

BASIC REQUIREMENTS FOR THE TRANSITION TO IPv6

Besides the changes on routers and network equipment, other actions are required to allow smooth transition to IPv6

- Web servers need to be updated or reconfigured to listen on IPv6 addresses and accept IPv6 connections.
- DNS servers (IPv6 support, new entries for services, proxies, and authentication authorities)
- Firewalls need to be reconfigured to include IPv6-based rules.
- ...

sTESTA

Linking element between the eGovernment infrastructures and networks deployed in the Member States for their administrative duties

Provides a private network to securely connect services from different Member States

- In-production administrative network, interconnecting Member States.
- Already deployed and working different eGovernment services.
- Currently it only supports IPv4. GEN6 will support the evolution of sTESTA to a native IPv6 network
- Protected by hardware cryptographic modules, which currently operate with IPv4 connections.
- Excellent to test transition scenarios.

ABOUT GEN6



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.

- 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



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IPv6 eGov

IPv6-readiness for cross-border
eGovernment services

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IPv6-based support for cross-border eGovernment services

Cross-border eGovernment services are required in order to strengthen the Single-Market and to favour the mobility of EU citizens. Due to the imminent transition to IPv6, it must be assured that they are (and will be) prepared to interoperate using IPv6.

This project has the following objectives:

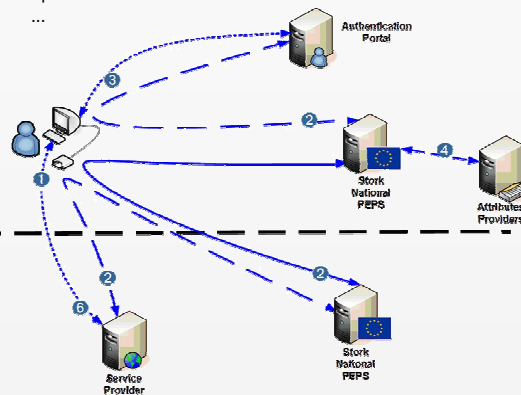
- Identification of the needed technical arrangements for the interoperability of the IPv6 transition national strategies.
- Preparation of different transition scenarios with a mix environment of IPv4 and IPv6 clouds in the government tiers (national, regional, universities, ...).
- Testing of the interoperability scenarios and compilation of a troubleshooting manual, roadmap of actions developed and guidelines.
- Incentivation of the usage of IPv6 on public administration by means of learning by examples based on the experience of this pilot.

CROSS-BORDER AUTHENTICATION

Strong authentication is one of the cornerstones of cross-border eGov services

Services need to be adapted to use existing cross-border authentication systems:

- Authentication process based on the national eID cards issued by the origin member states.
- Citizens redirected from the target service to their national authentication authorities through different proxies via HTTP GET/POST requests.
- Citizens redirected back to the target service with the authentication outcome signed by the national authority.
- Different authentication systems, similar behaviour: STORK, GERMAN one. Proxies make interoperation possible.
- Services, proxies and authentication authorities need to be update to IPv6.
- ...

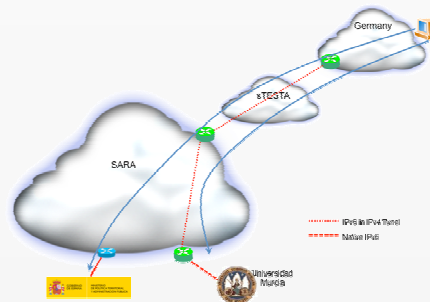


IPv6-ENABLED INTERCONNECTION OF CROSS-BORDER eGOV SERVICES

Enable the Member States' eGovernment services to interact through IPv6-enabled connections

Analyse current administrative communication infrastructures, and prepare an action plan to provide point-to-point IPv6 connectivity between Member States-

- Promote the use of native IPv6 connection provided by ISPs, national gateways, etc.
- Define the use of IPv6 in IPv4 tunnels to go through non-IPv6 networks (e.g. sTESTA and DOI Backbone).



- Support the transition of sTESTA to a native IPv6 network.
- Adapt network equipment to the use of IPv6 (e.g. firewalls, routers, DNS servers).
- Configure web servers and applications to support IPv6 connections
- Provide good practice examples, drawbacks, advantages and procedures that will serve for future adaptations.
- ...

USE CASES

Spanish public worker accesses to a German eGov service

A geological eccentricity nestled in the middle of the Indian Ocean, the Maldives are a series of ancient coral reefs that grew up around the sides of towering prehistoric volcanoes. These immense structures have long since sunk into the ocean, leaving behind coral islands of incredible natural beauty, now themselves being colonised by travellers seeking unbridled pampering and romance, from the modernity of Male' to the idyllic paradise of the Southern Atolls.

- This is life stripped down to simplicity – bright blue skies, all-year sunshine and fantastic diving and snorkelling in lagoons the temperature of bath water.

The country embraces travellers from around the world allowing them the freedoms holiday makers require without compromising the islands' deep Muslim faith one bit.

German public worker accesses to a Spanish eGov service

Perhaps the ultimate in long haul luxury, the Maldives is currently enjoying incredible growth again having bounced back from a series of disasters in the past few years including the coral bleaching wrought by el Niño and the horror of the 2004 tsunami. Indeed, so superior are its beaches, so cobalt blue its waters and so warm its welcome that the country has become a byword for paradise whether it be for honeymooners, sun worshippers or divers.

- This is an exciting time to visit a country in developmental frenzy. Every few months brings newly opened resorts from top end boutique brands to ecologically sound back-to-nature hotels.
- Not cheap even at the bottom end, this is a place for a holiday of a lifetime (and that phrase suddenly takes on a new meaning here).
- The Maldives demands the attention of anyone looking for a uniquely indulgent break, breathtaking nature and sheer beauty that stays with you long after your tan has faded.