Automation & Control System Security Assurance (ACSSA) Implementation Update

ISA
International Society of Automation
Setting the Standard for Automation™

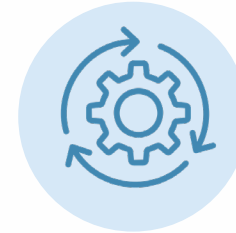ISA | **ISASecure®**

Agenda

WELCOME

PANELIST INTRO

ACSSA ... THE WHY

TECHNICAL UPDATE

Q&A

Questions ... Submit them through the Q&A Panel throughout the Program

ISASecure Certifications

Certification Description	Certification Mark	Availability
Automation and Control system Security Assurance (ACSSA) ISA/IEC 62443 2-1, 2-4, 3-2, 3-3	"ISASecure IEC 62443 Conformant Operating Site"	Summer 2025
IIoT Component Security Assurance (ICSA) ISA/IEC 62443-4-1 and ISA/IEC 62443-4-2 plus 16 extensions	Certified IIoT Component ISASecure	Dec 2022
Component Security Assurance (CSA) ISA/IEC 62443 4-1 and ISA/IEC 62443 4-2	Certified Component ISASecure	Aug 2019
System Security Assurance (SSA) ISA/IEC 62443 3-3 and ISA/IEC 62443-4-1	Certified System ISASecure	Oct 2018
Security Development Lifecycle Assurance (SDLA) ISA/IEC 62443 4-1	"An ISASecure Certified Development Organization"	July 2014

Mission and Vision for ACSSA

Mission

Publish a consensus specification and establish a global scheme for assessing and certifying the cybersecurity of automation and control systems in use at asset owner sites based on the Asset Owner series of ISA/IEC 62443 standards.

Vision

The assessment specification and resulting standard report will become the de-facto foundational document of reference for assessing and certifying OT cybersecurity, globally, by asset owners, consultants, certification bodies and public policy makers.

Phase One – Develop Core ACSSA Program from ISA/IEC 62443

ISA/IEC 62443 Asset Owner Standards
(346 requirements)

62443-2-1 – Security program requirements

62443-3-2 – Risk assessment & system design

62443-3-3 – System requirements & security levels

62443-2-4 – Service provider requirements

TSC = Technical Steering Committee

ISASecure TSC Develops Specifications

CAB = Conformity Assessment Body

"Core" ISASecure ACSSA Program

Evaluation methods

Evaluation Specification & Report
Standardized evaluation methods, & **report.**

Three-day Training Class
Asset owner standards, ACSSA evaluation methodology

Specification Licensing Agreements
End-users, consultants, conformity assessment bodies, other

Third-party Inspection/ Certification Schemes

Scheme Definitions
Pass/fail for certification
Program policies & procedures

CAB Accreditation
ISO/IEC 17020 (inspection), 17065 (certification) and scheme specific requirements

