TECHNICAL INTEROPERABILITY STANDARD

For Requirements for Connection to the Communications Network of Spanish Public Administrations.
TÍTULO/TÍTLE: Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations.

Elaboración y coordinación de contenidos/Content elaboration and coordination:
Dirección General de Modernización Administrativa, Procedimientos e Impulso de la Administración Electrónica/General Directorate for Administrative Modernization, Procedures and Promotion of Electronic Administration

Características/Characteristics: Adobe Acrobat 5.0
Responsable edición digital: Subdirección General de Información, Documentación y Publicaciones/Responsible for digital edition: Deputy director for Information, Documentation and Publications (Jesús González Barroso)

Así mismo, se puede encontrar esta publicación en el Portal de Administración Electrónica (PAe):/Publication available at:
http://administracionelectronica.gob.es/

Para ver estas Guías de aplicación..... publicadas en 2011 ver :/Technical Interoperability Standards 2011 available at:
http://www.seap.minhap.gob.es/es/publicaciones/centro_de_publicaciones_de_la_sgt/Guias_NTI.html

Edita:
© Ministerio de Hacienda y Administraciones Públicas
Secretaría General Técnica
Subdirección General de Información,
Documentación y Publicaciones
Centro de Publicaciones

Edit:
© Ministry of Finance and Public Administration
Technical Secretariat,
Directorate General for Information,
Documentation and Publications
Publication Center

NIPO: 630-12-090-8
III. OTHER PROVISIONS

MINISTRY OF TERRITORIAL POLICY AND PUBLIC ADMINISTRATION

Resolution of the Secretary of State for Public Service, of 19 July 2011, giving approval to the Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations.

The National Interoperability Framework, established in Article 42, Section 1, of Law 11/2007, of 22 June, on Citizens’ E-Access to Public Services, is aimed at creating the conditions necessary to guarantee an adequate level of technical, semantic and organisational interoperability of the systems and applications used in the Public Administration, allowing the exercise of rights and the fulfilment of obligations through e-access to public services, while acting in the interest of effectiveness and efficiency.


The Technical Interoperability Standards describe specific aspects of a wide range of topics such as e-documents, digitisation, e-files, authentic copy and conversion, signature policy, standards, data brokerage, data models, e-document management, connection to the communication network of the Spanish Public Administration, and data models for the exchange of registry entries and declarations of conformity, all of which are necessary to guarantee the more practical and operational aspects of interoperability between Public Administration agencies and citizens. The Technical Interoperability Standards shall be further developed and improved over time, parallel to the progress of e-government services, their supporting infrastructure, and the evolution of technology, in order to meet the provision in Article 42.3 of Law 11/2007, of 22 June.

Within the Technical Interoperability Standards, the Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations is in accordance with the provisions in the aforementioned Royal Decree 4/2010, of 8 January, in order to facilitate the interconnection of the Public Administration networks and the exchange of information between them, as well as the interconnection with the networks of EU institutions and other EU Member States.

In particular, the Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations sets forth the conditions under which every agency in the Public Administration or public law entity associated or reporting to it can access the SARA Network, describes the functions and responsibilities of the agents connecting to said network, and establishes the requirements to connect to, access, and use the services provided through it.

Drafted in collaboration with all the Public Administration agencies to which it applies, the present Technical Standard has received a favourable report from the Standing Committee of the High Council for E-Government, at the proposal of the E-Government Sector Committee.
In accordance with the provisions in Section 2 of Additional Provision 1 of Royal Decree 4/2010, of 8 January, the Secretary of State decides:

One

To approve the Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations whose text appears below.

Two

That the Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations that is being approved by virtue of this document shall come into force on the day following its publication in the Official State Gazette, irrespective of the clauses in Transitory Provision 1 of Royal Decree 4/2010, of 8 January, regulating the National Interoperability Framework for E-Government.


