

# Integrated security concepts for critical systems

[www.uti.eu.com](http://www.uti.eu.com)

Adrian Floarea  
Chief Commercial Officer  
UTI

**Do you feel  
secure?**



**You may not be!**





**All the systems  
can be attacked**





Bucuresti 10 Octombrie 2013 - Protecția infrastructurilor critice din sectorul energetic.  
Dependențe intersectoriale energie-comunicații.





**What are you  
prepared for?**



Bucuresti 10 Octombrie 2013 - Protecția infrastructurilor critice din sectorul energetic.  
Dependențe intersectoriale energie-comunicații.













Bucuresti 10 Octombrie 2013 - Protecția infrastructurilor critice din sectorul energetic.  
Dependțe intersectoriale energie-comunicații.







## Threats are borderless



**Attack over RSA  
in USA**

**STUXNET in Iran**

# Threats



- **Civil and military information systems can be vulnerable**
- **Critical infrastructure is relying on electronic data**
- **Solar explosions can perturb or even destroy electronic devices and communication**
  - **Worst case scenario**
  - **Pencil and paper supplies**
  - **Out of the boundaries of today presentation**



# Updated security perimeter

## What is new

Cloud computing

- Information can be anywhere

Mobile users

- Information available remotely
- Heterogeneous environment

Unconventional On-line presence and social media

- New mechanisms for information sharing and publishing

Difficult to control and monitor

Challenges

- Technical
- Policies and procedures
- Collaboration and information exchange: CERT/CSIRT, SOC

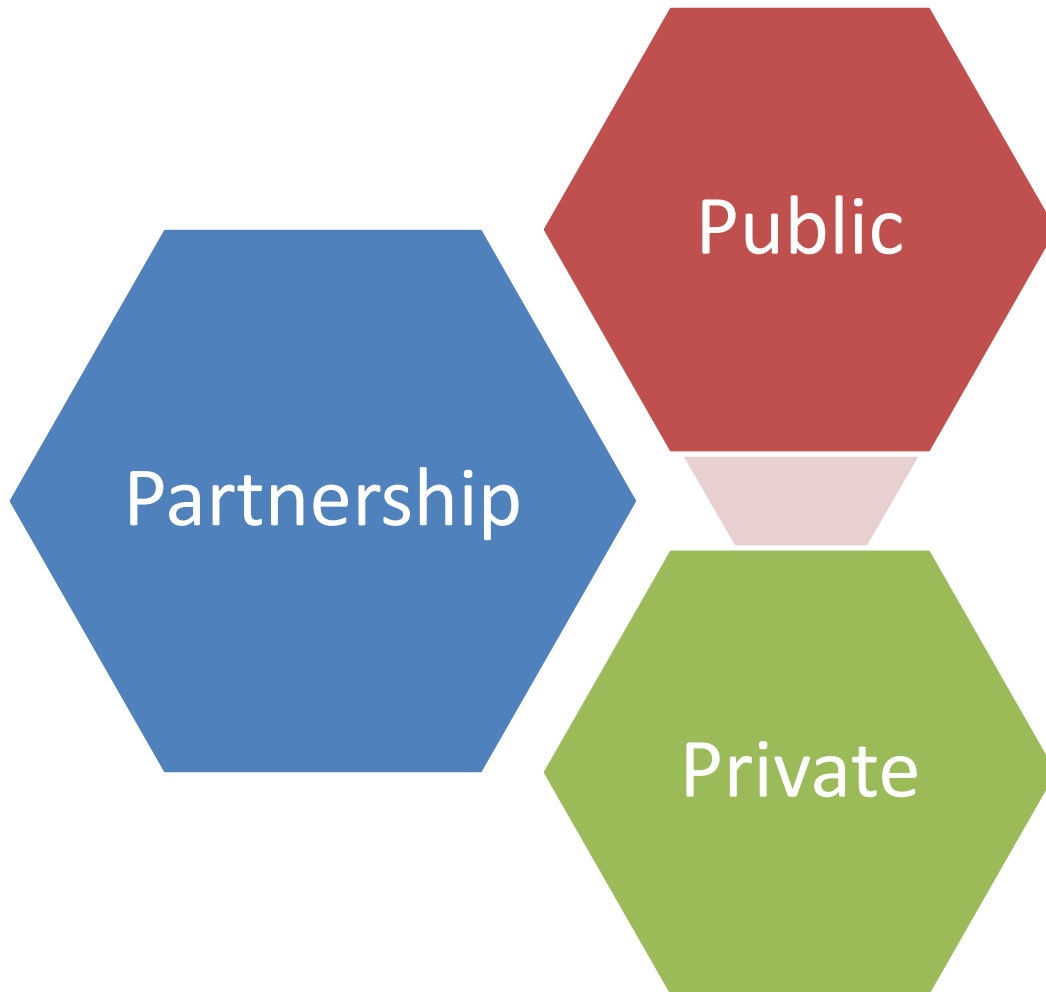


## Emergency preparedness

- Get ready for the unexpected
- Complex situation that occur by surprise
  - Stakeholders are defenseless
  - Plans were not prepared
- Establish an emergency management framework
  - Understable and sharable
  - Applicable to all stakeholders
  - Flexible



## Critical infrastructure crisis management coordination group



- Public – Private partnership
- Involvement of relevant third parties
  - According to the importance of the domain

## Critical infrastructure crisis management coordination group, tasks

- Governance
- Target achievement
- Supervise preparation
- Promote improvements of legislation
- Definition of emergency situations
- Easy to be identified
- Justify new investments by the stakeholders
- Establish or get on board a technical body
- Establish Critical infrastructure CERT/CSIRT
  - Monitoring, detection, reaction
  - Information sharing
- Circle of Absolute Trust\*
  - collaborative mechanism allowing to exchange confidential information anonymously under the govern of a "Trusted Chair"

\* Final Report THALES INFORMATION SYSTEMS SECURITY CONSULTING AND EVALUATION for the European Commission Directorate-General "Justice, Freedom and Security"



## Practical achievements

- Common governance model
- Technical standards and guidelines
- Exercise and interoperability tests
- Establishment of CERT/ CSIRT by each stakeholders
- Development of complementary systems
  - Early Warning
  - Disaster Warning
  - Investigation / Forensic
  - Information sharing network

## What to do

Mission Critical

- Label it “Mission critical” and act accordingly
- Start with available stakeholders
- Obtain support from external organization
- Reuse experience from other industries



**Thank you!**