

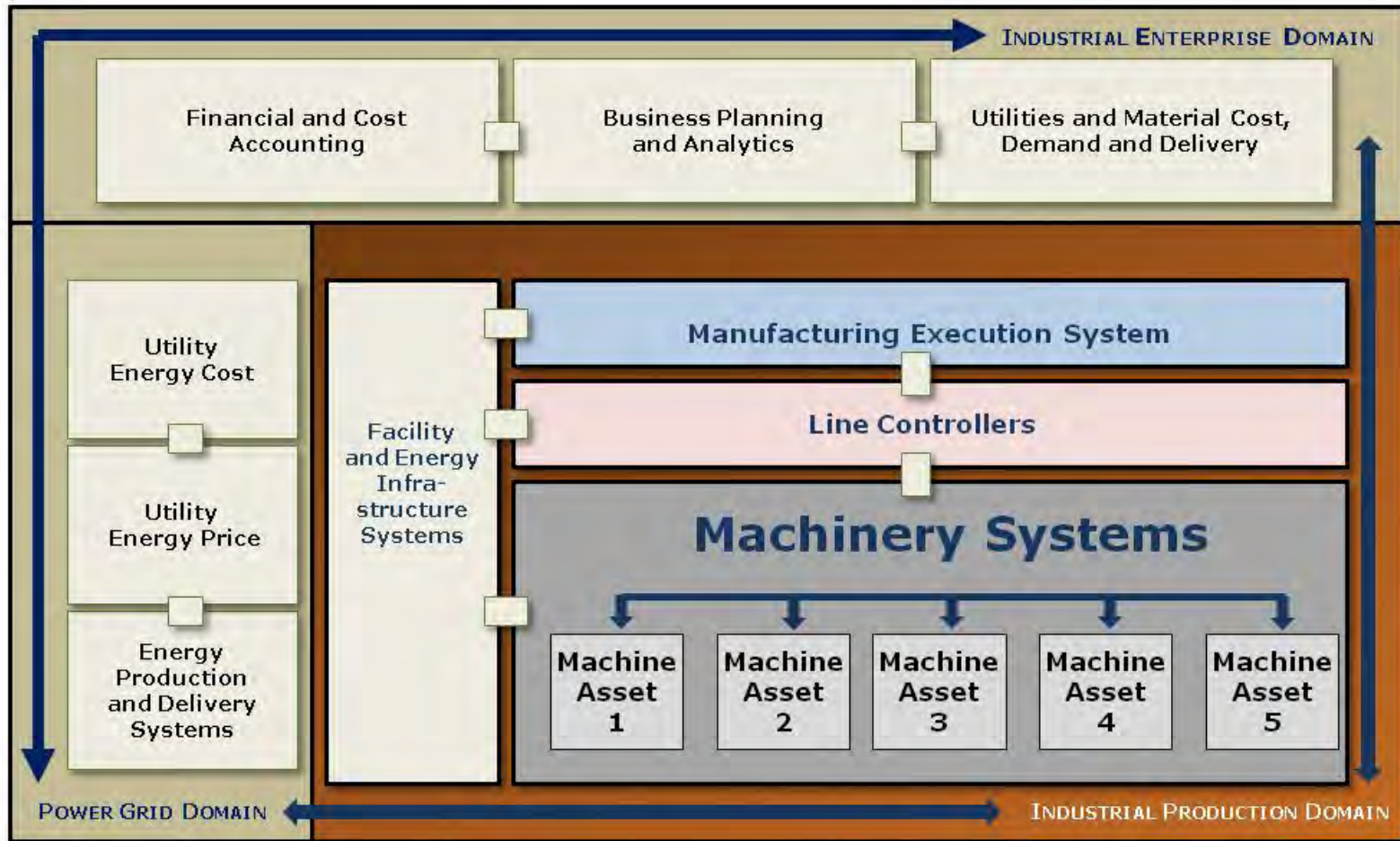


Optimization of Machine Integration

Industry Conference

www.odva.org

OMI in the Industrial Ecosystem



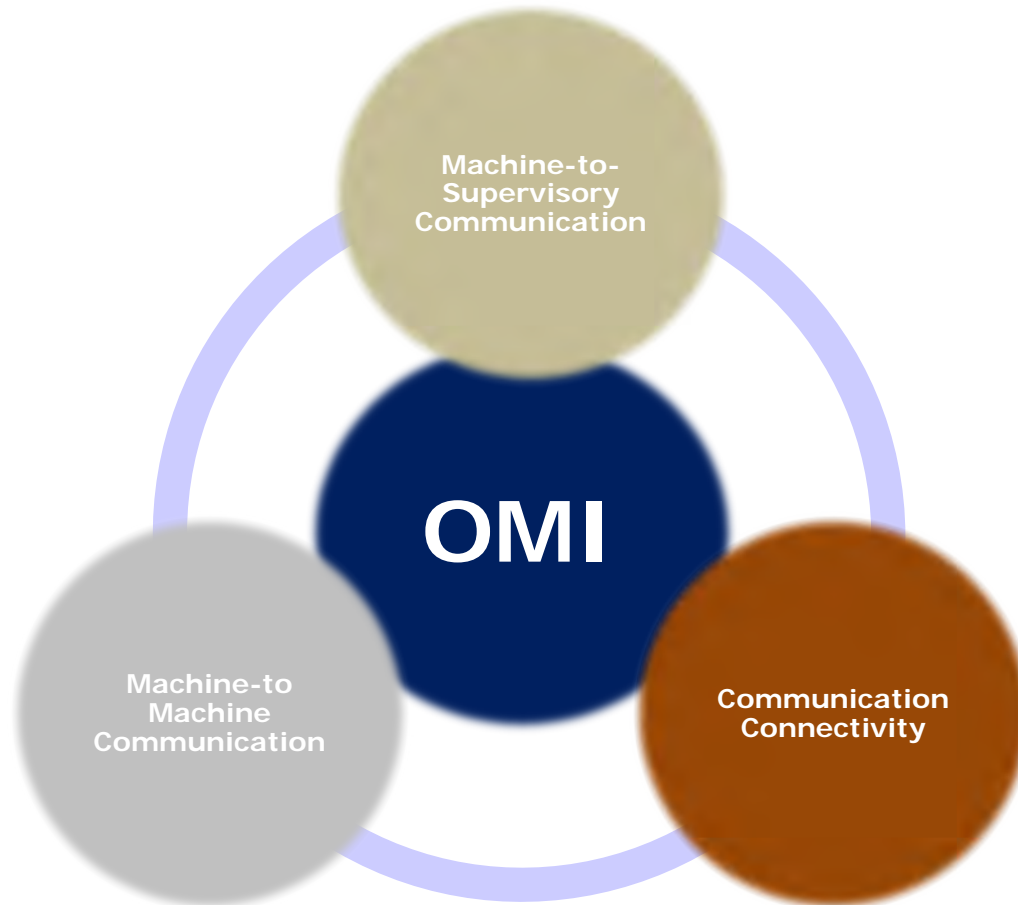
Key Challenges of Machine Builders & Users

1. Proliferation of automation networks in machine automation.
2. Long useful life of machine assets which results in many installations with legacy networks.
3. Machine builders motivated to provide a high-value machine differentiated from their competition on price and performance relative to asset turnover, not overall equipment effectiveness.
4. To maintain machines, manufacturers need to give OEMs secure, remote access to the information being shared from machine-to-machine as well as from the machines to supervisory systems including line controllers, MES and enterprise applications.