TECHNICAL INTEROPERABILITY STANDARD FOR REQUIREMENTS FOR CONNECTION TO THE COMMUNICATIONS NETWORK OF SPANISH PUBLIC ADMINISTRATIONS

Contents
I. General considerations
I.1. Purpose
I.2. Scope of application

II. Agents connecting to the SARA Network
II.1. Connection to the SARA Network
II.2. MPTAP – SARA Network Support Centre
II.3. SARA Network Access Providers (SAPs)
II.4. End users

III. Technical requirements for SAP connection
III.1. Connection area (CA) schema
III.2. Connection management
III.3. Routing plan
III.4. Connectivity element provision
III.5. Fitting-out guarantees
III.6. Support service and troubleshooting

IV. Access and use of services
IV.1. Access to services
IV.2. Service catalogue management
IV.3. Terms of use of services

V. Agents and functions
V.1. Ministry of Territorial Policy and Public Administration (MPTAP)
V.2. SARA Network Access Providers
V.3. End users
V.4. Reference publication
I. General considerations

I.1 Purpose: The Technical Interoperability Standard for Requirements for Connection to the Communications Network of Spanish Public Administrations established the conditions for agencies in the Public Administration or public law entity associated or reporting to them (hereinafter referred to as “organisations”) to access the SARA Network.

I.2 Scope of application: The contents of this Standard shall apply to the SARA Network within the scope established in Article 3 of Royal Decree 4/2010, of 8 January, regulating the National Interoperability Framework for E-Government.

II. Agents connecting to the SARA Network

II.1 Connection to the SARA Network

1. The SARA Network shall be accessed from the so-called “Points of Presence” (PoPs). PoPs are all the offices with a direct connection to the SARA Network, without intermediaries.

2. SARA Network PoPs are divided into the following:
   a) SARA Network access providers (SAPs).
   b) SARA Data Processing Centres (DPCs).
   c) sTESTA Network (Secure Trans-European Services for Telematics between Administrations).
   d) External monitoring centres.
   e) Certification service providers.
   f) Others, e.g. Single Business Offices.
### Legend of Figure 1

<table>
<thead>
<tr>
<th>Red SARA</th>
<th>SARA Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red sTesta</td>
<td>sTESTA Network</td>
</tr>
<tr>
<td>MPTAP – Centro de Soporte Red SARA</td>
<td>MPTAP – SARA Network Support Centre</td>
</tr>
<tr>
<td>Organismos dependientes</td>
<td>Dependent bodies</td>
</tr>
<tr>
<td>Red organismo</td>
<td>Body network</td>
</tr>
<tr>
<td>Organismo Proveedor de Acceso a Red SARA</td>
<td>SARA Network access providers</td>
</tr>
<tr>
<td>CPDs y prestadores de servicios</td>
<td>DPCs and service providers</td>
</tr>
<tr>
<td>Otros Puntos de Presencia</td>
<td>Other PoPs</td>
</tr>
</tbody>
</table>

3. Except for special PoPs, to connect to the SARA Network the intervention of the Ministry of Territorial Policy and Public Administration (hereinafter referred to as MPTAP), an access provider, and the organisation wanting to connect (end user) shall be required.
II.2  **MPTAP – SARA Network Support Centre:** The functions of the SARA Network Support Centre at MPTAP are listed online at www.redsara.es, accessible from the SARA Network.

II.3  **SARA Network Access Providers (SAPs)**

1. Direct connection to the SARA Network shall be available from a connection area (CA) at the offices of the relevant Public Administration agencies, which shall be the SAPs for depending units, bodies and public law entities, and, in the case of autonomous communities, the local governments within their territory.

2. The organisations that do not depend on a higher body – ministries, autonomous communities, autonomous towns, constitutional bodies – shall be SAPs. Local governments shall depend on their autonomous communities for access.

3. If authorised by MPTAP, other public bodies can be SAPs too, provided they have special roles or offer special services.

