



Myndigheten för
samhällsskydd
och beredskap

Industrial Information and Control Systems Security

A Government Perspective

Dr. Åke J. Holmgren

`ake.holmgren@msb.se`

Information Assurance Department
The Swedish Civil Contingencies Agency (MSB)



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We're good at this ...



Challenges 1(3)

- **Critical infrastructures are dependent on control systems**
 - Economic prosperity and national (homeland) security
 - A cross-sector issue – interdependencies
 - There is a legacy – but things move fast now ...

⇒ *Government must play an active role*
- **Critical infrastructures are operated by private actors**
 - Regulation vs. self-regulation?
 - Many stakeholders (POC?)

⇒ *Private public partnerships*
- **Weak competence in society**
 - Varying level of maturity between sectors

⇒ *Awareness and training on all levels*



Challenges 2(3)

- **Integration between Control Systems and business systems (public networks)**
 - ⇒ *Same risks as the 'internet world'*
- **The use of standard components (COTS)**
 - ⇒ *The role of the vendor is changing (integrator)*
 - ⇒ *Interoperability*
 - ⇒ *Increasing demands on end-users*
- **The 'culture clash on the plant floor' continues ...**



Challenges 3(3)

- **Disturbances in control systems have occurred**
 - Lack of information – ‘urban myths’
 - Legal and cultural obstacles to information sharing?
 - ⇒ *From sharing information to jointly ‘producing’ information*
- **‘All-risk approach’ needed to protect control systems**
 - Cyber-attacks constitute a credible threat, but there’s also the traditional hazards ...
 - ⇒ *Both resilience and security*
 - ⇒ *Less threat-driven, more solution oriented*
- **Multinational control systems vendors**
 - Standardization vs. best-practice
 - ⇒ *International coordination and collaboration – a challenge and a solution*



Collaboration and Information Sharing Requires Capacity

Information sharing and
collaboration
-Likelihood of success



- Capacity to generate your own unique knowledge



- Capacity to evaluate and adapt information acquired from others



- Capacity to carry out traditional open source intelligence





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MSB Program for Increased Security in Industrial Information and Control System (SCADA)



Technical
Platform for
Collaboration



Awareness
Raising



Information
Sharing &
Cooperation



Planning &
Program
Development



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Practical Recommendations



- Awareness raising on all levels
- Basic training for process engineers and IT-department
- Separation and defense-in-depth
- Security requirements in procurement

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