



European Commission

**Expert Group on Security and Resilience of
communication networks and information systems for
the Smart Grid**

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The European Commission (EC), with the support of the European Network and Information Security Agency (ENISA), convened an Expert Group for:

- I. Better understand of the views and objectives of the private and public sectors on the ICT security and resilience challenges for the smart grids.
- II. Identification and discussion about the related policy at EU level.



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The Policy Context for the Expert Group

COM(2011) 163 on Critical Information Infrastructure Protection

“**destruction** purposes. This is a scenario that has not yet materialised but, given the increasing pervasiveness of ICT in Critical Infrastructures (e.g. smart grids and water systems), it cannot be ruled out for the years to come”

COM(2011) 202 on Smart Grids

“The Commission will continue bringing together the energy and ICT communities within an expert group to assess the network and information security and resilience of Smart Grids as well as to support related international cooperation.”



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Expert Group: Concrete objectives

The Expert Group works on how to strengthen at European Level the security and resilience of communication networks and information systems for Smart Grids.

Objective 1

Identify European priority areas for which action should be undertaken to address the security and resilience of communication networks and information systems for Smart Grids. The Expert Group is also expected to define recommendations on how to progress on each priority area at European level.



Expert Group: Concrete objectives

Objective 2

Identify which elements of the smart grid should be addressed by the Expert Group (e.g. smart appliances, smart metering, smart distribution, smart (local) generation, smart transmission) and to what level. The use of an existing common concept model should be considered.

The Expert Group will:

- Identify key strategic and high level requirements
- Identify a good practices guideline based on lessons learned
- Propose mechanisms/messages to raise awareness of decision makers



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Expert Group: How to achieve objectives- State of Play

Six meetings, last one the 28th Feb 2012. The Expert Group has developed a Program of Work. Conclusions will be made public in Q2-2012.



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Program of Work of the Expert Group on the security and resilience of communication networks and information systems for Smart Grids

Mission, vision and goals

... to contribute to a coherent and increased effort to improve the cyber security for smart grids. This should be covered by both the Technology and Organisation & Human aspects that are all essential for an integral security approach.

Scope

... will be the security and resilience of communication and information systems that impact on the performance of the physical electricity infrastructure. The physical threats of security are only taken into account in case it has a direct relation with communication and information systems.



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Expert Group- Program of Work

2.1. Risks, threats and vulnerabilities

WP 1.1. Identify and categorize all relevant Smart Grid assets

WP 1.2. Develop an attack / threat taxonomy for relevant assets

WP 1.3. Develop a countermeasure taxonomy for relevant assets

WP 1.4. Develop a high-level security risk assessment methodology for relevant assets

2.2. Requirements and technology

WP 2.1. Security Requirements

WP 2.2. Extend Smart Grid requirements to include effective security measures

WP 2.3. Research Smart Grid communication protocols and infrastructures to incorporate data security measures

WP 2.4. (Public) procurement

2.3. Information and knowledge sharing

WP 3.1. Develop a cross-border alliance between Member States and relevant competent bodies and

