# Diskussion Digital Security/Critical infrastructure protection

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## Diskussioner Upplägg

13.45-14.30

#### Digital Security/Critical Infrastructure Protection

- Mer detaljerad diskussion och analys kring utlysningarna
- Önskvärda framtida förmågor
- Vilka svenska utvecklingsbehov kan tillvaratas i de olika utlysningarna
- Finns tentativa projektidéer i gruppen?



## DS - Digital Security

- ICT-driven transformations bring opportunities across important sectors but also vulnerabilities to critical infrastructures and digital services
- Can have significant consequences on the functioning of society,
   economic growth and the technological innovation potential of Europe.
- Cross-cutting; ICT, Health and Security
- Assurance and Certification
- Improved addressing of basic cyber security threats
  - SMEs, local public administration and Individuals
- Digital security for eHealth related solutions
- Economic metrics of cyber security
  - cost-benefit framework, incentives and business models
- Improved dialogue, within the EU and internationally



## CIP - Critical infrastructure protection

- Societies and their economics are strongly dependent upon the operation of our countries' infrastructure
- Disruptions may result from many kinds of hazards and physical and/or cyber-attacks on installations and systems
- Comprehensive, yet installation-specific approach is needed
  - Water Systems,
  - Energy Infrastructure (power plants and distribution)
  - Transport Infrastructure and means of transportation
  - Communication Infrastructure
  - Health Services
  - Financial Services
- Solutions to increase security and resilience of all functions performed
  - Prevention, detection, response, and in case of failure, mitigation of consequences
  - Physical, cyber or combined threats, and potential cascading effects



## DS / CIP, topics 2016

- DS-01-2016: Assurance and Certification for Trustworthy and Secure ICT systems, services and components
- DS-02-2016: Cyber Security for SMEs, local public administration and Individuals
- DS-03-2016:Increasing digital security of health related data on a systemic level
- DS-04-2016: Economics of Cybersecurity
- DS-05-2016:EU Cooperation and International Dialogues in Cybersecurity and Privacy Research and Innovation
- CIP-01-2016-2017:Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe.



- DS-01-2016: Assurance and Certification for Trustworthy and Secure ICT systems, services and components
- Assurance
- Certification
- Support actions
  - Building trustworthiness
  - Engage with multidisciplinary communities and stakeholders



- DS-02-2016:Cyber Security for SMEs, local public administration and Individuals
- Expected impact
  - Increased resilience against widespread cyber security threats facing SMEs, local public administrations and individuals.
  - Increased effectiveness of cybersecurity solutions through usability advancements and increased automation.



- DS-03-2016:Increasing digital security of health related data on a systemic level
- Expected Impact:
  - Better acceptance of eHealth solutions among patients
  - Encouraging Member States to widen the use of eHealth
  - Ensuring the right of patients to cross-border healthcare
  - Supporting the development of European legal and operational standards for cross-border data exchange and patient privacy protection
  - Better protection against unauthorised use of personal data, breach of confidentiality and cybercrime
  - Increasing the awareness of stakeholders, private and public ones, on the current level of data security.
  - Definition of clear architectures that will promote interoperability between eHealth solutions



- DS-04-2016: Economics of Cybersecurity
- Cybersecurity cost-benefit framework
- Incentives and business models
- Expected Impact:
  - Improved societal understanding of information security failures and how they should be addressed.
  - Improved risk-based information security investment.
  - Increased societal resilience to cyber security risks through more efficient and effective institutional and incentives structures.
  - Progress beyond the state of the art in information security economics models.



- DS-05-2016:EU Cooperation and International Dialogues in Cybersecurity and Privacy Research and Innovation
- Expected Impact:
  - Identify and prioritise R&I topics across the EU.
  - Foster and promote European cybesecurity innovation activities
  - Increase the international visibility of EU activities in cybersecurity.
  - Identify potential European and international common approaches in addressing cybersecurity challenges from a R&I as well as a governance and institutional perspective.



## Critical infrastructure protection, topics 2016

- CIP-01-2016-2017: Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe.
- Water Systems, Energy Infrastructure (power plants and distribution), Transport Infrastructure and means of transportation, Communication Infrastructure, Health Services, Financial Services.



