) New XML Tools for being developed for D

## DeviceNet News

Apr. 2000 Newsletter of the Open DeviceNet Vendor Association Volume 6, Issue 2

**Introducing EtherNet/IP**

**ODVA Sets the Ethernet-for-Factory Automation Standard**

**O**DA announced a global standard for using Ethernet on the plant floor at its 6th Annual Meeting. "The new technology standard - EtherNet/IP - allows users to take advantage of commercial off-the-shelf Ethernet physical media and components while using an open, industrially proven application layer. As a result, EtherNet/IP delivers the one feature that has eluded the automation community - interoperable Ethernet products from multiple vendors."

supported by several organizations and a who's who list of leading industrial manufacturers.

**EtherNet/IP**

Recent innovations such as Fast Ethernet and reliable Ethernet switches have addressed questions pointed at the network's suitability for control applications and have fueled the desire to expand its role in automation. But in spite of the industry-wide name (Continued on page 3)

**ODVA's 6th Annual Meeting Draws 300+ to Tampa**

The final count, 304 participants representing 129 Vendors (94 Vendor Members, 7 Distributor Members, and 28 non-members), users, distributors and system integrators) attended ODVA's sixth annual meeting, held March 7-8, 2000 at the Tampa Waterside Hotel. On Monday, ODVA co-sponsored a free seminar on "How to develop a product for EtherNet" that drew over 200 attendees.

During the general Members meeting, the Regular Members elected Greg Baker (Woodward Industries) and Mike Jones (Synthetic Micro Systems) to the Board of Directors and Nick Jones (SST) to the Technical Review Board. Joining the Board are the ODVA Board are Greg and Mike who are appointed by the Regular Members. Jack DeLeon (Rockwell/Allen-Bradley), Brian Brickhouse (Cutter-Hammer), Andy Sazo (Hitachi), and Dave Quisenberry (OMRON). Toshio Sanematsu (Hitachi), President of ODVA also attended. Mr. Sanematsu was elected ODVA President for the coming year by the Board of Directors last October. Nick Jones was elected Chief Technical Officer and Chairman of the Technical Review Board.

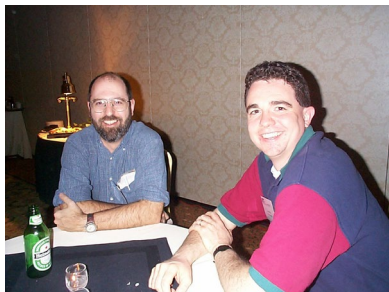
This year's program was more light-hearted than past ODVA meetings. The most entertaining segment was a (Continued on page 2)

**inside...** Introducing DeviceNet Detective New Search Engine Based on XML DeviceNet Specifications - Status of Errata 3

