

# GEN6: Governments ENabled with IPv6

GOVERNMENTS ENABLED WITH IPv6

Antonio F. Skarmeta  
Universidad de Murcia (Spain)  
skarmeta@um.es

## A Quick View to GEN6

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# Project Data



- ICT PSP call 2011
  - Pilot Type B
  - Objective: 4.3 Piloting IPv6 upgrade for eGovernment services in Europe
- 6.000.000 Euros, 50% funding
- Partners:
  - Germany: Devoteam, Fraunhofer, Citkomm
  - Spain: Consulintel, UMU, MPTYAP, MITYC
  - Turkey: Tubitak Ulakbim, TURKSAT
  - Luxembourg: UL
  - Slovenia: ULFE
  - Netherlands: TNO, Gemeente Alkmaa
  - Greece: GRNET, CTI
  - Cyprus: INTELEN

# Objetives



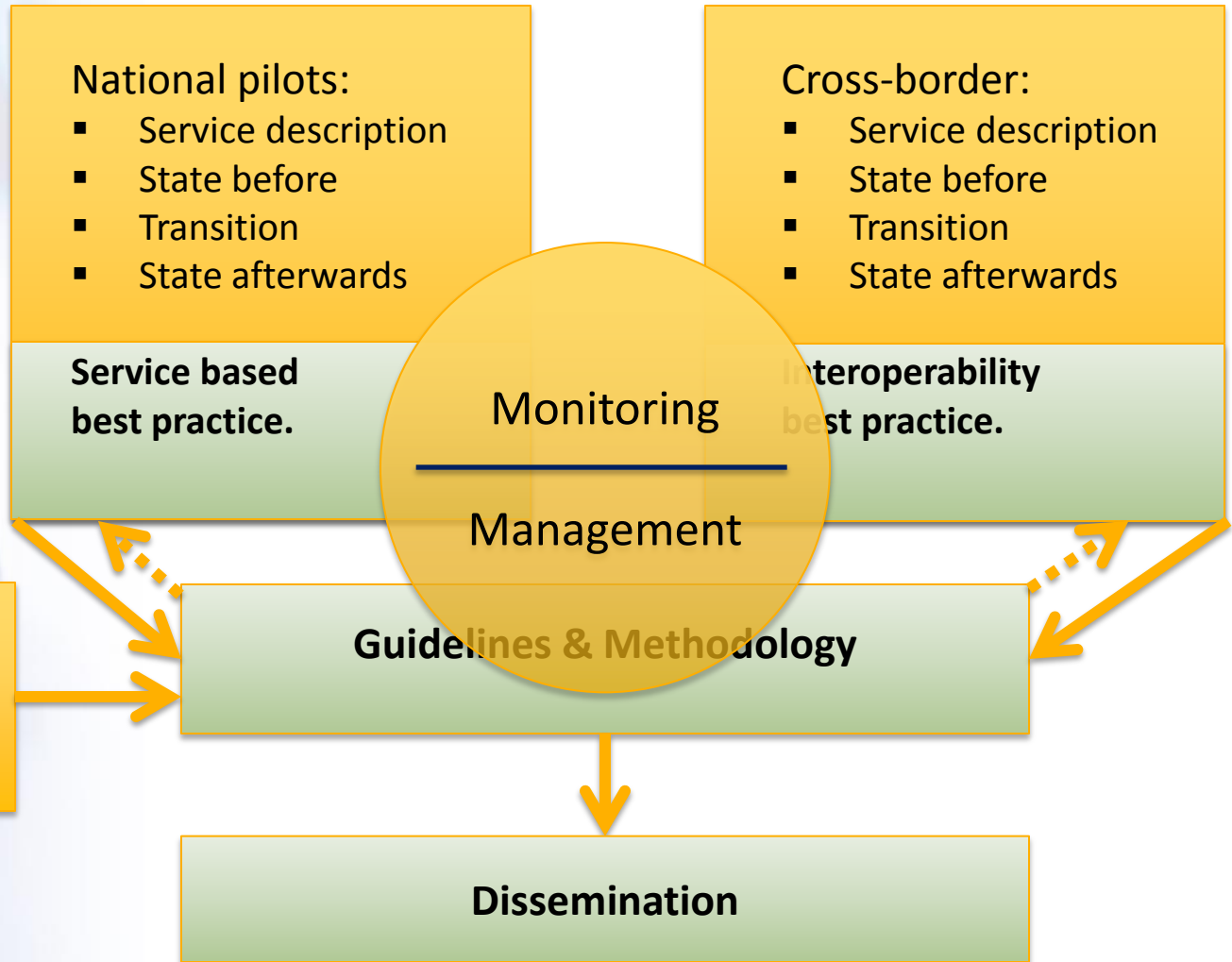
- Stimulating EU-wide deployment of IPv6 by means of best practices and doing the work
- Launch national and cross-border pilots
- Communication activities and road shows to ensure the dissemination in public administrations and other relevant stakeholders (targeted to experts and public authorities).
- Publications, Internet presence (web service, Facebook, twitter) and presentations with special focus on eGovernment events, as well as clustering activities.