Evaluator Personnel Credential Program
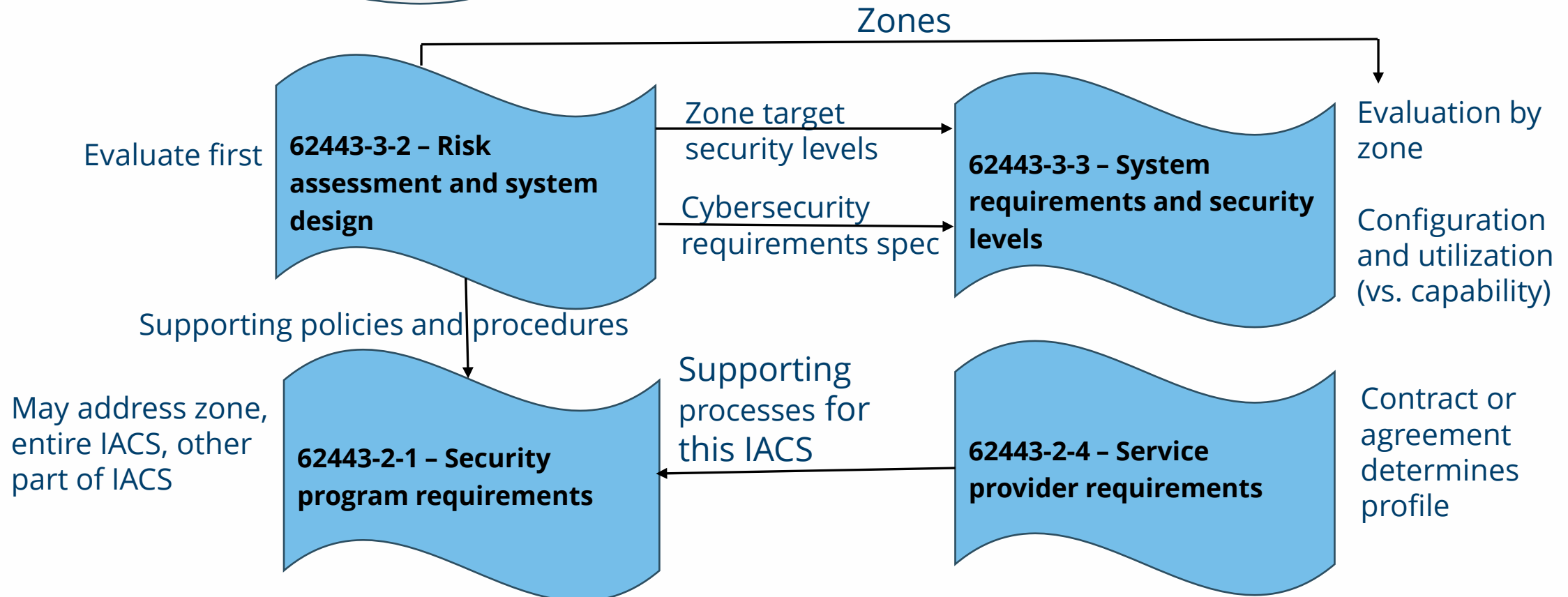Profile, education, experience, certifications

Scheme Definitions

Pass/fail for certification

Program policies & procedures

Progress: 85%

Decided:

- Two programs, same technical evaluation:
  - Inspection (one and done)
  - Certification (3-year certificate, annual surveillance)
- Evaluation plan for each client
- Option to roll inspection report into certification
- Certification is for maturity level 3
- Public or specific disclosure of certificate up to asset owner

"Core" ISASecure ACSSA Program

CAB Accreditation
ISO 17020 (inspection), 17065 (certification) and scheme specific requirements

Evaluator Personnel Credential Program
Profile, education, experience, certifications

Progress: 85%

Requirements for evaluators include:

- Work experience in ACS environment
- 62443 expertise
- ACSSA training certificate, pass exam
- Annual ACSSA training update

Three-day Training Class
Asset owner standards, ACSSA evaluation methodology

Progress: Team in place, class outline

Coverage: How to perform an ACSSA evaluation

Prerequisite: 62443 expertise (tested)

Top level outline:

- Overview of ACSSA
- Eligibility
- Plan the evaluation
- Evaluation process
- Evaluation methods
- Document the evaluation
- Surveillance
- Recertification

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Specification Licensing Agreements
End-users, consultants, conformity assessment bodies, other

"Core" ISASecure ACSSA Program

Coming Soon

Q&A

Cybersecurity Resources at ISA

ISASecure product certifications – https://www.isasecure.org/en-US/

ISASecure web page with ACSSA program details https://isasecure.org/isasecure-site-assessment-0

ISA Global Cybersecurity Alliance - https://isagca.org/

ISAGCA Blogs (tons of great info and free downloads) - https://gca.isa.org/blog

ISA/IEC 62443 Training - https://www.isa.org/training-and-certification/isa-training

In 2021, ISA established a cybersecurity incident command system for industrial control systems. www.ics4ics.org

Elevating OT cybersecurity from an art, to a science, to an engineering discipline

Thank You

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