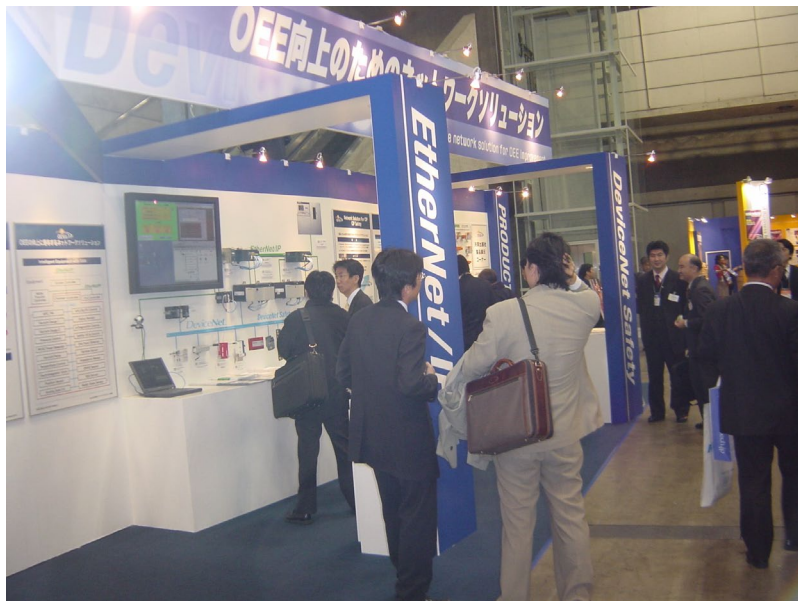
Page 4  
Page 6  
Page 7



## Celebrating our 30<sup>th</sup> Anniversary!



## Celebrating our 30<sup>th</sup> Anniversary!



## Celebrating 30 Years of ODVA Membership with us!

- SMC Corporation
- Yaskawa America, Inc.
- Eaton Electrical
- OMRON Corporation
- Parker Hannifin Corporation
- Rockwell Automation/Allen-Bradley
- Phoenix Contact
- Softing
- BALLUFF
- WAGO Corporation
- Festo SE & Co KG
- Belden Deutschland GmbH
- Huron Net Works
- Ametek Automation & Process Technologies
- Real Time Automation, Inc.
- Pepperl+Fuchs
- ASCO Numatics
- Horner Electric
- AVG Automation (Uticor)
- Online Development, Inc. (OLDI)
- Mitsubishi Electric Automation, Inc.
- MKS Instruments, Inc.
- SWCC Corporation
- Beckhoff Automation
- Molex Incorporated



- To provide education to vendors around the world, ODVA held several online training courses
- Thanks to our ODVA Designated Trainers for their hard work!



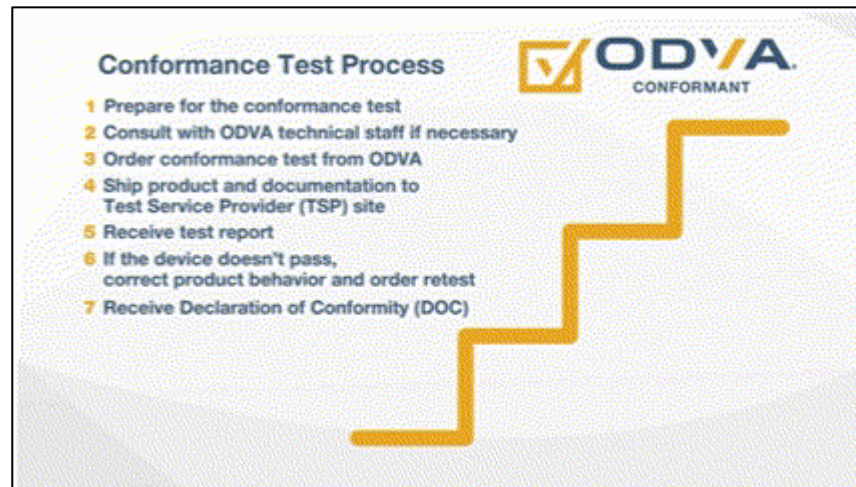
## Global Activities





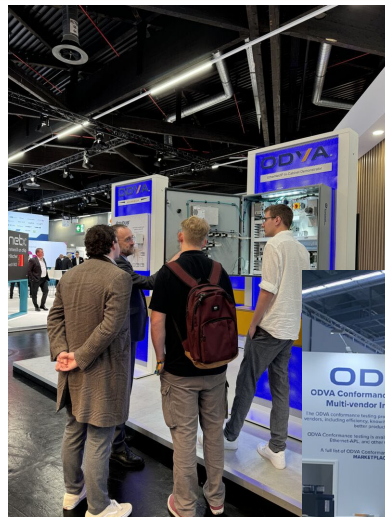
## Global Activities

- ODVA launched two videos globally: one on EtherNet/IP for the process industries and one on the importance of conformance testing



Visit [www.odva.org](http://www.odva.org) to watch and share!