4. New SAPs shall be approved by the SARA Network Support Centre at MPTAP.

II.4  **End users**

1. All SARA Network end users shall access the network through an organisation which shall act as SAP.

2. The characteristics and devices of end users’ connection to SAPs shall depend on the terms and mechanisms made available by each SAP.

3. End users shall send their connection requests to the SAP they are dependent on and communicate them to the SARA Network Support Centre at MPTAP.

4. The full list of SAPs shall be available online at www.redsara.es, accessible from the SARA Network.

III. **Technical requirements for SAP connection**

III.1  **Connection area (CA) schema**

1. The connection areas (CAs) of SAPs shall be the only connection point between the network of a Public Administration agency and the organisations reporting to it or associated with it as SAP, the networks or other Public Administration agencies and public law entities connected to the SARA Network, and the sTESTA Network of the European Commission.

2. CA structure will be that of a demilitarised zone (DMZ) bounded by an external security subsystem connected to the SARA Network and an internal security system protecting the organisation.

3. CA elements shall provide perimeter security and host the basic digital services offered at SARA Network: DNS, SMTP, NTP, proxy, and reverse proxy.

4. The external security subsystem shall establish a virtual private network (VPN) with the other offices in the SARA Network, which means all communications through the telecommunication service operator shall be tunnelled.

5. In the DMZ, any equipment can be used to connect to the other organisations in the network. To protect the global security of the network, the SARA Network Support Centre at MPTAP shall establish the conditions for the incorporation of additional elements in the CA.
6. A simplified version of a CA is shown below.

Figure 2. Logical schema of a connection area (CA).

<table>
<thead>
<tr>
<th>Legend of Figure 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.C.</td>
<td>CA</td>
</tr>
<tr>
<td>Red organism</td>
<td>Body network</td>
</tr>
<tr>
<td>DMZ</td>
<td>DMZ</td>
</tr>
<tr>
<td>Red SARA</td>
<td>SARA Network</td>
</tr>
<tr>
<td>Cortafuegos interno</td>
<td>Internal firewall</td>
</tr>
<tr>
<td>Cortafuegos externo</td>
<td>External firewall</td>
</tr>
<tr>
<td>Servicios</td>
<td>Services</td>
</tr>
</tbody>
</table>

III.2 **Connection management**: MPTAP shall manage the connection to the SARA Network, applying all the necessary policies to ensure interoperability and guarantee the appropriate security level.

III.3 **Addressing plan**

1. The organisations connecting to the SARA Network shall apply the Public Administration Network Addressing and Interconnection Plan established by the Directorate-General for the Promotion of E-Government (DGIAE), available online at http://administracionelectronica.gob.es/, in accordance with the provisions in Article 14 of Royal Decree 4/2010, of 8 January.

2. The parties shall make the means available to adapt to routing plans, so that an IP direction space or range shall be used to preserve compatibility and interoperability.

III.4 **Connectivity element provision**: MPTAP shall acquire, install, manage, set up, and maintain each SAP’s connectivity elements.

III.5 **Fitting-out guarantees**: The fitting-out of SAP facilities shall comply with the relevant provisions in Royal Decree 3/2010, of 8 January, regulating National Security Framework for E-Government, in order to ensure service continuity.

III.6. **Support service and troubleshooting**

1. Support and troubleshooting services for the SARA Network shall be provided jointly by MPTAP and SAPs through dedicated teams.

2. To facilitate joint action by MPTAP and SAPs, each organisation shall provide the following support service and troubleshooting information:
   a) Identification.
   b) Head of unit.
   c) Technician in charge.
   d) Service hours.
   e) Location.
   f) Troubleshooting contact hours.
g) Comments.