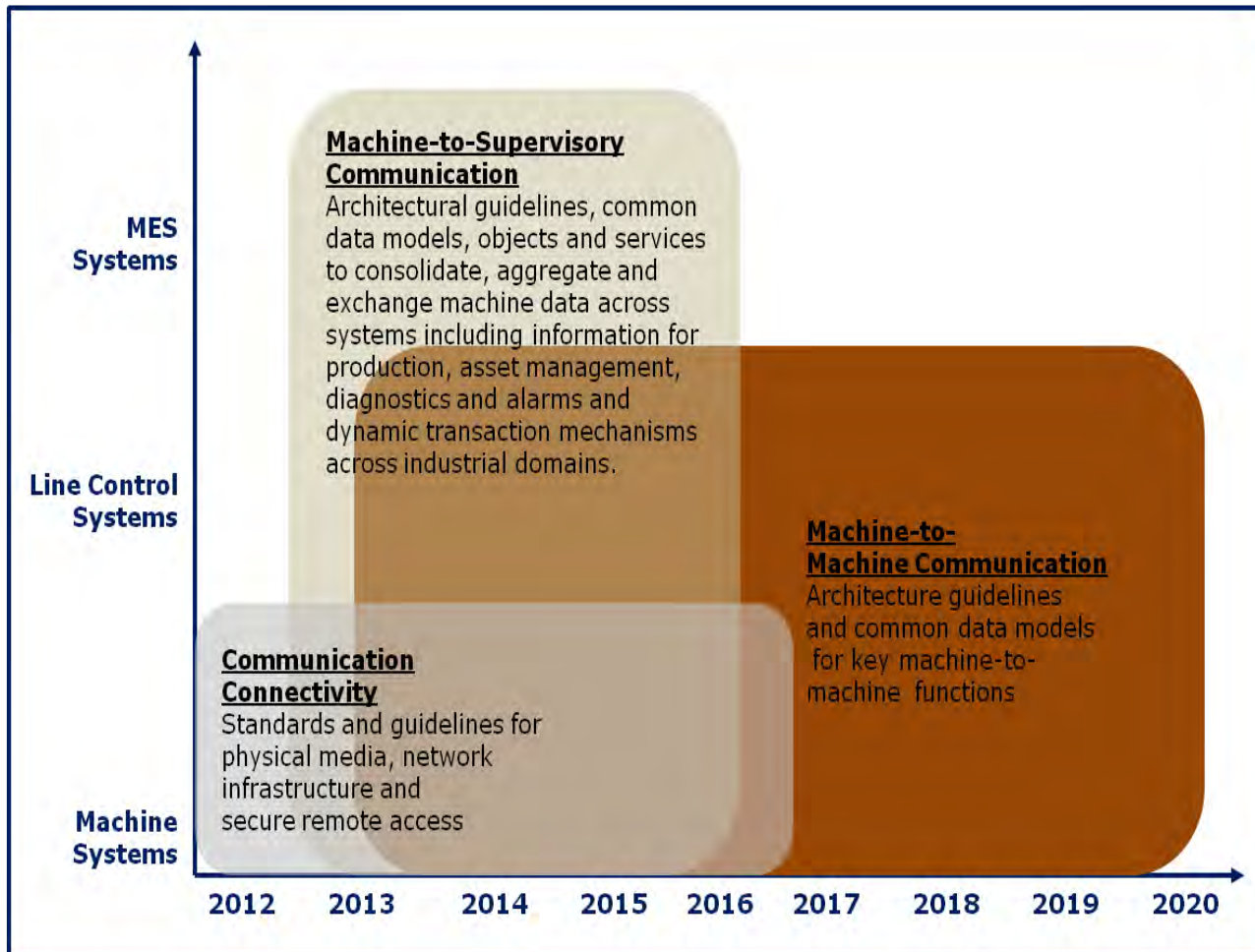
Multi-Organization Partnership



Typical Use Cases



Timeline & Related Topics



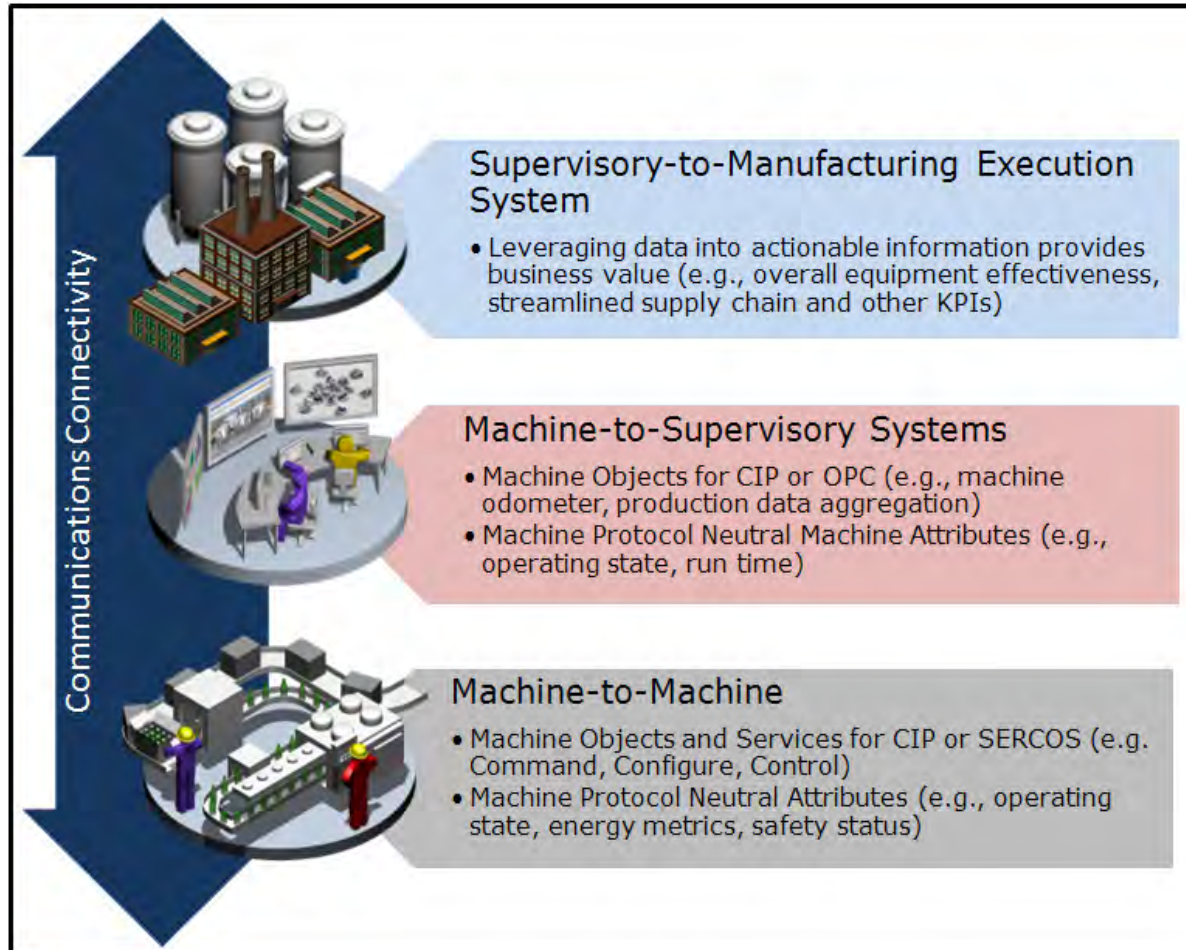
SIGs

- On-going energy enhancements
- Safe motion enhancements to CIP Safety
- Integration of I/O-Link devices

