



Swedish Civil  
Contingencies  
Agency

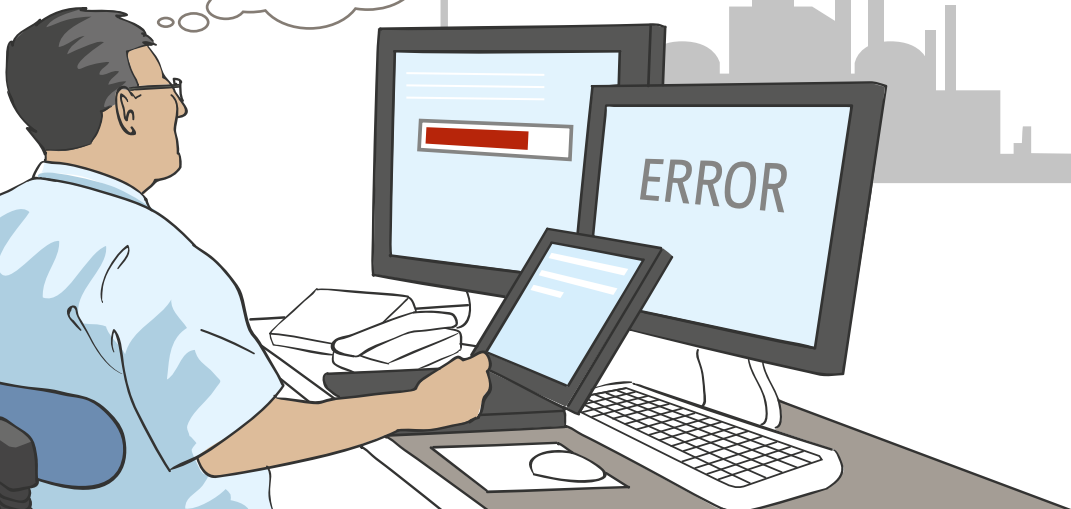
# ICS Parables

Part 3

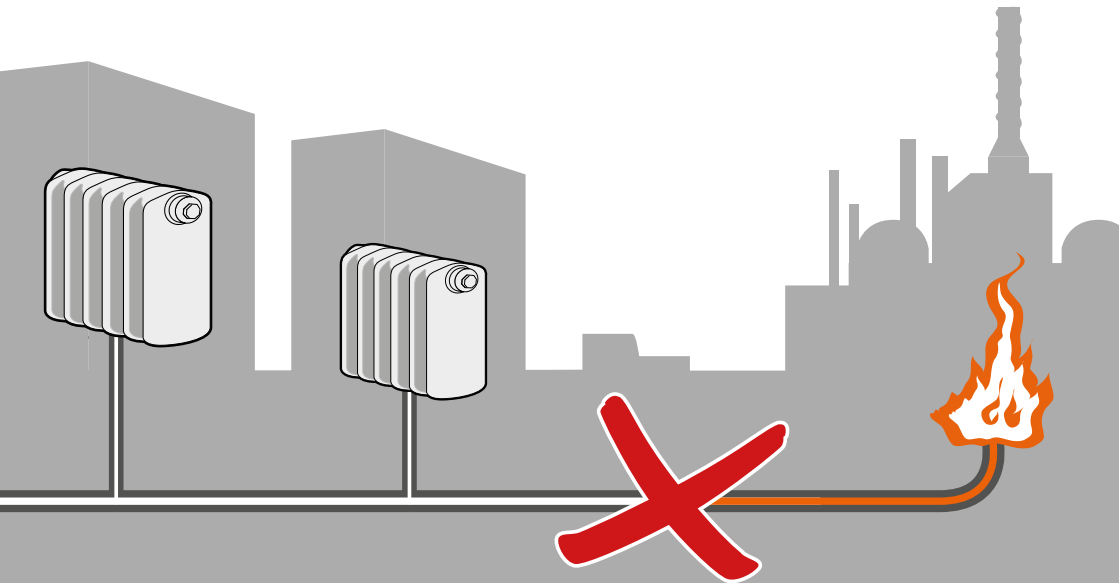
# To be unprepared

*A Thursday at the District heating plant.*

Why can't I load  
the device drivers?  
What do I do now?



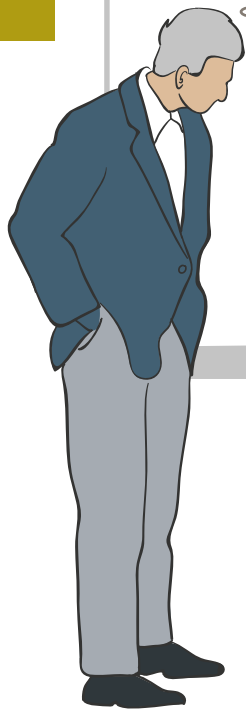
Oh no, we will have trouble delivering heating if we can't solve this. What is going to happen?  
What should we do?



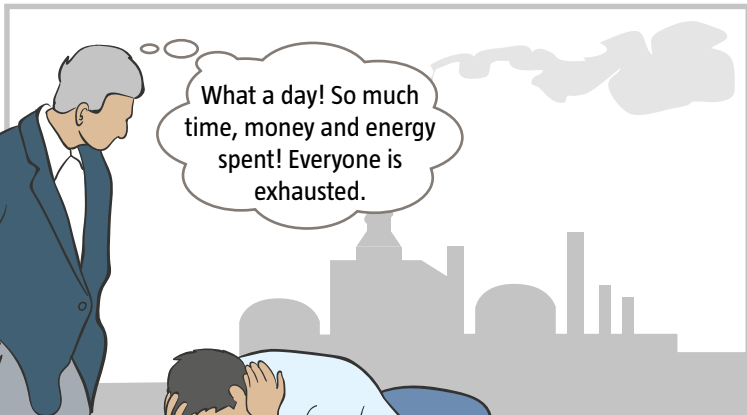
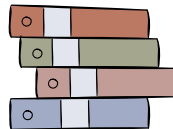
I am sorry that we have to call you! It's complete chaos around here. No-one knows how to restore the system and we can't find anything in the manual.



