

# **Towards a EU policy on critical information infrastructure protection (CIIP)**

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# NIS : a cross-cutting issue @ EC

## DG INFSO

- NIS policy
- CIIP
- e-Signature & eID
- e-privacy
- SPAM
- harmful content
- FP7 ICT theme
- IPv6

## DG JLS

- Cyber crime
- EPCIP & support programme
- Data protection
- Data retention
- Travel documents
- Identity theft

## DG MARKT

- e-payment
- e-frauds
- ...

## DG ENTR

- SME's & NIS
- standards
- FP7 Security theme

## DG JRC

- Support to policy DG
- Specific R&D
- ...

## DGIT/ADMIN-DS

- e-Commission
- IDABC
- Internal security rules...

# NIS Policy and related Regulations (1)

- **Strategy for a Secure Information Society [COM(2006)251]**
  - holistic approach for a comprehensive EU-wide strategy across “pillars”, related policy and regulatory initiatives
  - “voluntary” activities stakeholders via dialogue, partnership and empowerment
  - reinforce **ENISA’s role** in implementing the EC policy
  - importance of “resilience” strategy for CIIP, i.e. the ability to deal with unexpected events
- **Other initiatives related to NIS**
  - fighting against spam, spyware and malware [COM(2006)688]
  - *promoting data protection by PET [COM(2007)228]*
  - *fighting against cyber crime [COM(2007)267]*
  - new Safer Internet Programme [COM(2008) 106]



# NIS policy and related Regulations (2)

- **NIS in the eCommunications Review**
  - **Security and integrity (Art 13 FW D)**
    - level of security appropriate to risks
    - prevent/minimise impact of security incidents on users and interconnected networks
    - focus on continuity of supply of services
  - **Responsibilities of operators**
    - stronger obligations to ensure security and integrity (Art 13 FW D)
    - mandatory breach notifications
      - to NRA (Art 13 FWD): significant impact on operations
      - to consumers and NRA (Art 4 e-privacy D): personal data compromised
  - **Technical measures (Art 13 FW D)**
    - The Commission (“... *taking the utmost account of the opinion ...*”) may adopt appropriate technical implementing measures with a view to harmonising



# NIS policy and related Regulations (3)

- **European Network and Information Security Agency (ENISA)**
  - Established in March 2004 with a 5 ys mandate
  - Mid term evaluation in 2006 followed by a public consultation in 2007 [COM(2007) 285]
  - Extension of the mandate for 3 ys formally adopted in September
- **What's ahead?**
  - A public debate on objectives and means for a reinforced NIS policy in the EU
  - A policy initiative on Critical Information Infrastructure Protection (CIIP)



# Public debate on NIS policy

- **Broader thinking on NIS is essential**
- **Commissioner Reding** called on EP and Council to open an intense debate on Europe's approach to network security and on how to deal with cyber-attacks
- **Calls were made both in EP and Council** for a debate on further discussion on the future of ENISA and on the general direction of the European efforts towards an increased network and information security
- **Aim and Scope:**
  - **Possible objectives for a modernised and reinforced NIS policy at EU level, and the means to achieve those objectives**



# Public Consultation “Towards a Strengthened NIS Policy in Europe”

- **The Commission launched an on-line public consultation (07/11/08 – 09/12/09)**
  - **challenges to NIS**
  - **priorities of a modernised NIS policy**
  - **means needed to address the challenges**
- **The European Council will be involved**
  - **Telecom Working Group March**
  - **Planned Ministerial Conference (tentatively on 27-28 April 2009)**
  - **Exchange of views at the European TTE Council on 12 June 2009 – Presidency guidelines**

