

# Future and Emerging Threats in Information and Communication Technology Infrastructures

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# Goals

<http://www.ics.forth.gr/dcs>

- The future is hard to predict...
  - Worms
- ... but we have had success stories
  - RFID
- The FORWARD Project is a coordination action
  - Bring together academics, industry, and policy makers who are interested in emerging threats in ICT
  - Discuss future threats
  - Develop realistic scenarios

# Consortium

<http://www.ics.forth.gr/dcs>



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# The Working Groups

<http://www.ics.forth.gr/dcs>

- Smart Environments
- Malware and Fraud
- Critical Systems

# Threats

<http://www.ics.forth.gr/dcs>

- Underground economy
- New vectors to reach victims
- Hardware malware/Malicious hardware
- Advanced botnets
- Attacks against the core Internet protocols and services
- Privacy and trust abuses in online communities
- Targeted attacks, spear phishing
- Naming and fast flux networks
- IPv6 and direct reachability
- Mobile device malware
- Attacks against financial sector
- Attacks against virtualization

## Threats cont.

<http://www.ics.forth.gr/dcs>

- Smartphones into zombies
- Spyware in the bedroom
- False sensor data
- Maintainability and verifiability
- RFID
- Attacks against office equipment
- Attacks to home automation
- Aviation security
- Multicore threats
- Threats due to scale
- Wireless plane attacks

# Conclusions

<http://www.ics.forth.gr/dcs>

- Factors driving emerging and future threats
  - New technologies
    - Wireless, device miniaturization, etc.
  - New applications
    - E-government, E-commerce, etc.
  - New social dynamics
    - User connectivity, social networks, etc.
- [www.ict-forward.eu](http://www.ict-forward.eu)