ENISA Activities

Industry Seminar Information Security ISO/IEC JTC SC27

10th October 2008, Limassol, Cyprus

Dr. D. Ikonomou

Dr. L. Marinos

Overview of Content

- Work on Risk Management

- Awareness raising

- Resilience (Dr. Ikonomou)

Risk Management (1)
RM in Businesses

★ In 2007: An approach for RM in SMEs

★ In 2007-2008: Working Group on Risk Management

★ In 2007-2008: Integration of RM with operational processes and Corporate Governance

★ In 2008: Pilots of the RM approach with multipliers (Univ. of Bologna - IT, IAAITC- UK, GMV - SP)

★ In 2008: Overview of existing models in Business Continuity (IT-Contingency)

★ In 2008: Overview of existing methods/tools in Business Continuity (IT-Contingency)

★ In 2008-2009 (yet to start): Business Continuity approach for SMEs

Risk Management (2) Emerging and Future Risks

★ In 2006: Road mapping to identify sequence of tasks

★ In 2006: Identification of Information collection and dissemination process

★ In 2007: Requirements for identification of Emerging and Future Risks (Methods)

★ In 2007-2008 : EFR workflow

★ In 2008: Establishment of Stakeholder Forum

★ In 2008: Specification of the workflow

★ In 2008: Test scenario to validate EFR workflow

★ In 2008: First prototype of the EFR

http://www.enisa.europa.eu/rmra/er_home.html

What's next?
ENISA WP2009

- Perform further and more extensive validation tests of the life cycle (proof of concept cont.)
- Establishment of the Stakeholder Forum
- Brokerage of achieved results

- Maintain the EFR lifecycle according to feedback received

2008 Publications of ENISA's AR section and AR Community members

★ Obtaining support and funding from senior management for awareness raising initiatives

★ Secure printing (*based on controls from standards COBIT and ISO 27001*)

★ Secure USB flash drives

★ Key facts and figures about the Awareness Raising Community and its members (*electronic booklet*)

Latest publications - October 2008

★ **Children on virtual worlds - *What parents should know*** giving recommendations to parents and guardians whose children participate in online virtual worlds.

★ **Social Engineering: *Exploiting the Weakest Links***

Resilience

The ability of a system to provide & maintain an **acceptable level of service** in face of faults *(unintentional, intentional, or naturally caused)* affecting normal operation.

★ The main aim of resilience is for faults **to be invisible to users**;

★ A resilient network must guarantee protection and / or restoration schemes;

★ Real-time applications demand that resilient end-to-end services be extended across the network;

★ The classification of a networks resilience has to be given from the **availability and performance perspective;**

Risks to resilience

- ★ Flash crowd events
- ★ Cyber attacks
- ★ Outages to other services affecting the network
- ★ Natural disasters
- ★ System/Logical failings

Risk Mitigation

★ Network resilience is an issue of **risk management.**

★ Mitigation of identified risks involves technical measures such as:
   ★ Resilient design;
   ★ Resilient transmission media;
   ★ Resilient equipment;

…and Technologies which might improve Resilience:
   ★ **MPLS**
   ★ **IPv6**
   ★ **DNSSEC**
   ★ **S-BGP**
   ★ **Other ?**

Selected Technologies

★ MPLS
  - ★ OSI Layer 2.5 technology.
  - ★ Used by operators in IP backbones, replacing Frame Relay and ATM.
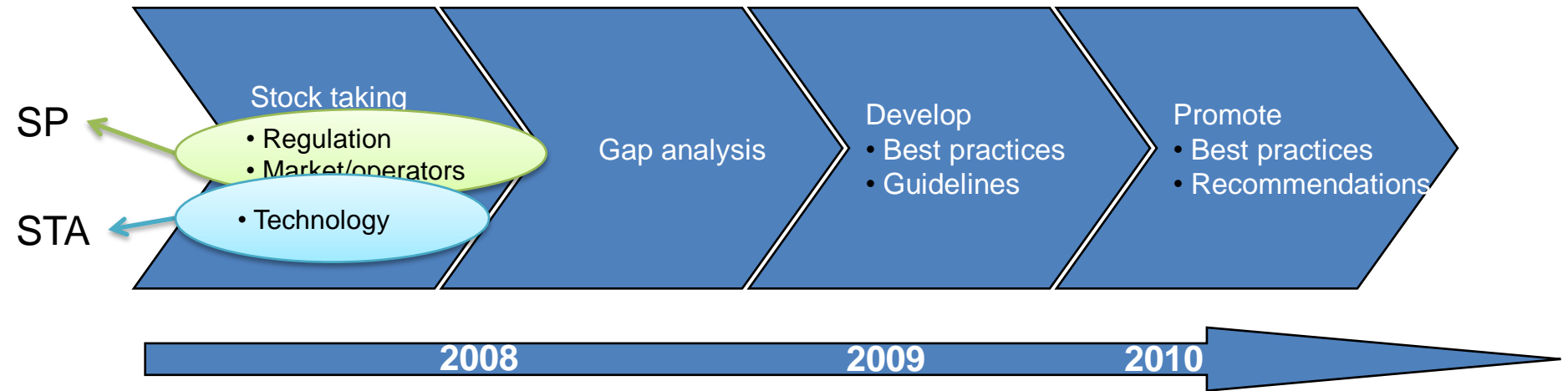
★ IPv6
  - ★ OSI Layer 3 technology replacing IPv4.
  - ★ Action Plan for the deployment of Internet Protocol version 6 (IPv6) in Europe.