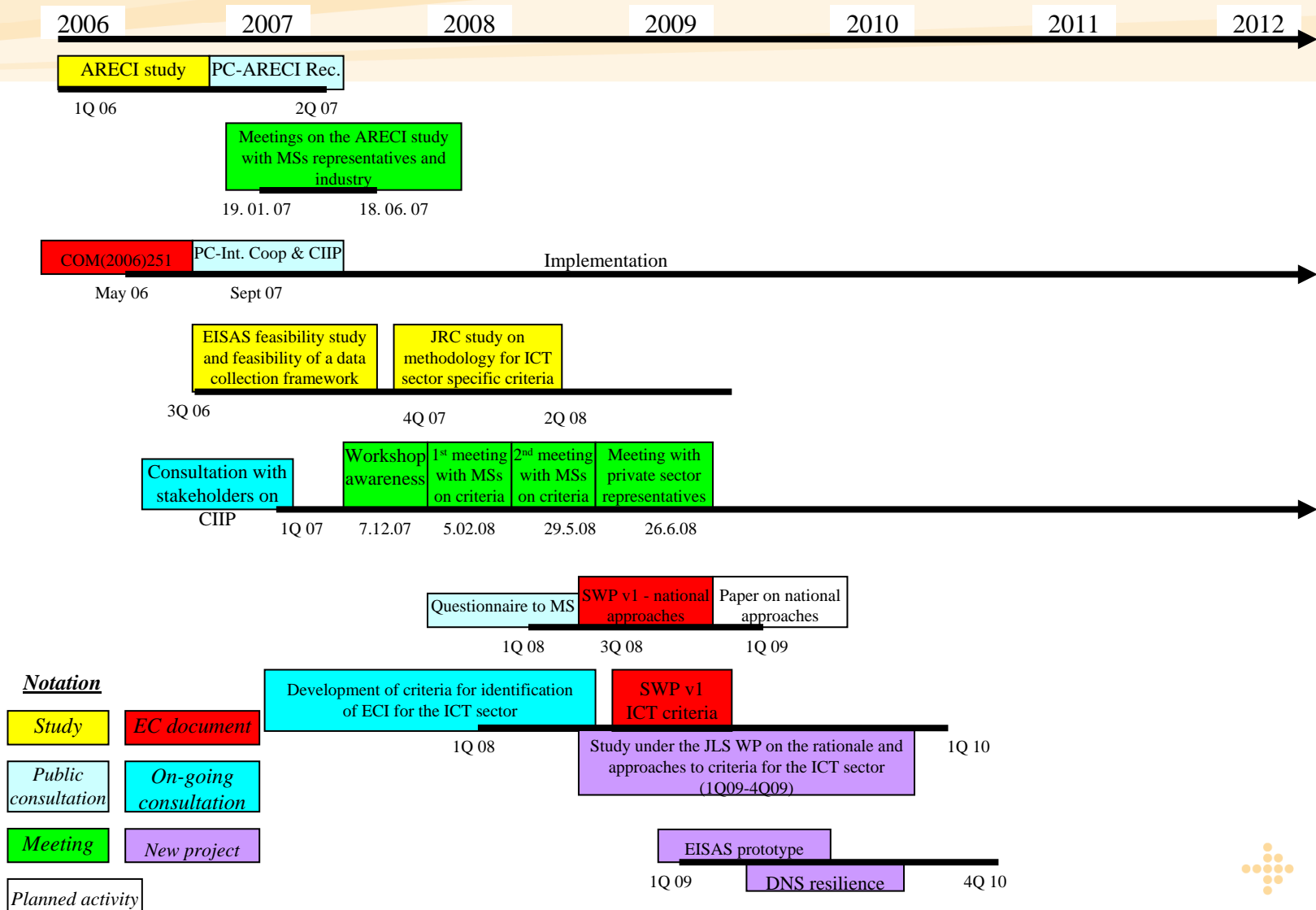


# Policy initiative on CIIP – Q1 2009: *The issues at stake / Rationale*

- **CII are the nervous system of the Information Society**
  - **Liberalisation, deregulation and convergence → complexity / multiplicity of players**
  - **Infrastructures are privately owned and operated**
  - **Ensuring the stability of society and economy is governments' responsibility**
  - **CII stretch out well beyond national borders**
  - **The level of security in any country depends on the level of security put in place outside the national borders**
  - **National governments face very similar issues and challenges**
  - **The private sector is calling for harmonised rules**
- **A more integrated and co-ordinated approach to complement and add value to the national programmes**
- **Contribute to reinforce the EU wealth creation capabilities**



# TIMELINE OF THE CIIP INITIATIVE: *preparatory activities*



# Planned policy on CIIP

## • Goal

- Protect Europe from large scale cyber attacks and disruptions
- Promote security and resilience culture (*first line of defense*) & strategy
- Tackle cyber attacks & disruptions from an ecosystem perspective

## • Aims

- Enhance the CIIP preparedness and response capability in EU
- Promote the adoption of adequate and consistent levels of preventive, detection, emergency and recovery measures
- Foster International cooperation, in particular on Internet stability and resilience

## • Approach

- **Build** on national and private sector initiatives
- **Engage** public and private sectors
- **Adopt** all-hazards
- **Be** multilateral, open and all inclusive



# Planned policy initiative on CIIP *priority areas (1)*

- **Preparedness and prevention**
  - **European Public Private Partnership on Resilience**
  - **Baseline of capabilities and services for National/Gov CERTs for pan-European cooperation**
  - **European Forum for Member States to exchange good policy practices**
- **Detection and response**
  - **Prototyping a European Information sharing and alert system**



## **Planned policy initiative on CIIP *priority areas (2)***

- **Mitigation and recovery**
  - **Cooperation between European National/Gov CERTs**
  - **Promote national contingency planning for incident response and disaster recovery**
  - **Promote pan European exercises on simulated large-scale public network security incidents**