# Best Practices



- GEN6 will provide general guidelines for planning and transition steps.
  - IPv6 networks topologies and addressing types
  - IPv6 addressing technologies and addressing plans for Governments
  - IPv6 transition technologies and support
  - IPv6 deployment support
- The outcome of the national pilots will contribute to these guidelines and will provide additional documentation based on transition experience in the fields of:
  - network equipment (switches, router, firewalls, load balancers, ...)
  - network provider access points (CPE, fiber, xDSL, ...)
  - middleware and technologies like web servers, portals, databases
  - Security requirements
- Besides the technical documentation, the national pilots will document their efforts and costs for the transition and estimate possible benefits from the IPv6 upgrade.
- Relevant for IoT is:
  - the Energy Efficiency pilot with sensor deployment
  - Energy efficient pilot with smart grid

# Project Organization



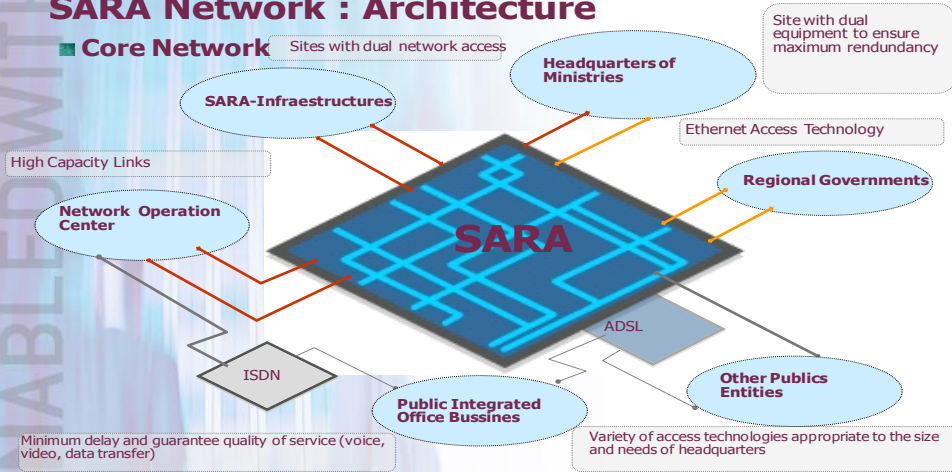