3. Support service and troubleshooting identification and contact details shall be regularly updated and shared with all agents, so that they are available when needed for troubleshooting action. They will be available online at www.redsara.es, accessible from the SARA Network.
IV. Access and use of services

IV.1 Access to services

1. Any organization connected to the SARA Network can request use of any of the services offered in it.

2. The SARA Network service catalogue shall be available online at www.redsara.es, accessible from the SARA Network.

IV.2 Service catalogue management

1. The catalogue of services shall be managed and updated by MPTAP and the SAPs providing each service.

2. All the services published by SAPs in the SARA Network shall be communicated to the SARA Network Support Centre at MPTAP for it to keep the catalogue up to date.

3. The catalogue of services shall make it easier to make statistics and dashboards to be published by MPTAP on www.redsara.es, making them available to all the parties involved.

IV.3 Terms of use of services

1. The terms of use below shall apply to vertical or business services as well as to common e-services, irrespective of special terms established by service providers:
   a) Prior agreement between the Public Administration agency providing the service and the beneficiary.
   
   b) Communication to the SARA Network Support Centre at MPTAP.
   
   c) If relevant, terms of use of the data brokerage platform involved in service provision. If the platform used is the MPTAP Brokerage Platform, the provisions in Technical Interoperability Standard for Data Brokerage Protocols shall apply.

2. New service registration and communications to the SARA Network Support Centre shall use the media made available for these purposes at www.redsara.es, where the following minimum information shall be published:

   a) Applicant's name.

   b) General service information.
      i. Name of service or application.
      ii. Level of criticality.
      iii. Availability hours.
      iv. Service beneficiaries.

   c) Technical support details to contact service provider.

   d) Technical information for access and use of service.

V. Agents and functions

V.1 Ministry of Territorial Policy and Public Administration. The MPTAP shall:

   a) Set up, manage, and maintain a connection with enough capacity and high availability in the offices selected by the Public Administration that best enable the connection to their own networks to become SAPs.

   b) Provide SAP authorities all the technical documents on the architecture and settings of the systems that make the CA.
c) Offer 24/7 support service in order to ensure service continuity at the CA and main network for troubleshooting when relevant, resolution management when external agents (manufacturers, operators, bodies with access to the system) are involved, or technical enquiries on the service or access requests.

d) Manage www.redsara.es, a website giving general information on the SARA Network and specific information for SAP technicians on the services providers, problem notifications, scheduled interruptions, new services, and news of interest.

e) Take the necessary security measures to protect the information being transferred by means of communication encryption and early detection of errors, working jointly with CCN-CERT.

V.2 SARA Network Access Provider. All Public Administration agencies acting as SAPs shall:

a) Perform connectivity and deployment tasks in order to be able to access the SARA Network through the CA from their offices or facilities.

b) Manage the elements connecting their own corporate networks to the SARA Network and keep them active.

c) Create the proper conditions in the CA location (environmental conditions, power supply, wiring, etc.) in order to ensure service continuity.

d) Offer support service (if possible, 24/7) to ensure service continuity in their role as SAPs, giving MPTAP the contact details of SAP authorities and the heads of the support, user service, or similar centre.

e) Work with MPTAP in troubleshooting, even when it involves checkups or actions at the CA, coordinated at the SARA Network Support Centre, to reduce problem solving times.

f) Facilitate, promote, and support access to the SARA Network among the bodies and public law entities reporting to it and, in the case of autonomous communities, among the local governments within their territory, using the technologies, mechanisms, and procedures agreed upon, ensuring service continuity, and creating a secure environment for the area they are concerned with.

g) Work with MPTAP in connection and service catalogue management.

V.3 End users. Those bodies and public law entities reporting to Public Administration agencies, and local governments within the territory of each autonomous community with access to the SARA Network shall apply:

a) The special terms or the SAP they are dependent on.

b) The special terms of the horizontal and vertical services they use through the SARA Network.

V.4 Reference publication

1. MPTAP can publish the names of the bodies using the SARA Network in any reference list or press gazette without need of prior authorisation.

2. Public Administration agencies shall be able to reference the use of the SARA Network without need of authorisation from MPTAP.