# Planned policy initiative on CIIP *priority areas (3)*

- **International Cooperation**
  - **Internet long term resilience and stability**
    - EU priorities on security and resilience of critical components (i.e. DHCP, DNS, MPLS)
    - Principles and guidelines for Internet resilience and stability (*focus on remedial actions, mutual assistance agreements, coordinated recovery and continuity strategies, geographical distribution of critical Internet resources, technological safeguards in the architecture and protocols of the Internet, replication and diversity of services and data*)
  - **Global co-operation on exercises on large-scale network security incidents exercise**

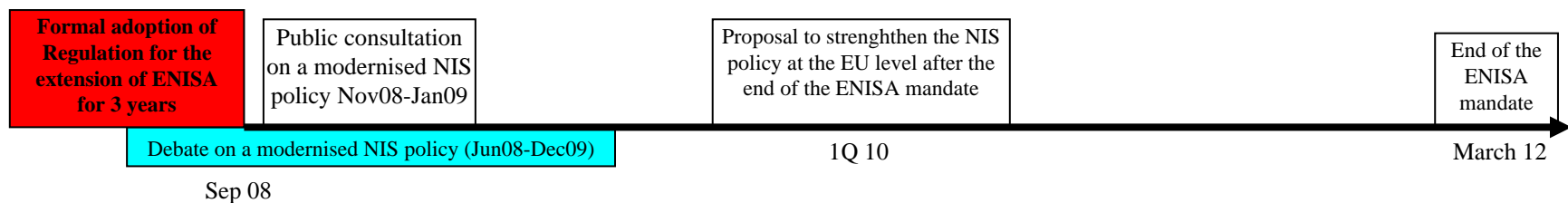


## **Planned policy initiative on CIIP *priority areas (4)***

- **ICT sector specific criteria**
  - **continue to develop, in cooperation with Member States and all relevant stakeholders, the criteria**
  - **A study is being launched**
  - **Staff Working Paper on criteria**

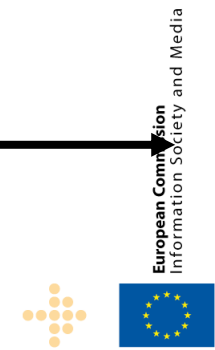
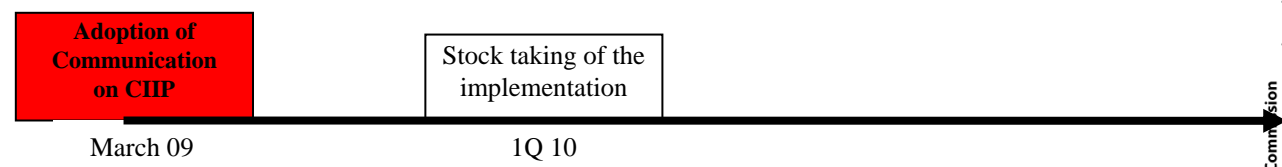


# TIMELINE OF THE CIIP INITIATIVE: *implementation activities*



**Notation**

- Study    EC document
- Public consultation    On-going consultation
- Meeting    New project
- Planned activity



## **Policy initiative on CIIP: *Next steps – short term***

- **End of January 2009**
  - Procedure for formal adoption of Communication + Impact Assessment
- **5 February 2009**
  - Workshop with MS on DNSSEC deployment
- **March 2009**
  - Adoption of Commission policy on CIIP
- **31 March 2009**
  - Workshop on vulnerability disclosure
- **27-28 April 2009**
  - *Ministerial Conference on CIIP and the future of NIS in the EU*

# Policy initiative on CIIP: Next steps - Medium term (1/2)

- **Studies and projects soon starting**
  - A study on **dependencies on ICTs** of finance, energy and transport sectors\*
  - Grants for prototyping a **European multilingual information sharing and alert system** to provide appropriate and timely information via dedicated e-security web portals on threats, risks and alerts as well as on best practices\*
  - Grant for a **project on DNS resilience**\*
- **Studies being launched**
  - A study on measures to **analyse and improve European emergency preparedness** in the field of fixed and mobile telecommunications and Internet\*
  - A study to **support the process to define sectoral criteria** to identify European Critical Infrastructures in the ICT sector focusing on the sub-sectors of Internet, fixed and mobile telecommunications\*

\* Projects and studies funded under EPCIP financial scheme: "Prevention, Preparedness and Consequence Management of Terrorism and other Security Related Risks" 

# Policy initiative on CIIP: Next steps - Medium term (2/2)

- **Call for Tenders & for Proposals in 2009**
  - **Grant** for the development, implementation and evaluation of a **large-scale pan-European exercise** to test Internet contingency plans\*
  - **Grant** for the development of national business case for the **implementation of priority communications capability** on public networks\*
  - **Study** on **public-private partnership** initiatives to enhance security and resilience of fixed and mobile telecommunications as well as the Internet\*
  - **Grant** for the development of **inter-dependency modelling tools** for the ICT sector\*
  - **Study** aiming the development of a methodology and research of quantitative data on the **economics of security and resilience in CII (tentative)**
  - **Study** on the security and resilience challenges brought about the **convergence towards IP networks (tentative)**