# National Pilots



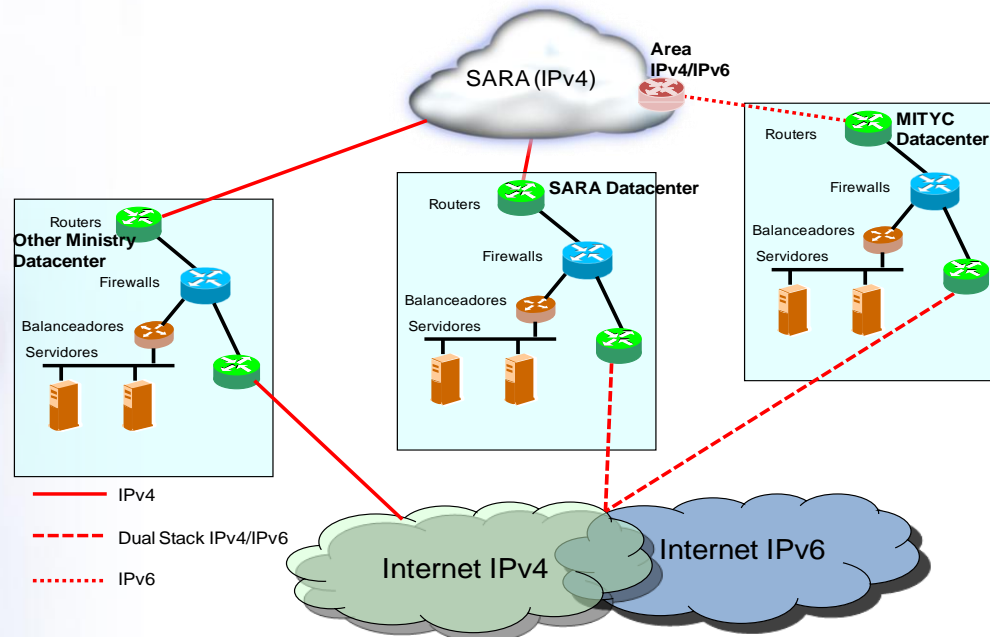
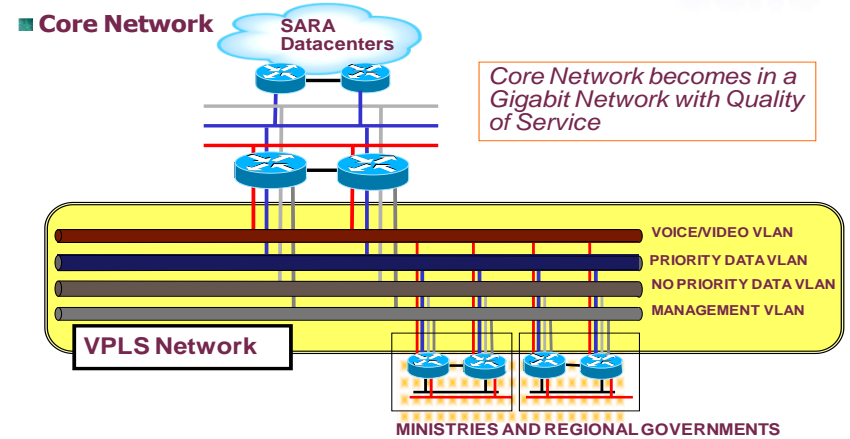
- 4 different national pilots, some of them replicated in a complementary way in different countries, considering different existing approaches with IPv4:
  - IPv6 upgrade of eGovernment Network Infrastructures, e-Identification, Services and Applications (Germany, Spain, Netherlands and Turkey).
  - IPv6 upgrade of Secure Cloud Services (Luxembourg).
  - IPv6 upgrade of Energy Efficiency in School Networks (Greece).
  - IPv6 upgrade of Emergency Response Environments (Slovenia).
- Replicating many aspects of the pilots across different existing infrastructures in different countries, that have different approaches, allows more alternatives to be tested in real scenarios, providing a broader view for the replication of the project results across Europe, while actually the project approach reduces the cost, because of the parallel learning and knowledge exchange among partners, and maximizes the impact of the resources involved in the project.