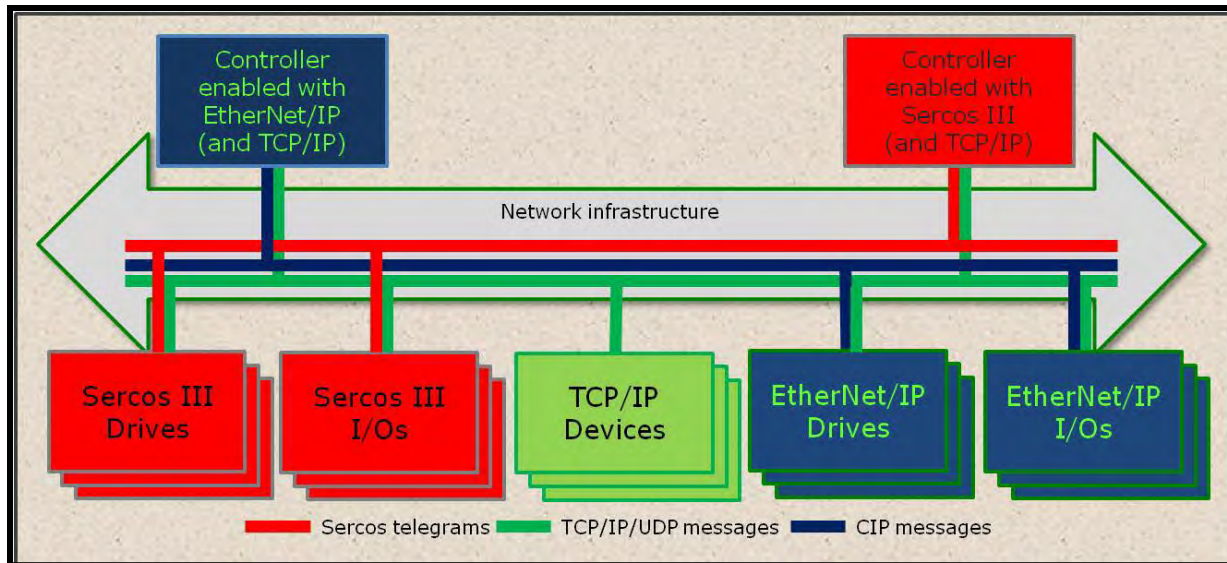
Technical Papers

- ODVA 2012 Industry Conference

Technical Approach



Technical Approach UC3 – Communication Connectivity



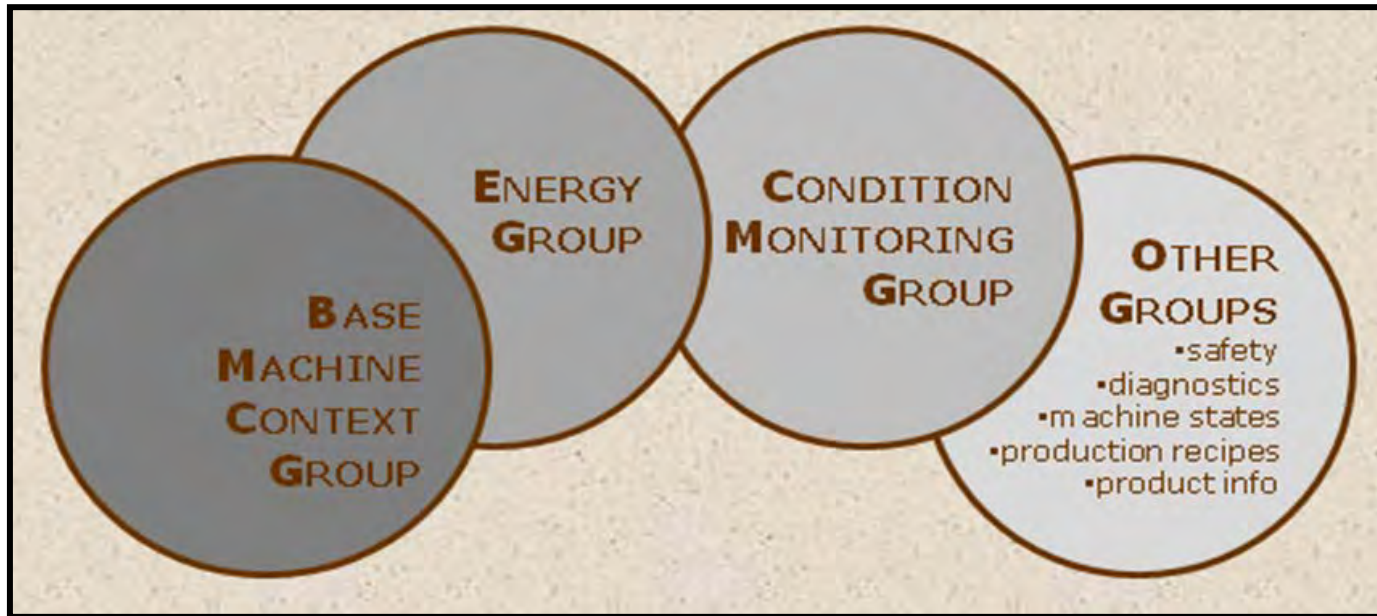
OPTIONAL BLENDED INFRASTRUCTURE FOR SYSTEMS USING ETHERNET/IP AND SERCOS III

What this means for ODVA
 and EtherNet/IP vendors...