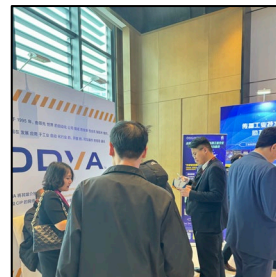
- In Europe, ODVA highlighted the benefits of EtherNet/IP, including EtherNet/IP for In-Cabinet, 5G and wireless, CIP Security and SPE including APL at:
  - Hannover Messe 2024
  - ACHEMA 2024
  - SPS 2023 and 2024



## Global Activities



- In China, TAG China featured EtherNet/IP at Gongkong's forums, at the Control Engineering China annual meeting, and at IAS





- In Korea, TAG Korea held its first EtherNet/IP and Ethernet-APL event and published articles in local media

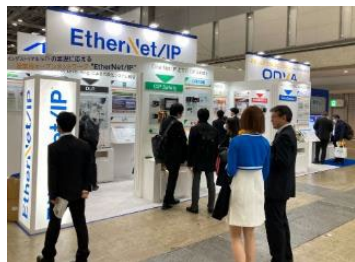


## Global Activities

- In Japan, TAG Japan held several seminars, interoperability events, and participated in multiple exhibitions, including IIFES

### Exhibition

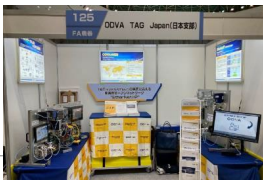
IIFES2024( Jan 2024)



1296 people  
visited!  
Booth:892 people  
Online:404 people

ODVA HQ  
President : AI-san  
Vice president : Adrienne-san  
Market Leader : Steve-san  
Joined!

Okayama Technology  
exhibition (Nov. 2023)



Industrial open network  
exhibition (Jul. 2024)



### Seminar

Held 6 + Planned 2 seminars since Oct 2023.

Real Seminar



Live  
streaming

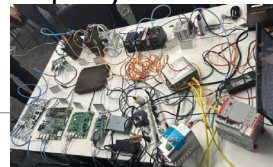


Real Exhibition



### Inter operability test

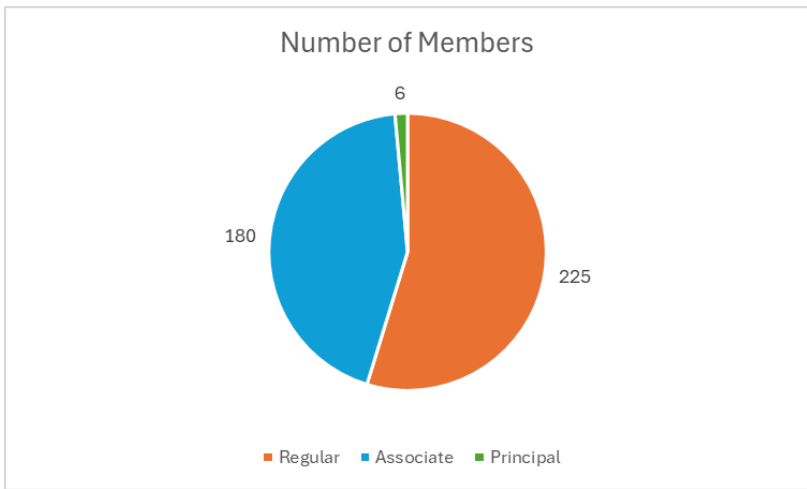
18 devices from 12 company are connected each other  
(Dec. 2023)



- ODVA continued to add new Members from around the world with over 415 Members as of today
- Over 70 new vendor IDs have been issued since the last Annual Meeting to companies beginning to make EtherNet/IP products



