### **PILOT KEY FEATURES**

- Takes advantage of the existence of Red SARA (SARA network) that connects all Spanish Public Administrations, as well as the shared services that it provides.
- Considers connectivity scenarios in which IPv6 ready administrative units provide services through IPv6 that can be consumed by IPv6 or IPv4 units.
- Includes a pilot upgrading to IPv6 a service of one administrative unit, MINETUR, that will allow the rest of the public administration to acquire the necessary knowledge and expertise.



# 2

CID competitive framework



The Spanish pilot is powered by the Ministry of Finance and Public Administration and the Ministry of Industry, Energy and Tourism, with the collaboration of the University of Murcia. Work was in part supported by the European Commission as part of the project »Governments Enabled with IPv6« (GEN6). GEN6 is about stimulating EU-wide deployment of IPv6 by means of best practices and guidelines.

**ABOUT GEN6** 

- National pilots to make a step further in IPv6 deployment in different sectors
- Cross-border pilots to demonstrate EU-wide interoperability of IPv6
- Communication activities and road shows to ensure dissemination in public administrations and with other relevant stakeholders



Supported by EC, Grant nr. 261584



http://www.ipv6.es/ http://administracionelectronica.gob.es/



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eGovernment Services with IPvG

http://www.ipv6.es/

Ministry of Finance and Public Administrations Ministry of Industry, Energy and Tourism University of Murcia

# IPv6 for eGovernment Services

The Spanish IPv6 transition pilot aims to foster the IPv6readiness of e-Government services, with a down-to-earth and sensible approach based on the following principles:

- Building upon the infrastructure already in place, making the most of the IPv6 capabilities of the existing hardware, software and networks.
- Relying on the use of shared services, to increase efficiency in the use of the existing resources, and avoid divergence in technologies and solutions.
- Providing enough flexibility so that it can accommodate the different transition paths of the different administrative units (IPv4 and IPv6 coexistence).
- Assuring that the experience from the transition to IPv6 of the early adopters is shared and used by the administrative units that follow, so that their own transition can be softened.

# **3 COMPLEMENTARY ACTION LINES**

- 1. The upgrade of Red SARA so that it can transport IPv6 natively, allowing therefore IPv6 communications between administrative units
- 2. The implementation of a transition mechanism that allows Public Administrations to offer online services accessible by means of IPv6, based on a shared service approach
- 3. The evolution of MINETUR network so that it can provide native IPv6 services (eITV application) to be consumed by other administrative units



administrative units that follow, so that their own transition can be softened.

## **UPGRADING OF RED SARA**

**Red SARA** is a set of communications infrastructure and basic services, not just a telecommunications network.

- It allows the interconnection among the 3 levels of Spanish Public Administrations, facilitating the exchange of information and services.
- It supports common facilities such as esignature validation, verification of identity and residence data or e-notification.
- The networks of the different public bodies are tied with Red SARA by means of connection areas, which also host equipment aimed to provide some basic network services (such as DNS or proxy), as well as security functions (virus scanning, firewall, IPS, etc.).



#### In the GEN6 pilot:

- The backbone of the network, as well as the links connecting the Public Administration sites to this backbone, will be upgraded to carry IPv6 traffic.
- The equipment located in the connection areas of MINETUR and MININT will be turned into dual-stack, so that it can handle the future IPv6 traffic that will be generated by the eITV service.
- The existing Spanish Public Administration

## SHARED SERVICE FOR IPv6 AVAILABILITY

- The goal of this action line is to set up the IPv6 accessibility for e-Government services as a shared service, building a bridge between existing IPv4 e-Government services with native IPv6 Internet.
- It takes advantage of the fact that the connection to the Internet is one of the network facilities that can be provided by Red SARA, and this connection is currently IPv6 ready.



 Making e-Government web sites IPv6 accessible through the Internet connection provided by RedSARA, instead of dealing with the upgrading of the connection of each Ministry, will be a more efficient approach as a mean of allowing a quick access by the citizens to the e-Government services using IPv6.

#### **UPGRADING OF eITV SERVICE TO IPv6**

- The aim of this action line is to upgrade to native IPv6 one of the existing internal administrative services, in order to test the interoperability between an IPv6 ready unit which acts as service provider, and an IPv4 only unit which acts as service consumer.
- This test is significantly relevant since it refers to a scenario which will be quite frequent along the transition to IPv6, due to the different paths and paces of the different administrative units.
- The chosen application in the pilot for demonstrating IPv6 enablement of e-Government services is eITV, related to the process of registering a motor vehicle
- eITV replaces the traditional paper-based ITV card (Vehicles Technical Inspection card) by an electronic card, as well as all the face-toface procedures required for authorizing the manufacturers to issue the cards, by electronic procedures.





 This involves acting in every level of the infrastructure, from network equipment to business application software; this way, it is expected the acquisition of a relevant knowledge and experience in the practical the eITV service.

• The existing Spanish Public Administration Interconnection and Addressing Plan will be updated so that it considers IPv6 addresses as well as the current IPv4 ones. citizens to the e-Government services using IPv6.

expected the acquisition of a relevant knowledge and experience in the practical issues of the transition to IPv6 that will be very valuable when addressing the upgrading of new services.