What this means for sercos international
 and sercos III vendors...

Technical Approach

UCs 1 & 2: Machine Communication

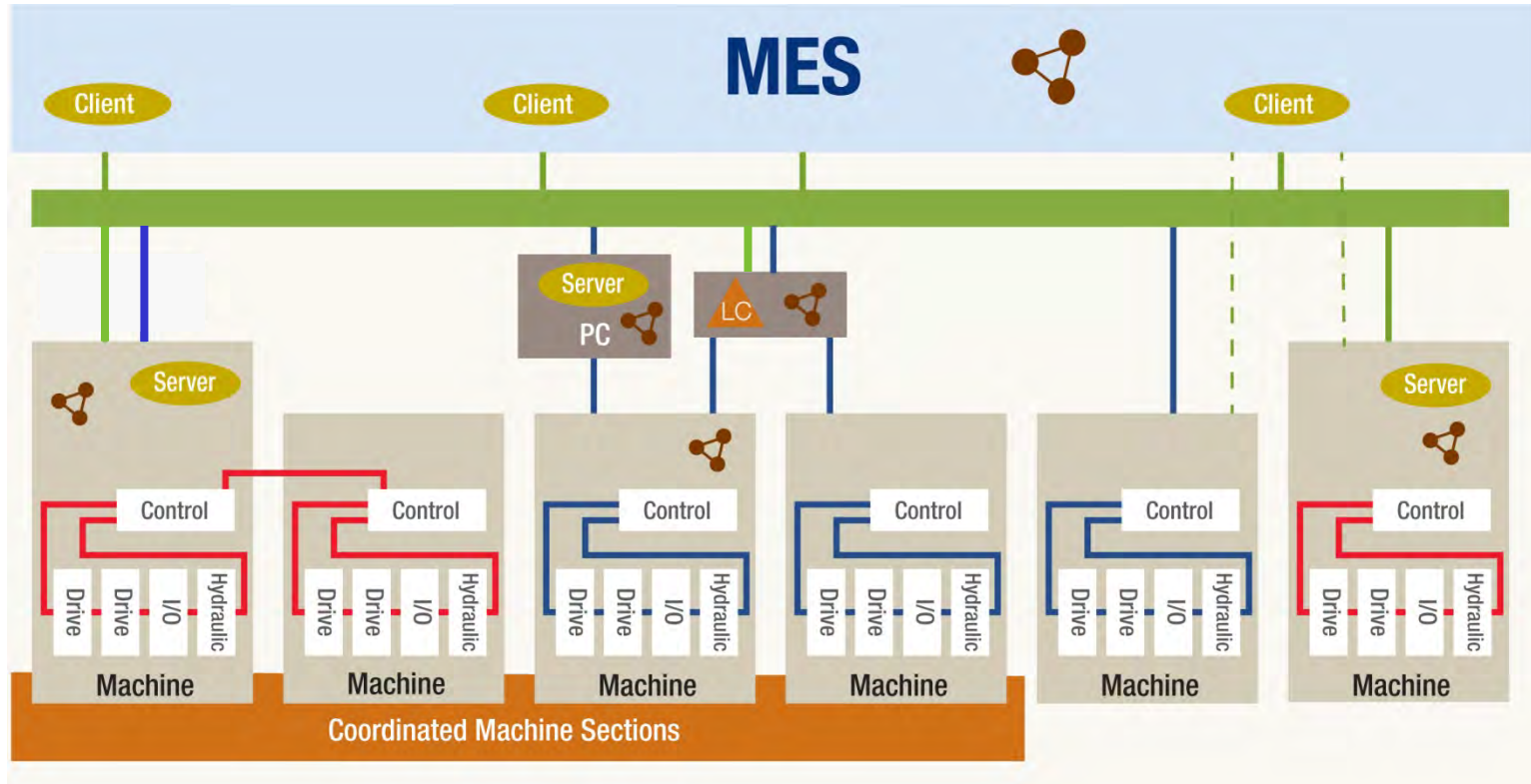


Common attribute sets for CIP, sercos and OPC UA for logical groups of machine data needed for communications to supervisory and executive systems.

