

Improving Resilience in Public eCommunication Networks

P. Saragiotis

.SE DNSSEC and IPv6 Workshop

Activities for 2008 and beyond

- ★ Multi-annual Thematic Programmes
 - ★ Strategic priorities for ENISA
 - ★ Implemented through a number of Work Packages
- ★ Current focus on:
 - ★ Improving Resilience in European e-Communication Networks
 - ★ Developing and Maintaining co-operation between Member States
 - ★ Identifying Emerging Risks for creating trust and confidence
 - ★ Building information confidence with Micro Enterprises (Preparatory action)

Resilience



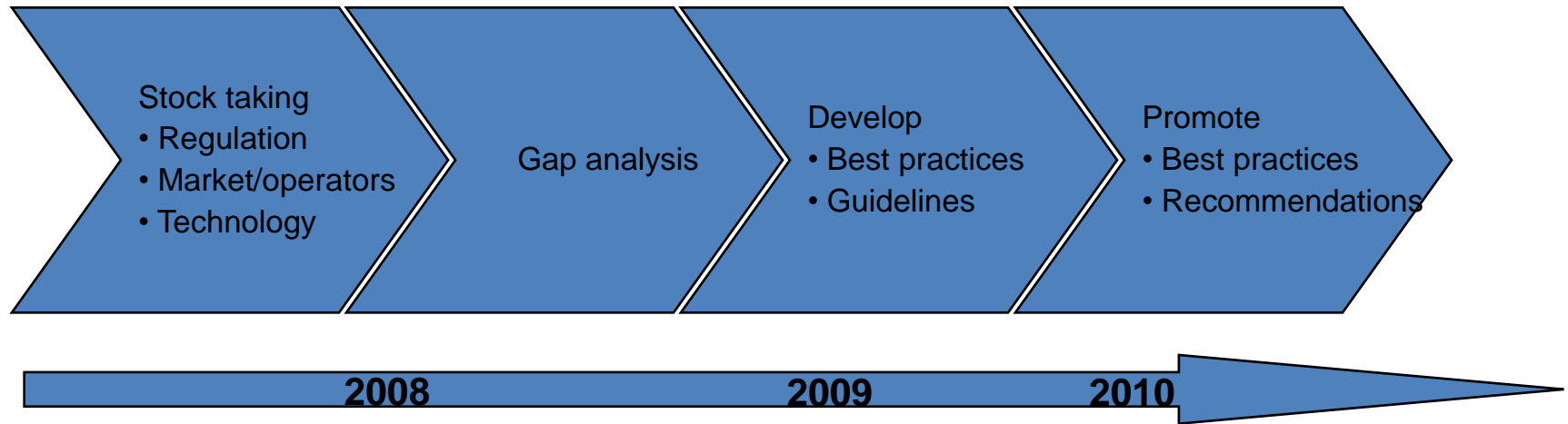
The ability of a system to provide & maintain an **acceptable level of service** in face of faults (*unintentional, intentional, or naturally caused*) affecting normal operation

Network resources resilience

- ★ The main aim of resilience is for faults **to be invisible to users.**
- ★ Real-Time Applications Demand that Resilient end-to-end Network Services Be Extended Consistently Across the Network.
- ★ The classification of a networks resilience has to be given from the **availability and performance perspective.**

Improving Resilience in European e-Communication networks

Collectively evaluate and improve resilience in European e-Communication networks



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

Existing Consultations and Reports

- ★ Hurdles and Triggers for the Deployment of IPv6 Technology, public consultation by INFISO
 - ★ Identified triggers, hurdles and worthy initiatives
 - ★ The average timeframe for wide deployment is 4 to 5 years
- ★ IPv6 among CENTR members, a survey by .SE
 - ★ If there is demand
- ★ World Wide DNSSEC Deployment
 - ★ <http://www.xelerance.com/dnssec/>
- ★ DNSSEC statistics
 - ★ <https://www.iks-jena.de/leistungen/dnssec.php>

Possible Recommendations

- ★ Opinion on consultation for implementing DNSSEC on DNS root
- ★ Best practices for providing recursive resolution service with DNSSEC validation
- ★ Best practices for the implementation of the three technologies for SME's
- ★ Incentives for the implementation of IPv6, DNSSEC
- ★ Require IT procurements to include IPv6 capable products and systems

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



•Workshop on “Improving Resilience in European e-Communication Networks”, Brussels, 12-13 November 2008

- ★ 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>



Summarizing

- ★ Importance of the Resilience of public eCommunication networks
- ★ ENISA is working with all sector actors
 - ★ Key target audience are Policy Makers, NRAs and Operators
- ★ Technologies benefits are well recognized however the economical / political incentives have to be made

Thank You

Panagiotis SARAGIOTIS,
European Network and Information Security Agency
SN Expert - Security Tools and Architectures

Email: Panagiotis.Saragiotis@enisa.europa.eu

★References

★ <http://www.enisa.europa.eu/sta>

★ <http://www.enisa.europa.eu/sta/workshop2008>

Disclaimer: "The views expressed in this presentation are those of the authors and do not necessarily represent the views of the Agency".