International Society of Automation
Setting the Standard for Automation™

ISA/IEC 62443

An Asset Owner's Perspective

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Topics

ExxonMobil's ISA/IEC 62443 journey

Program Development & Sustainment

Advice for Getting Started

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Our Journey

Business-line specific standards

< 2008

2008

Corporate-wide standard

Prescriptive

Initial alignment with industry standards

2012

2020 >

Further alignment with industry standards

Procurement practices require 62443 SL2+

Risk-based

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Program Development

Objective: Integrate industry standards into corporate standard

Highlights

- Enhanced management of risks and controls
- Consistent language, expectations, and processes
- Flexible, risk-based approach

Challenges

- Business model diversity
- Requirements vs. recommendations
- Prescriptive vs. risk-based
- Government regulations

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Program Sustainment

- Governance
- KPIs
- Culture
- Training
- Internal Collaboration
- External Engagement

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External Engagement

- Suppliers
- Service Providers
- 3rd Pty Operators
- EPC Contractors
- Joint Ventures
- Standards Orgs
- Gov't Orgs

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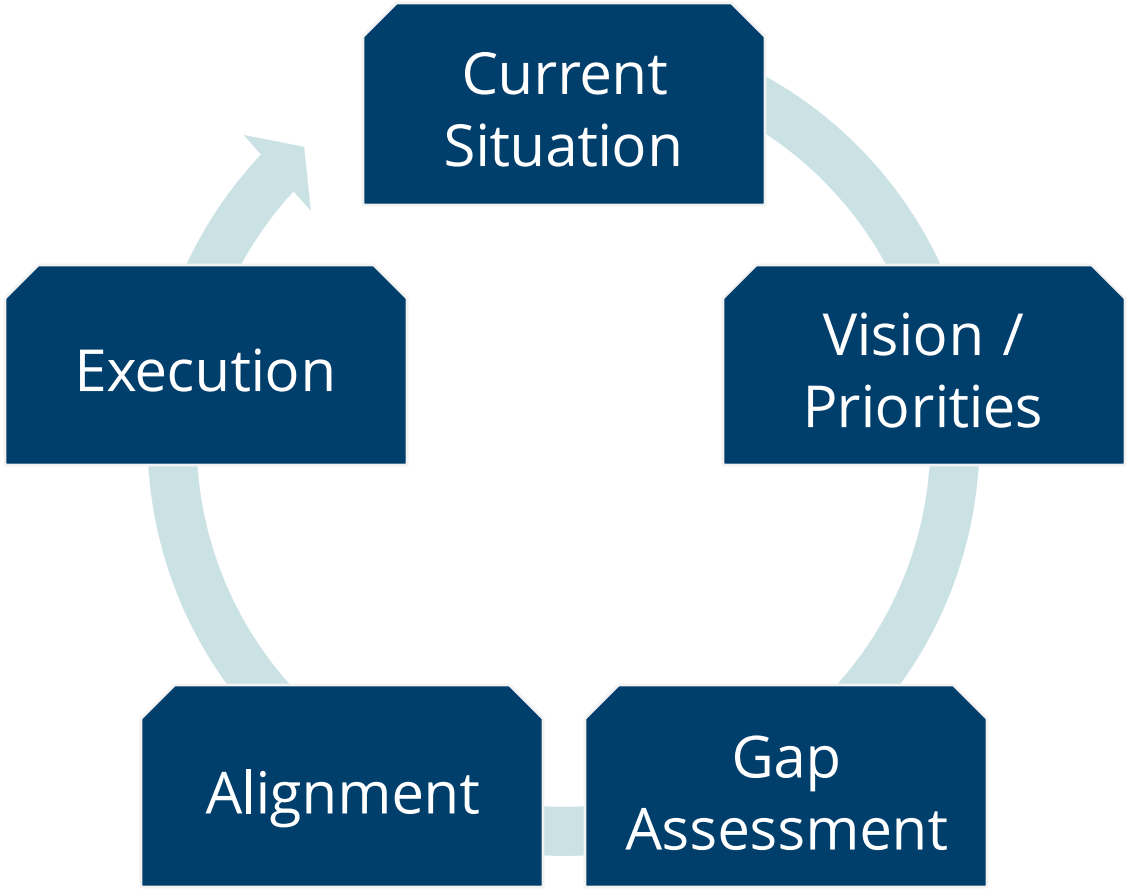
Getting Started with ISA/IEC 62443



Key Milestones

- Requirements ('what')
- Work practices ('how')
- Rollout plan / pilots

Key Success Factors

- Management buy-in & support
- Central coordination / guidance
- Key performance indicators
- Stewardship & communication

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Benefits of ISA/IEC 62443

- ✓ Developed by industry experts; consensus-based
- ✓ Internationally recognized; credible within engineering community
- ✓ Adopted by asset owners, service providers & product suppliers
- ✓ Conformance schemes & certifications provide assurance
  - ✓ Security development lifecycle
  - ✓ IACS components / systems
  - ✓ Site-deployed systems (*coming soon*)

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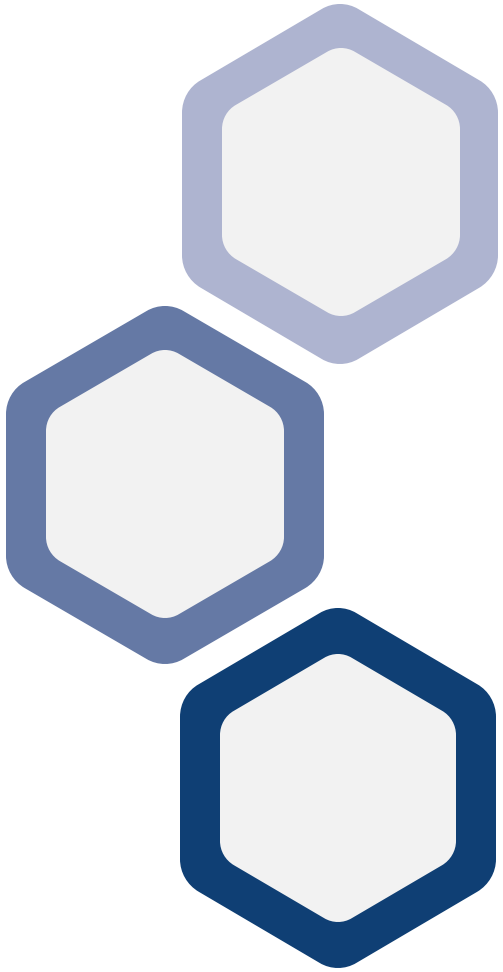
Summary / Key Takeaways



Program maturity takes time. Be strategic

Prioritize essential/critical functions (safety/high availability systems)

External engagement is critical

Seek minimum security level (SL) 2 certification for systems / components; encourage progression to SL3

Raise awareness of ISA/IEC 62443 (sector, suppliers, government)

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Thank you

Upcoming ISA-related Events

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- Continue the conversation on this topic in the Technical Discussion Forum at: https://connect.isa.org.

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