OMI IN ACTION

Typical Architectural Scenarios and Data Types for Machine Communication to Supervisory Systems

UC2: Machine-to-Supervisory Communication Architectural Scenarios

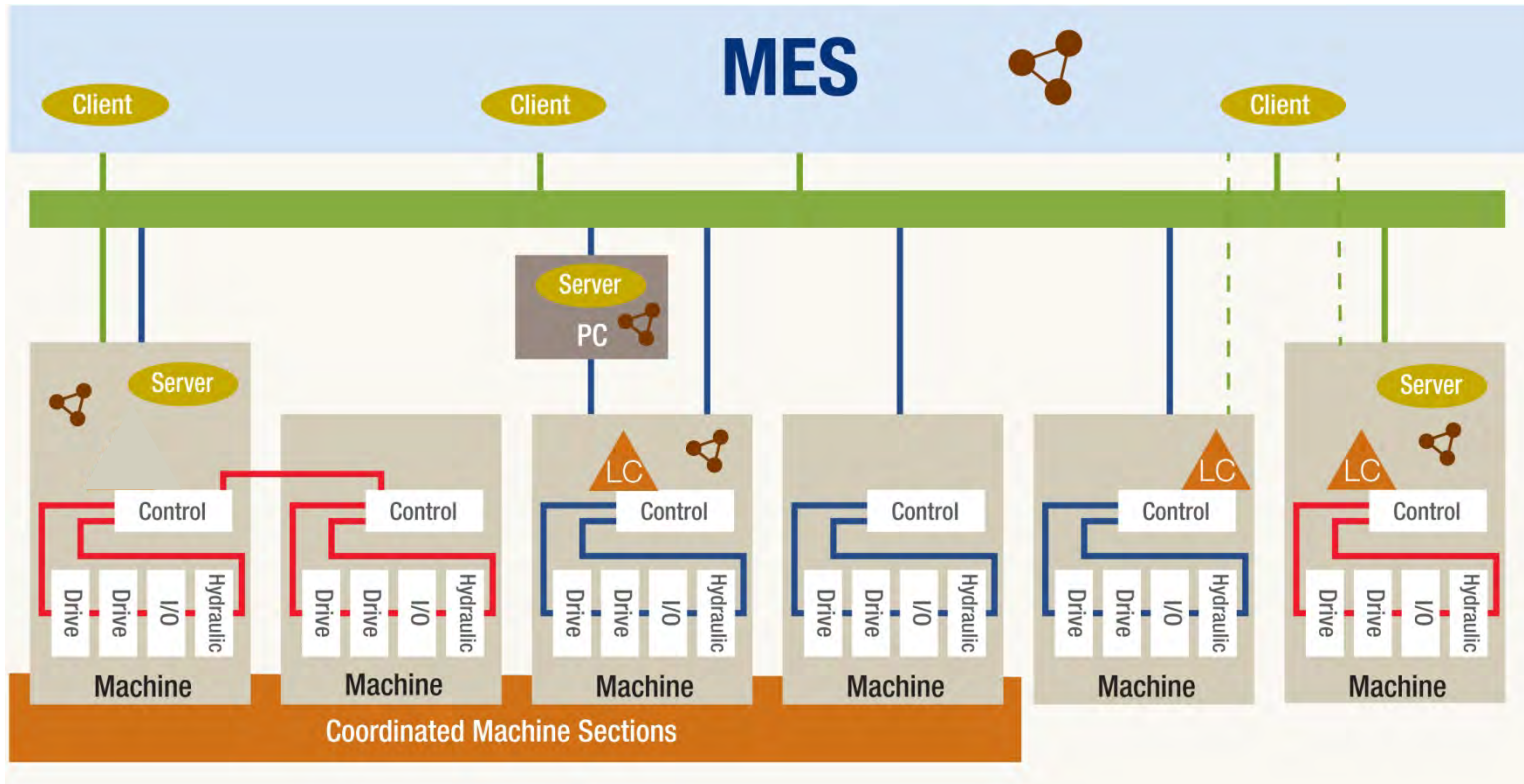


Machine communication

to the MES layer following various paths - an OPC UA server, external line controller or native communication