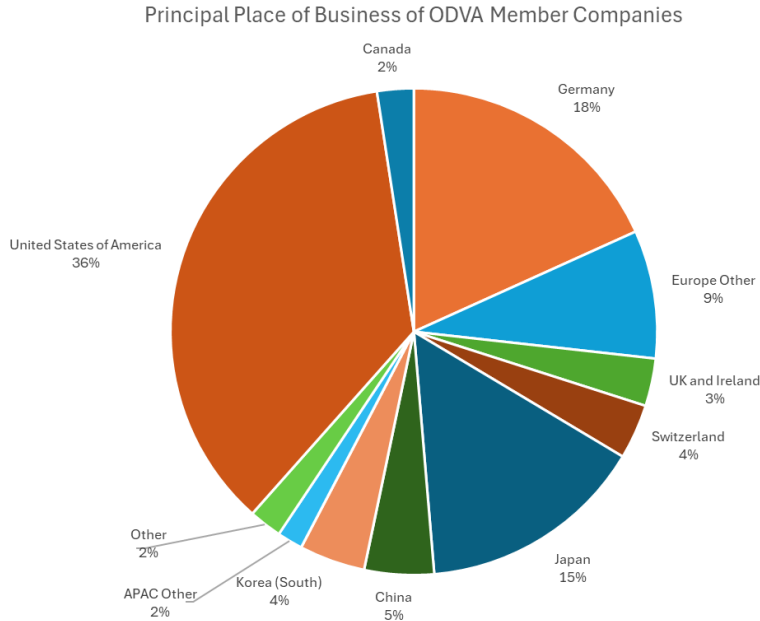
## Growth over Past Term



Type	Number of Members
Regular	225
Associate	180
Principal	6

## Growth over Past Term

### Mix of Membership by Principal Place of Business, as of December 31, 2024



Country or Region	Principal Place of Business of ODVA Member Companies
Germany	75
Europe Other	35
UK and Ireland	13
Switzerland	15
Japan	62
China	19
Korea (South)	18
APAC Other	7
Other	9
United States of America	148
Canada	10



## Looking Forward

- ODVA continues to drive education and awareness of the application of our technologies, as well as improve internal structures
  - New Association Management System that we announced that was contracted will be going online in 2025! We will provide more information and training when the launch date approaches.
  - Educational video on SPE in the works
  - Hands on training being developed
  - Full marketing audit to be commissioned
  - Licensing process under review
  - And more!





## Update on ODVA Technical Activities

Joakim Wiberg  
Director of Technology  
ODVA

# Trends in manufacturing are still affecting us



## SIG Work Summary

- A total of 53 Specification Enhancements (SEs) and Technical Document Enhancements (TDEs)
- Two publication cycles in 2024
- One publication cycle to date in 2025 (will be complete in April)
  
- A total of 12 volume revisions

## Accomplishments since 22<sup>nd</sup> Annual Meeting

- Redefined the scope of xDS
- Delivering CIP Security config with a file (making it easier to configure CIP Security device)
- Initiated work with IPv6
- Expanding process profiles (temperature and level)
- Extend Concurrent Connections to CIP Safety (serving process safety)
- Ensure compliance with upcoming safety requirements (ensure compliance with normative requirements in IEC61784-3 Edition 5)
- Creation of installation manuals for In-Cabinet EtherNet/IP
- Multiple updates, corrections, and clarifications (device-based firewall, concurrent connections, In-cabinet, CIP Motion, process diagnostics,....)

- The xDS project was initiated with a vision to modernize device descriptors
- In 2023, the TRB revisited the scope of the project, and developed a proposal to the Board
- The Board requested the TRB to develop a plan to address the most urgent issues
  - Minimum bar requirements to meet market needs
- The project has been divided into two phases:
  - Phase 1 Initiatives:
    - Enhancing security
    - Defining minimum support required for EDS consumers
    - Specifying Metadata for modern workflows
  - Phase 2 Initiatives:
    - Identify and prioritize additional gaps with EDS and the use of EDS.
      - E.g. configurable assemblies, modular devices, parameter dependencies, etc ....
    - Improve device description file accessibility.
      - Create an online repository for EDS and xDS files

## xDS Project Progress

- Phase 1 Initiatives:
  - Enhancing security (Lead: EtherNet/IP System Arch SIG)
    - A technical paper was presented at this conference
  - Defining minimum support required for EDS consumers (Lead: CIP System Arch SIG)
    - Control vendors and device vendors manned the SIG with relevant resources
    - The SIG is currently working on a CIPSE
  - Specifying Metadata for modern workflows (Lead: Common Industrial Cloud Interface SIG)
    - Papers have been presented at previous and on conference
    - Active discussions within the SIG

## In Process and Proposed Plans for Next 12-18 Months

- Enhancing device's usability, integration, and functionality (Metadata for CIP paper)
- Complete xDS Phase 1
- Explore inclusion of new transition media – SPE and Gigabit
- State of the art security – using the latest security transports, signing, and compliance with CRA (EDS signing paper and CRA paper)
- Investigate impact and implement use of IPv6 (IPv6 paper)
- Keeping CIP Safety relevant – conformance with new regulations and Closed Communication Systems

