



ENISA's response to Europe's online security threats

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Workshop-Reihe "IT-Sicherheit für unsere Gesellschaft"

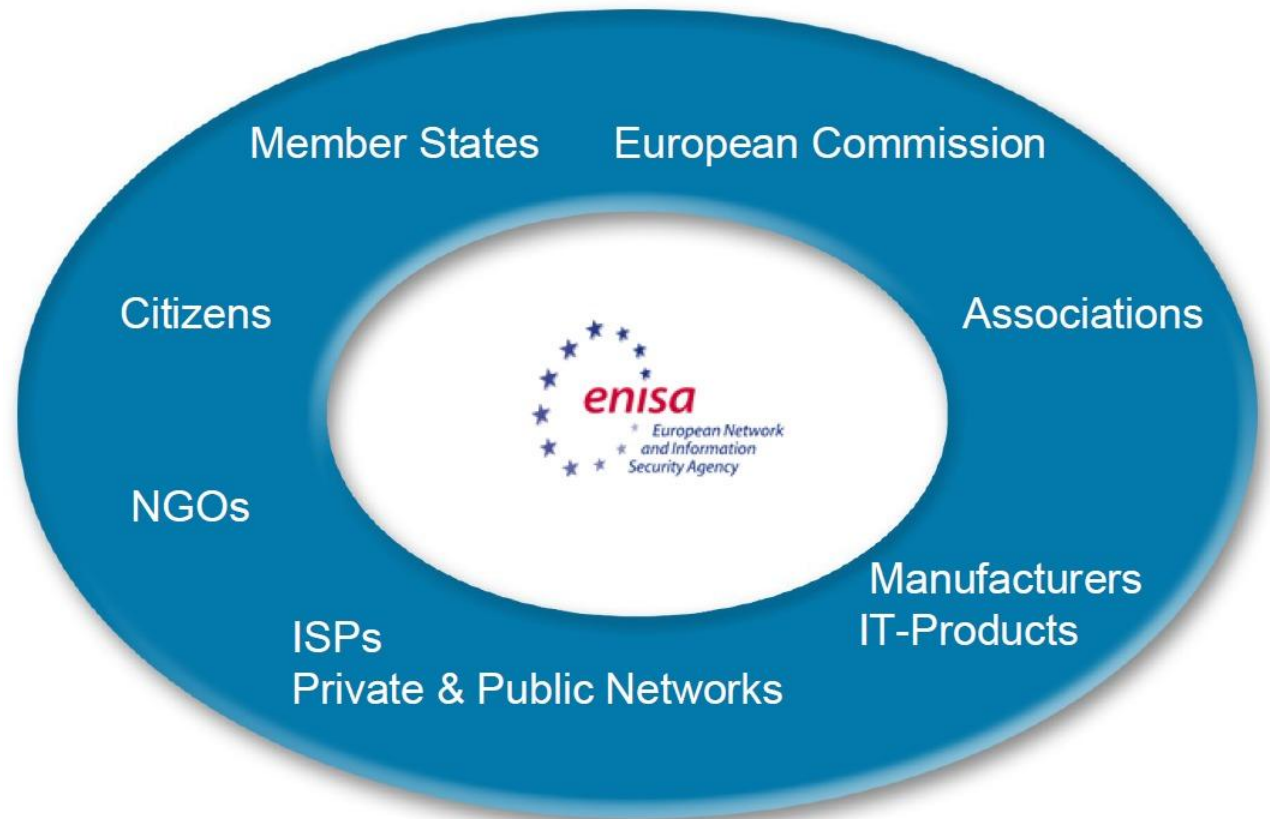
2. Workshop Drahtlose Sensornetze,
Universität der Bundeswehr München
Munich, 3rd December 2009

About ENISA

- The European Network & Information Security Agency (ENISA) was *formed in 2004*.
- The Agency is a *Centre of Expertise* that supports the EU Member States, the European Parliament and the Commission in the area of information security.
- We facilitate the exchange of information between EU institutions, the public sector and the private sector.

ENISA Mission

- Securing Europe's Information Society by acting as a pacemaker for network and information security



Activities

- The Agency's principal activities are as follows:
 - **Advising** and assisting the Commission and the Member States on information security.
 - **Collecting and analysing** data on security practices in Europe and emerging risks.
 - **Promoting** risk assessment and risk management methods.
 - **Raising awareness** and co-operation between different actors in the information security field.

Multi Annual Programs

- Improving resilience in European networks
- Developing and maintaining cooperation models
- Identifying emerging risks
- **Products**
 - Policy guidelines (e.g. on Resilience)
 - Position papers (e.g. on Social Networking)
 - Briefing papers (e.g. Quantum Key Distribution)
 - Reports (e.g. Cloud computing)
 - Quarterly Review
 - Workshops
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Wireless Sensor Networks

Research Challenges

- Interoperability / mobility
- Trust and verification
- Energy, power, lightweight crypto
- Vulnerabilities management, remote patching
- End-to-End Security
- Intrusion detection and recovery

Sensor Networks (1)

- Does this technology affect in negative way the network resilience?
- Open medium - poor physical protection.
- Lack of centralised monitoring & management points.
- Limited power, computational capacities and memory.
- Prone to failures, collisions, congestions.
- RFID tags could be used to propagate, viruses, malware and infect other entities of the network

Sensor Networks (2)

- Does this technology bring a benefit in terms of improving network resilience?
- RFID and sensors !
 - adapt to dynamically changing network conditions.
- Sensors: sensing accuracy, rich multidimensional view of an environment.
- Fault tolerance: given a high level of redundancy.



Contact

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