UC2: Machine-to-Supervisory Communication Architectural Scenarios

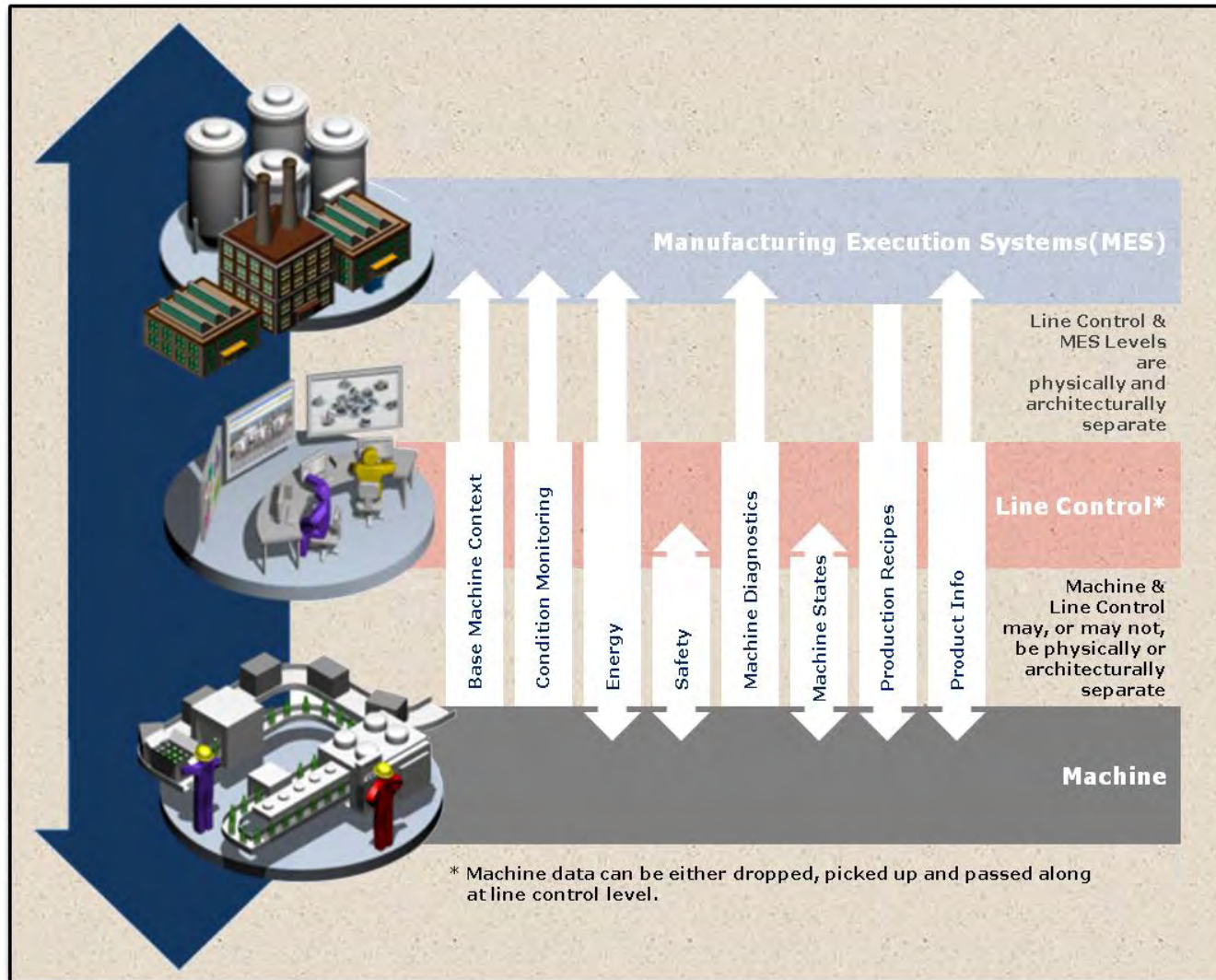


Machine communication

to the MES layer following various paths - an OPC UA server, internal line controller or native communication



Typical Flow of Machine Data Types