2.4. Awareness, Education & Training

WP 4.1. High level Conference for strategic leaders

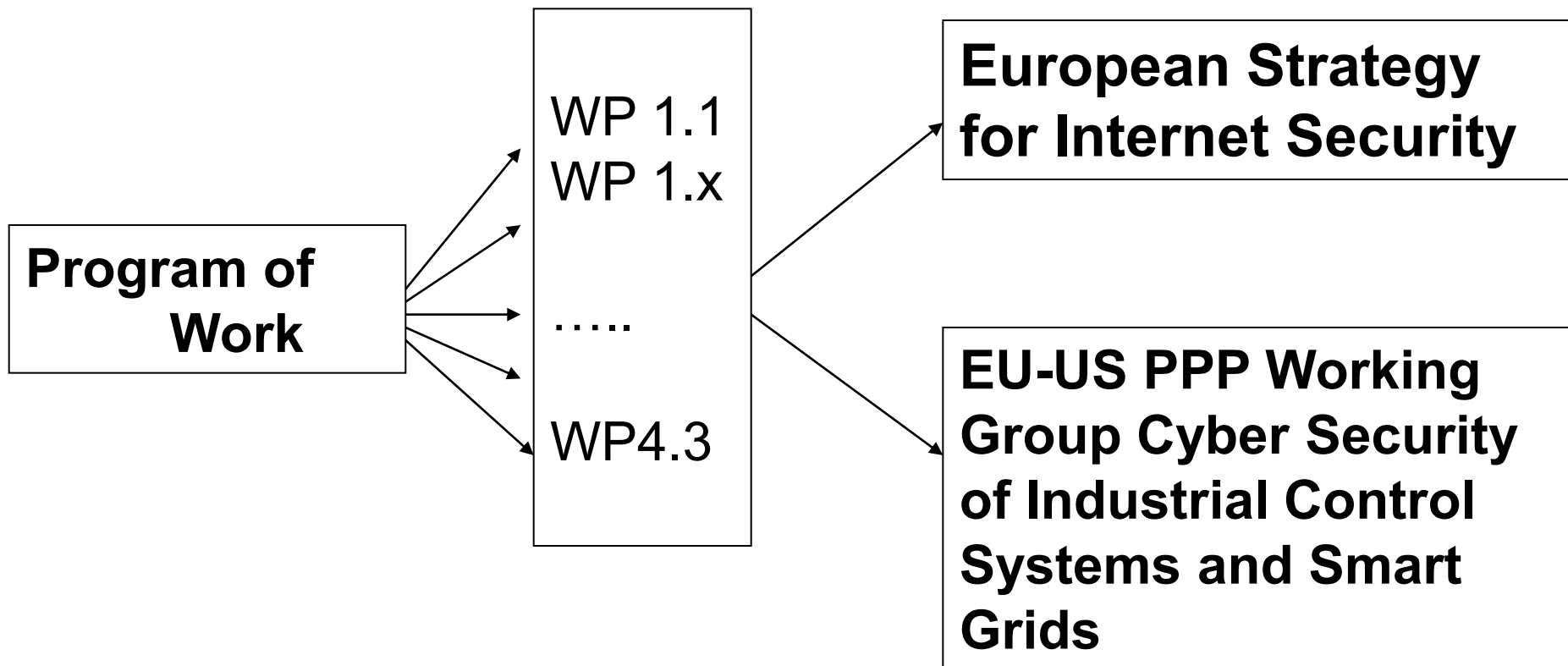
WP 4.2. Propose initiatives to increase stakeholder awareness on data security

WP 4.3. Skilled personnel on cyber security in energy industry



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Putting in value the work of the Expert Group: How the first outcomes of the Expert Group will immediately feed the policy process?





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Network of initiatives

The Expert Group is also well engaged with related initiatives at EU and international level:

Task Force Smart Grid (Expert Group 2)

CEN/CENELEC/ETSI Smart Grid Information Security (SGIS)

EuroScsie

EU-US ESG on PPP: cyber security of ICS & Smart Grid



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Thanks!



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Links to policy documents

- Commission Communication on Smart Grids "Smart Grids: from innovation to deployment"

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0202:EN:HTML:NOT>

- Commission Communication on Critical Information Infrastructure Protection – "Achievements and next steps: towards global cyber-security" - COM(2011) 163

http://ec.europa.eu/information_society/policy/nis/docs/comm_2011/comm_163_en.pdf

- Digital Agenda for Europe - COM(2010)245 of 19 May 2010

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF>

- Public Registry of the Expert Group on Security and Resilience of Communications Networks and Information Systems for Smart Grids

<http://ec.europa.eu/transparency/regexpert/detailGroup.cfm?groupID=2712>