

























SCADA Cybersecurity Workshop 10th March 2014

Introduction

Dr. Carlo Harpes itrust consulting







Welcome to CREOS in Luxembourg

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Thank you

Thank you

Patronage by the

Ministry of Economy Etienne Schneider

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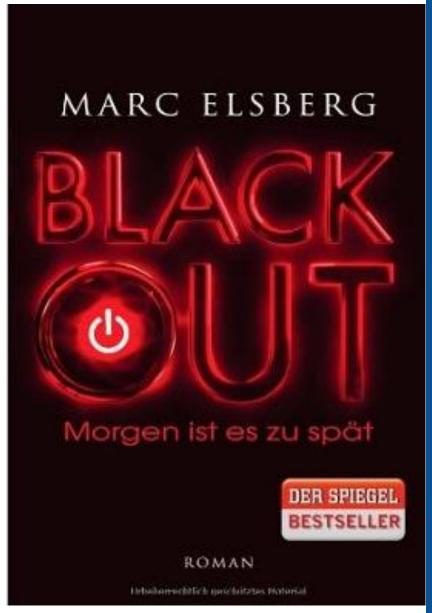
Some motivation

Some motivation

Bestseller related to Cybersecurity

http://
www.blackout-das-buch.de/
multimedia.html

http://www.youtube.com/watch?feat ure=player_embedded&v=uygGuJKi H5A





Standards – IEC 62443

General

IEC 62443-1-1 (Ed. 2)

Terminology, concepts and models

IEC/TR 62443-1-2

Master glossary of terms and abbreviations

IEC/TS 62443-1-3

System security compliance metrics

IEC/TR 62443-1-4

IACS security lifecycle and use-case

Policies & procedures

IEC 62443-2-1 (Ed. 2)

Requirements for an IACS security management system

IEC/TR 62443-2-2

Implementation guidance for an IACS security management system

IEC/TR 62443-2-3

Patch management in the IACS environment

IEC 62443-2-4

Installation and maintenance requirements for IACS suppliers

System

IEC/TR 62443-3-1

Security technologies for IACS

IEC 62443-3-2

Security levels for zones and conduits

IEC 62443-3-3

System security requirements and security levels

Component

IEC 62443-4-1

Product development requirements

IEC 62443-4-2

Technical security requirements for IACS components

Key topics

*H2020-Objectives*DS-6-2014: Risk management and assurance models

Scope: The proposals should implement a pilot to demonstrate the viability and scalability of state-of-the-art risk management frameworks. The risk management framework will have to encompass methods to assess and mitigate the risks in real time. Work should include a socio-economic assessment to evaluate the cost-benefit of implementing the framework. The framework should be dynamic, continuously adapted to new ways of managing risk to keep up with the ever evolving threat and vulnerability landscape. New ways of dealing with the security risk resulting from on-demand composition of services and massive interconnectivity should be developed.



3rd CockpitCl Workshop

Objectives

A. Present CockpitCl

Framework to allow the community of CI owners to detect, analyse and exchange real-time information about attacks in order to assess risk and avoid disastrous cascading effects, A few tools,

- **B.** Address security issues of operators
- C. Get up-to-date on EU context

A Workshop is sharing information, interactively!



Agenda

13:30	Registration	
14:00	Welcome to participants	Carlo Bartocci (CREOS) , François Thill (Ministery of Economy, Carlo Harpes (itrust):
First Session		
14:15	Recent evolution of the CIP and CIIP for SCADA	Adrian Pauna (ENISA) via Skype
14:45	Experience of SCADA upgrading project	Carlo Bartocci (CREOS)
15:15	The Government as key stakeholder for CI	Paul Rhein (Haut Commissariat à la
	Cybersecurity	Protection Nationale)
15:40	Overview of the CockpitCl Project	Antonio Graziano (Selex ES)
16:00	Coffee break	
Second Session		
16:20	The CockpitCl multi-layered detection framework	Paulo Simoes (FTUC):
16:35	Modelling SCADA and corporate network of a medium voltage power grid under cyber attacks	Michele Minichino (ENEA)
16:50	Risk Prediction Tool of CockpitCl system	Stefano Panzieri (Roma3):
17:05	Attributes extracted from network traces	Leandros Maglaras
17:15	Presentation of specific CockpitCl tools	Matthieu Aubigny (itrust)
Round Table		
17:30	Open discussion on security issues for SCADA	moderated by C. Harpes (itrust)
	operators and on CockpitCl's impacts.	
18:00	Conclusion	C. Bartocci and C. Harpes
18:15	Cocktail	



Confidentiality – Trafic Light Protocol

We are a closed user group!

Amber for CREOS presentation, discussions Green for CockpitCl, tools, conclusions

When should it be used?

Sources may use TLP: RED when information cannot be effectively acted upon by additional parties, and could lead to impacts on a party's privacy, reputation, or operations if misused.

Sources may use TLP: AMBER when information requires support to be effectively acted upon, but carries risks to privacy, reputation, or operations if shared outside of the organizations involved.

Sources may use TLP: GREEN when information is useful for the awareness of all participating organizations as well as with peers within the broader community or sector.

Sources may use TLP: WHITE when information carries minimal or no foreseeable risk of misuse, in accordance with applicable rules and procedures for public release.

Color

How may it be shared?



Recipients may not share TLP: RED information with any parties outside of the specific exchange, meeting, or conversation in which it is originally disclosed.



Recipients may only share TLP: AMBER information with members of their own organization who need to know, and only as widely as necessary to act on that information.



Recipients may share TLP: GREEN information with peers and partner organizations within their sector or community, but not via publicly accessible channels.



TLP: WHITE information may be distributed without restriction, subject to copyright controls.







Cockpit C1













reaction tools for Critical Infrastructures









Any questions?









Cockpit C]













reaction tools for Critical Infrastructures









Thank you for your attention