Session Panel

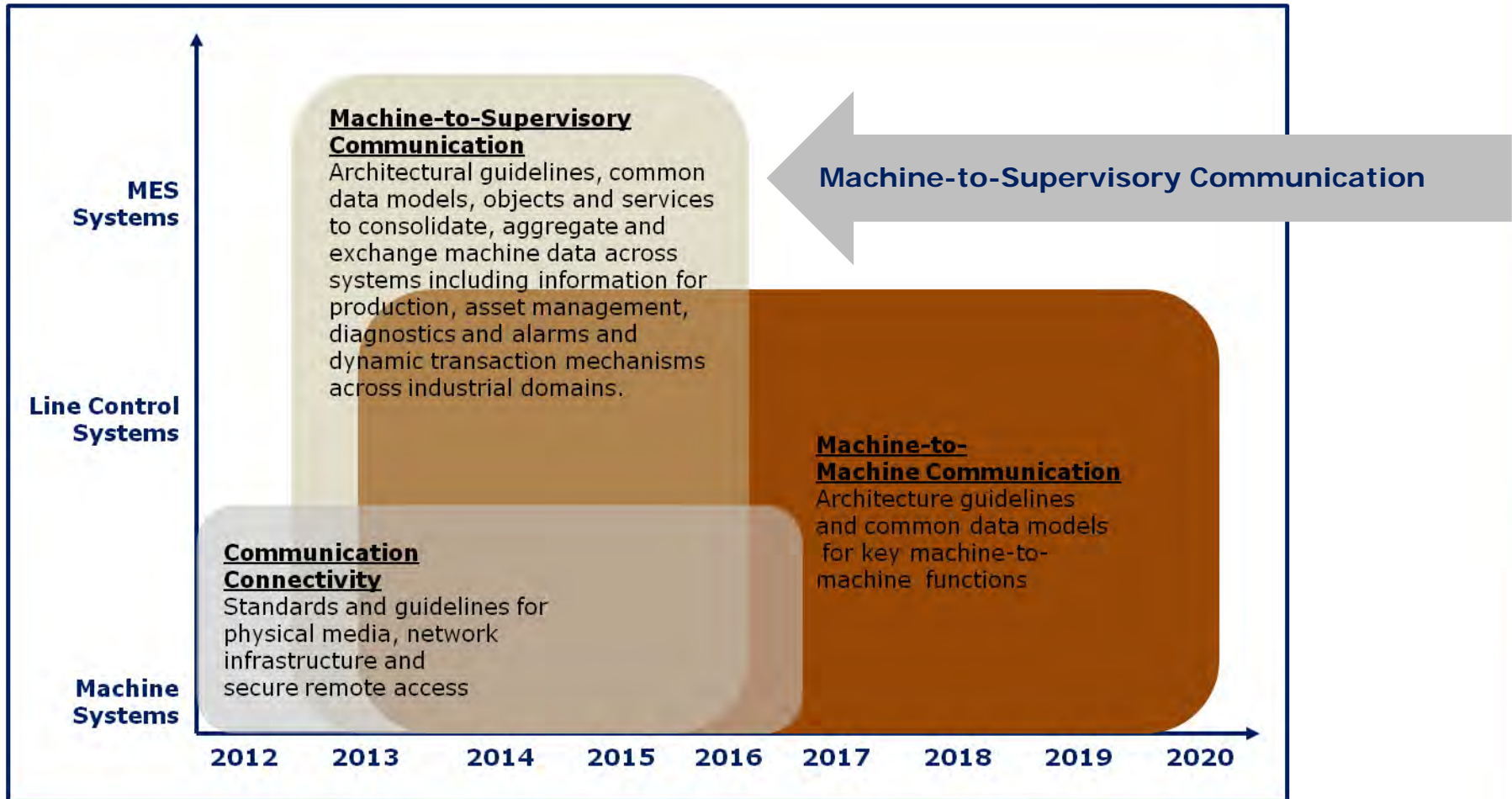
- VOLKER ALT, BOSCH REXROTH
- PAUL HUNKAR, OPC FOUNDATION
- PETER LUTZ, SERCOS INTERNATIONAL
- CLIFF WHITEHEAD, ROCKWELL AUTOMATION
- KATHERINE VOSS, ODVA, ALSO PARTICIPATING AS PANEL MODERATOR