# Spain: Public Adm network

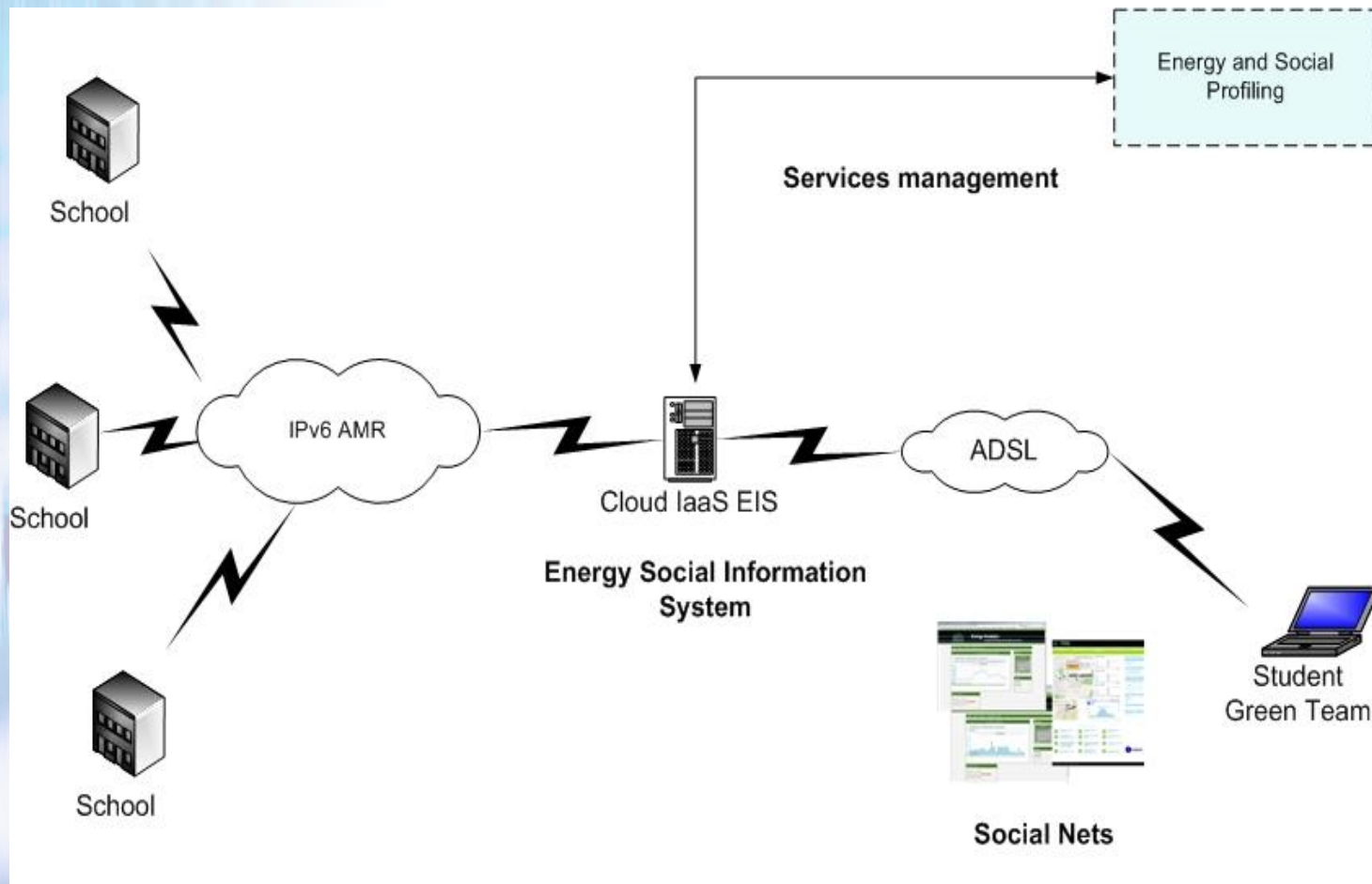
## SARA Network : Architecture



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# Greece: Smart metering





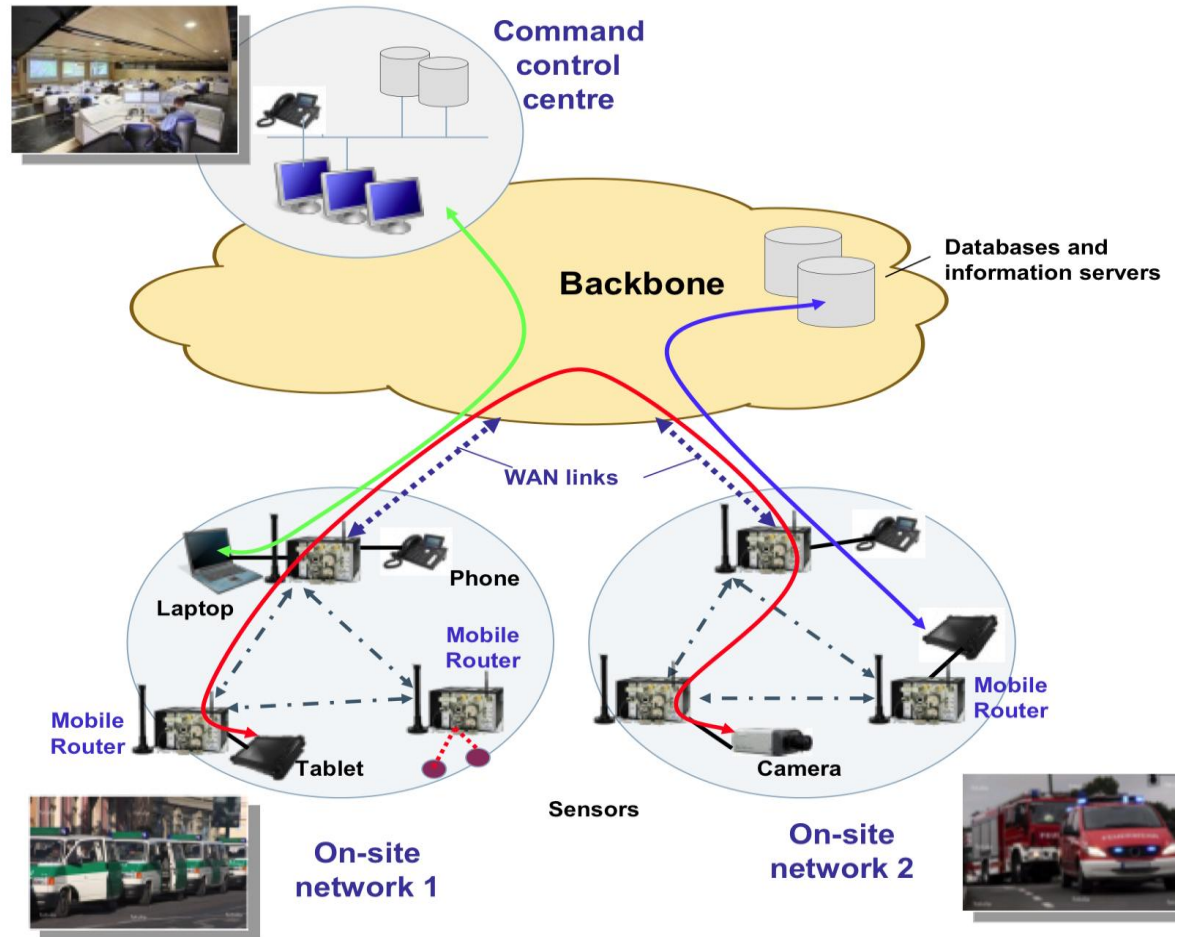
# Cross-Border Pilots



- Interconnection of national government backbones and European networks like sTESTA, in order to ensure a wider IPv6 readiness and interoperability for European cross-border services.
- Public Safety Networks exploiting the greater benefits brought in to this critical sector by IPv6 features (such as “on the fly networking”).

# Cross-Border Public Safety

- Impact of IoT
- Different sensors integration
- Mobility and security requirements
- IPv6 based solution
- Security on sensor



# Conclusion



- A specific methodology takes care of the evaluation and monitoring of each of the pilots.
- IoT related activities either at national and cross-border pilots
- IPv6 main focus
- Good practices and guidelines as a key tool to stimulate the take-up of IPv6