\* Projects funded under EPCIP financial scheme: "Prevention, Preparedness and Consequence Management of Terrorism and other Security Related Risks "



# Web Sites

## EU policy on secure Information Society

[http://ec.europa.eu/information\\_society/policy/nis/index\\_en.htm](http://ec.europa.eu/information_society/policy/nis/index_en.htm)

## Page on CIIP activities

[http://ec.europa.eu/information\\_society/policy/nis/strategy/activities/ciip/index\\_en.htm](http://ec.europa.eu/information_society/policy/nis/strategy/activities/ciip/index_en.htm)

## Page on ARECI study

[http://ec.europa.eu/information\\_society/policy/nis/strategy/activities/ciip/areci\\_study/index\\_en.htm](http://ec.europa.eu/information_society/policy/nis/strategy/activities/ciip/areci_study/index_en.htm)

## Page on the workshop on large scale attacks

[http://ec.europa.eu/information\\_society/policy/nis/strategy/activities/ciip/large\\_scale/index\\_en.htm](http://ec.europa.eu/information_society/policy/nis/strategy/activities/ciip/large_scale/index_en.htm)

## Public consultation "Towards a Strengthened Network and Information Security Policy in Europe"

[http://ec.europa.eu/information\\_society/newsroom/cf/itemdetail.nsf?item\\_id=4464](http://ec.europa.eu/information_society/newsroom/cf/itemdetail.nsf?item_id=4464)

<http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=Infosolis>



# Links to EU Policy Document (1/2)

- **Strategy for a Secure Information Society [COM(2006)251]**  
[http://eur-lex.europa.eu/Result.do?T1=V5&T2=2006&T3=251&RechType=RECH\\_natur&Submit=Search](http://eur-lex.europa.eu/Result.do?T1=V5&T2=2006&T3=251&RechType=RECH_natur&Submit=Search)
- **Fighting spam, spyware and malicious software [COM(2006)688]**  
[http://eur-lex.europa.eu/Result.do?T1=V5&T2=2006&T3=688&RechType=RECH\\_natur&Submit=Search](http://eur-lex.europa.eu/Result.do?T1=V5&T2=2006&T3=688&RechType=RECH_natur&Submit=Search)
- **Promoting data protection by Privacy Enhancing Technologies (PETs) [COM(2007)228]**  
[http://eur-lex.europa.eu/Result.do?T1=V5&T2=2007&T3=228&RechType=RECH\\_natur&Submit=Search](http://eur-lex.europa.eu/Result.do?T1=V5&T2=2007&T3=228&RechType=RECH_natur&Submit=Search)
- **Towards a general policy on the fight against cyber crime [COM(2007)267]**  
[http://eur-lex.europa.eu/Result.do?T1=V5&T2=2007&T3=267&RechType=RECH\\_natur&Submit=Search](http://eur-lex.europa.eu/Result.do?T1=V5&T2=2007&T3=267&RechType=RECH_natur&Submit=Search)
- **Package to reform the Regulatory Framework for e-communications [COM(2007)697, COM(2007)698, COM(2007) 699]**  
[http://ec.europa.eu/information\\_society/policy/ecom/tomorrow/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecom/tomorrow/index_en.htm)



# Links to EU Policy Document (2/2)

- **European Programme for Critical Infrastructure Protection [COM(2006) 786]**  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0786:FIN:EN:PDF>

- **Directive on the identification and designation of European Critical Infrastructure and the assessment of the need to improve their protection**

**Press release:**

[http://www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressData/en/jha/101001.pdf](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/jha/101001.pdf)

**Final text:**

<http://register.consilium.europa.eu/pdf/en/08/st09/st09403.en08.pdf>

- **EPCIP financial scheme: "*Prevention, Preparedness and Consequence Management of Terrorism and other Security Related Risks*"**

**Call for proposals**

[http://ec.europa.eu/justice\\_home/funding/cips/funding\\_cips\\_en.htm](http://ec.europa.eu/justice_home/funding/cips/funding_cips_en.htm)

**Call for tenders**

[http://ec.europa.eu/justice\\_home/funding/tenders/funding\\_calls\\_en.htm](http://ec.europa.eu/justice_home/funding/tenders/funding_calls_en.htm)

**Call for expression of interest (looking for external experts)**

[http://ec.europa.eu/justice\\_home/funding/tenders/funding\\_interest\\_en.htm](http://ec.europa.eu/justice_home/funding/tenders/funding_interest_en.htm)