## Critical infrastructure protection, topics 2016

- CIP-01-2016-2017: Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe.
- Expected Impact:
  - Short term:
    - State-of-the-art analysis of physical/cyber detection technologies and risk scenarios
    - Analysis of both physical and cyber vulnerabilities of a specific critical infrastructure,.
  - Medium term
    - Innovative, solutions to prevent, detect, respond and mitigate physical and cyber threats.
    - Innovative approaches to monitoring the environment, to protecting and communicating with inhabitants
    - In situ demonstrations of efficient and cost-effective solutions.
    - Security risk management plans integrating systemic and both physical and cyber aspects.
    - · Tools, concepts, and technologies for combatting both physical and cyber threats
    - · Where relevant, test beds for industrial automation and control system for critical infrastructure
    - Test results and validation of models
    - Establishment and dissemination throughout the relevant user communities
  - Long term
    - Convergence of safety and security standards, and the pre-establishment of certification mechanisms.

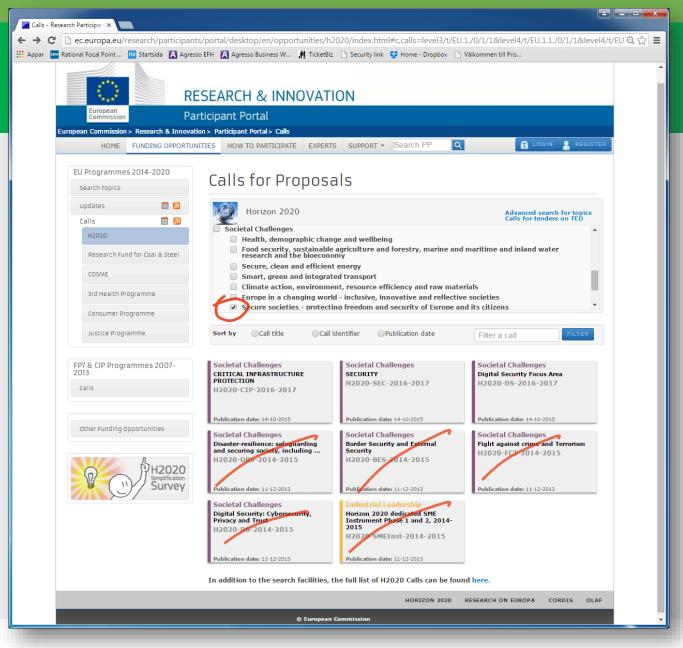




#### Utlysningarna Webportalen

Innehåller all information om utlysningarna

- Challenge
- Scope
- Expected impact
- Projekttyp
- Deadlines
- Teknikmognad
- Ungefärlig budget
- Villkor





## Utlysningarna - teknikmognad

Technology readiness levels (TRL)

I utlysningstexten anges det ofta vilken "mognadsgrad" ett projekt bör sikta på

TRL 1	basic principles observed
TRL 2	technology concept formulated
TRL 3	experimental proof of concept
TRL 4	technology validated in lab
TRL 5	technology validated in relevant environment
TRL 6	technology demonstrated in relevant environment
TRL 7	system prototype demonstration in operational environment
TRL 8	system complete and qualified
TRL 9	actual system proven in operational environment



# Utlysningsområden 2016

- CIP Critical infrastructure protection Budget 20 M€, deadline 25/8 2016
- SEC Security
  - DRS Disaster Resilience
     Budget 19.5 M€, deadline 25/8 2016
  - FCT Fight Against Crime and Terrorism
     Budget 44.25 M€, , deadline 25/8 2016
  - BES Border Security and External Security
     Budget 34 M€, , deadline 25/8 2016
  - GM General Matters
     Budget 15,5 M€, , deadline 25/8 2016
- **DS Digital Security**Budget 63.5 M€, deadlines 16/2, 12/4 och 25/8



# Inför eftermiddagens diskussioner

#### Potentiella intresseområden - förslag

#### **FCT**

- Fortifikationsverket
- FRA
- Kustbevakningen
- LFV
- Polismyndigheten
- Tullverket

#### **BES**

- Kustbevakningen
- Polismyndigheten
- Tullverket

#### **DRS**

- Fortifikationsverket
- Jordbruksverket
- Lantmäteriet
- LFV
- Lst / regioner
- Polismyndigheten
- Statens Veterinärmedicinska Anstalt
- Landsting

#### DS+CIP

- Arbetsförmedlingen, SOES ordf
- Fortifikationsverket
- FRA
- Lantmäteriet
- LFV
- Lst / regioner
- Riksgälden
- Landsting