★ DNSSEC
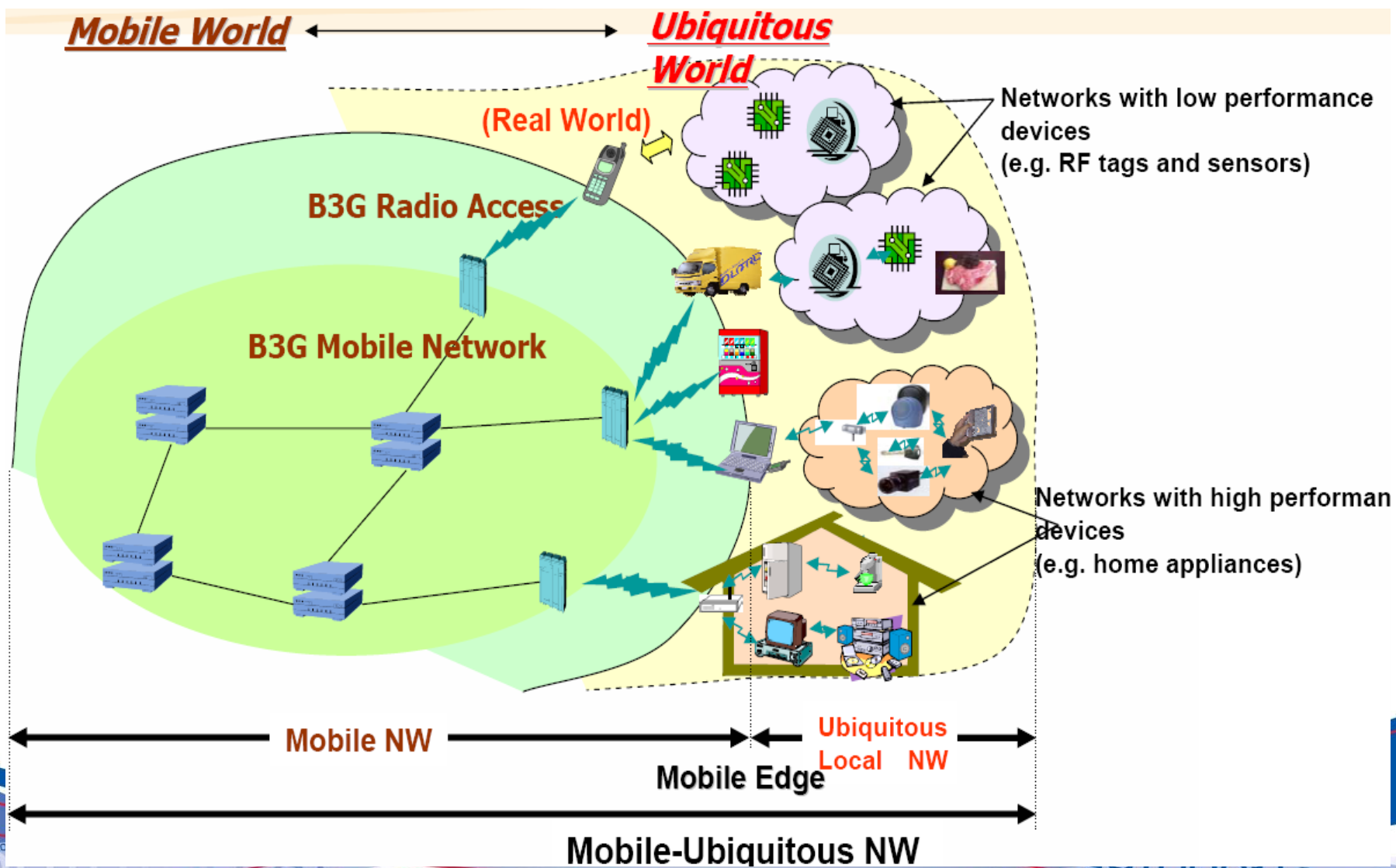 - ★ A technology improving the security of Domain Resolution Service.

MTP1 - Improving Resilience in European e-Communication networks

Collectively evaluate and improve resilience in European e-Communication networks

SP

STA

Stock taking
- Regulation
- Market/operators
- Technology

Gap analysis

Develop
- Best practices
- Guidelines

Promote
- Best practices
- Recommendations

2008   2009   2010

By 2010, the Commission and at least 50% of the Member States have made use of ENISA recommendations in their policy making process

WP2009 – Future Networking Trends

Mobile World ← → Ubiquitous World

(Real World)

B3G Radio Access

B3G Mobile Network

Networks with low performance devices (e.g. RF tags and sensors)

Networks with high performan devices (e.g. home appliances)

Mobile NW — Mobile Edge — Ubiquitous Local NW

Mobile-Ubiquitous NW

An in-depth look on the ENISA activities on resilience...

Workshop on "Improving Resilience in European e-Communication Networks", Brussels,12-13 November 2008 http://www.enisa.europa.eu/sta/workshop2008

★ Two days workshop, where:

- ★ the findings of the stock taking activities carried out during 2008 will be presented;
- ★ including the possible directions in terms of recommendations that the Agency will follow in the course of next year;

★ For further information:

http://www.enisa.europa.eu/sta/workshop2008

Where to find..

- ★ RM Web site:
  http://www.enisa.europa.eu/rmra/rm_home.html

- ★ Emerging Risks:
  http://www.enisa.europa.eu/rmra/er_home.html

- ★ Awareness Raising:
  http://www.enisa.europa.eu/pages/05_01.htm

- ★ Resilience:
  http://www.enisa.europa.eu/pages/resilience.htm
  http://www.enisa.europa.eu/sta/

Thank you for your attention!

demosthenes.ikonomou@enisa.europa.eu
louis.marinos@enisa.europa.eu

ENISA Website: *www.enisa.europa.eu*
http://www.enisa.europa.eu/sta/