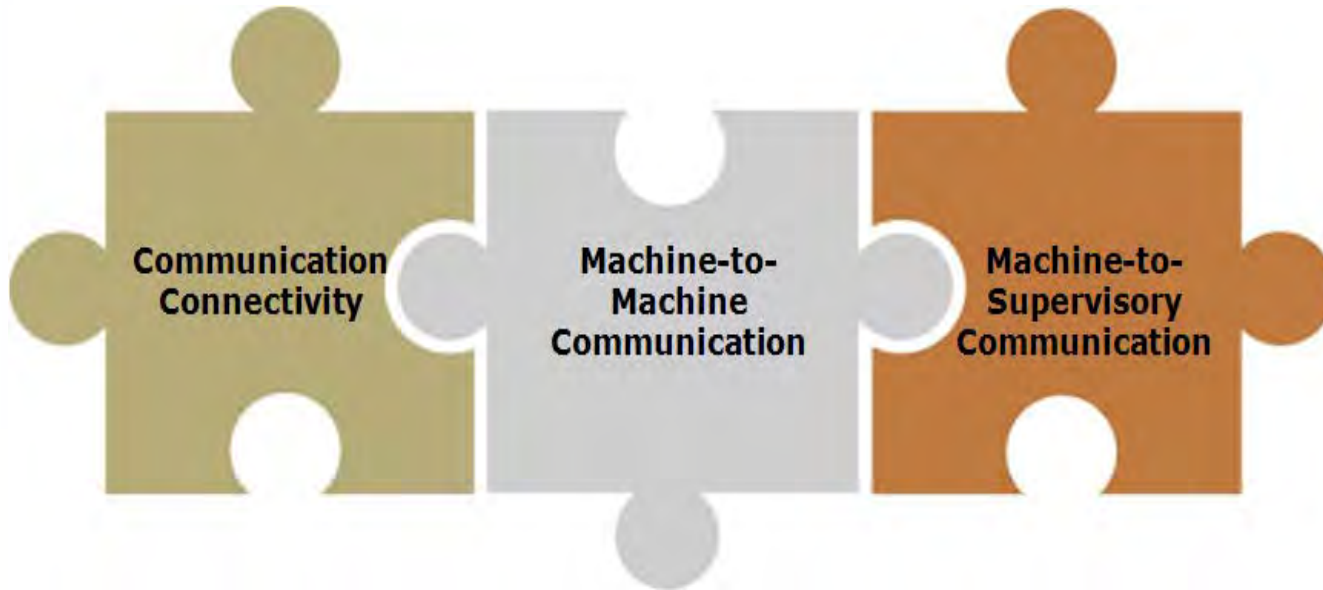
CURRENT PARTICIPANTS ON THE TASK FORCE

Volker Alt, Bosch Rexroth • Tom Burke, OPC Foundation
Scott Hibbard, Bosch Rexroth • Pascal Hampikian, Schneider Electric
Paul Hunkar, OPC Foundation • Peter Lutz, sercos international
Paul Taylor, Cisco Systems • Katherine Voss, ODVA
Cliff Whitehead, Rockwell Automation

Technical Work

Evolve Data Models for UC2 in 2013





For a written overview of ODVA's Machinery Initiative, visit www.odva.org and download the white paper.