*The heat production is finally restored.*



What a day! So much time, money and energy spent! Everyone is exhausted.



# Recommendations

- Maintain processes for system surveys and risk management in industrial information and control systems.
  - There should be a clear and updated documentation on the operation's systems, information flows and system dependencies.
- Conduct training and practice regarding IT incidents in industrial information and control systems.
- Ensure systematic contingency planning and incident management in industrial information and control systems.



# To be proactive

Look what's happened in the neighbouring municipality!  
How can we make sure this doesn't happen to us?





We have received more information. We have to prioritise this risk and act accordingly.

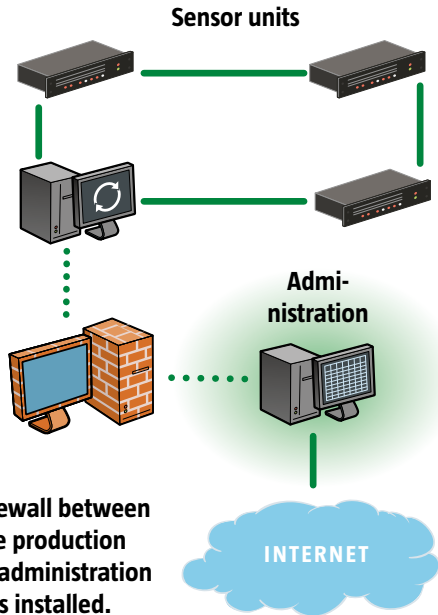
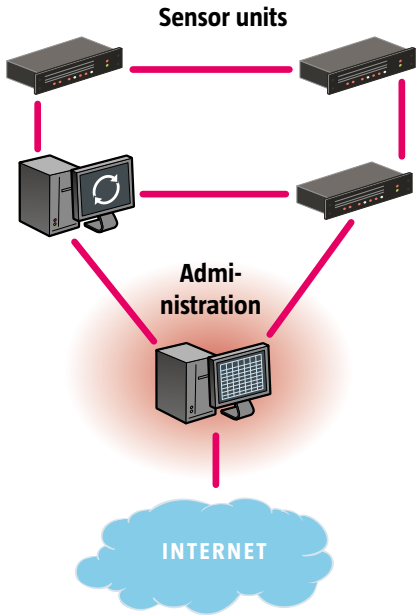
Probability  
**Low**

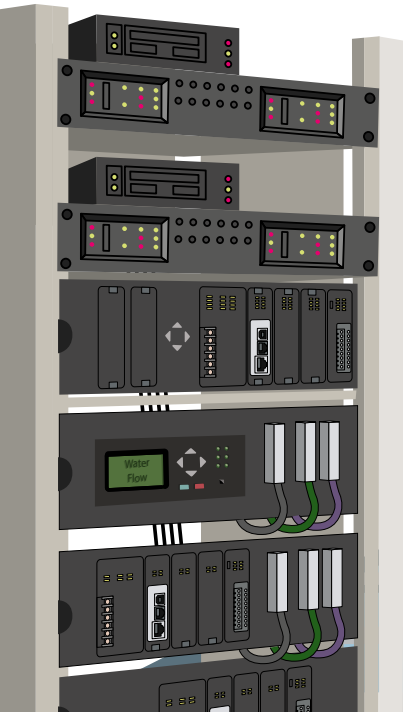


**High**  
Consequence

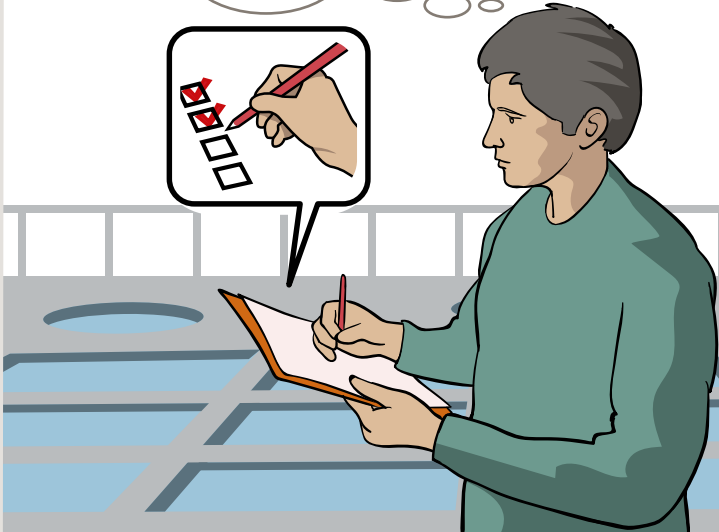


Let's make some changes to the network architecture.





Everything looks good. It is all in line with the decisions made in our risk analysis. We are continuously monitoring all network communications.



# Recommendations

- Follow up incidents in industrial information and control systems and monitor external security problems.
- Conduct regular risk analyses of industrial information and control systems.
- Work with a security architecture in the industrial information and control systems.
- Maintain processes for system surveys and risk management in industrial information and control systems.
- Participate in user associations, standardisation bodies and other networks for security in industrial information and control systems.

Protect vital societal functions.

Protect your organisation.

Protect your industrial control systems.



