

NIFO Factsheet – Spain

The main online sources for interoperability related information are:

- The Spanish NIF (Royal Decree 4/2010): <http://www.boe.es/buscar/doc.php?id=BOE-A-2010-1331>
- The portal for electronic administration (PAE): http://administracionelectronica.gob.es/pae_Home#.U5AjvnV-Hg

Main interoperability highlights

The Spanish National Interoperability Framework (NIF), *Esquema Nacional de Interoperabilidad* (2010) is a Royal Decree (4/2010)¹ which sets out provisions about interoperability stated in the eGovernment Law (11/2007)² and is applicable to all public administrations in Spain. This legal approach to implement the NIF embeds interoperability requirements in the legal framework of administrative procedures and eGovernment, thus configuring an integrated coherent and comprehensive approach.

The NIF specifically addresses requirements in relation to the implementation of interoperability principles, levels, agreements and governance, plus other topics related to interoperability. The NIF takes into account the European context and recommendations, and systematically links the interoperability instruments of Spain with the equivalent ones in the EU.

The NIF is extended through a number of technical interoperability resolutions which develop specific requirements necessary to guarantee the more practical and operational aspects of interoperability between public administrations, agencies and citizens. These resolutions are developed in cooperation between all public administrations in Spain following the same cooperative approach which was used to develop the NIF.

There is already a collection of common infrastructures and services, with actions ongoing to extend and improve these and to add new ones.

Summary of the NIF

The Spanish NIF is a legal text (Royal Decree 4/2010)¹ which develops the provisions about interoperability foreseen in the eGovernment Law 11/2007² with a set of statements to build and improve interoperability, to be followed by all Public administrations in their relations between them and with citizens and businesses.

In particular, the NIF introduces the following main elements:

- The NIF assumes the general principles stated in the eGovernment Law and additionally defines the specific principles of interoperability (Interoperability as an integral

¹ <http://www.boe.es/buscar/doc.php?id=BOE-A-2010-1331>

² <http://www.boe.es/buscar/doc.php?id=BOE-A-2007-12352>

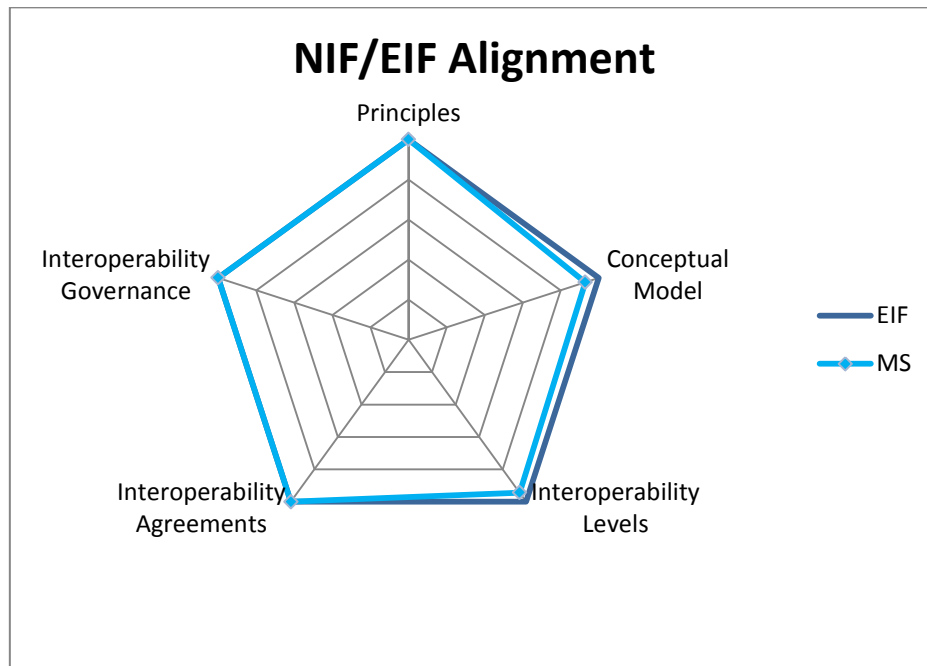
quality; Multidimensional character of the interoperability; Approach of multilateral solutions).

- The dimensions of interoperability, organisational, semantic and technical are developed and the NIF sets out a number of dispositions addressing issues like the role of interoperability nodes, the inventories of administrative information (procedures, services, administrative units, registry services), publication and conditions of use of eServices through the administrative network, publication and use of semantic assets and associated coding, and conditions about the selection and use of standards.
- Common infrastructures and services are recognised to be relevant instruments that contribute to the simplification and propagation of interoperability, and facilitate multilateral interactions and there is a call to public administrations to link their infrastructures and services to those ones provided by the General State Administration. In particular, there is a call to public administrations to link their networks with the administrative communications platform provided by Red SARA to facilitate exchanges of information and services between them and with the EU; in addition, it is mandatory to follow the IP Addressing Plan of the Administration.
- It is explicitly recognised that the reuse of applications of Public Administrations, associated information and to other objects of information, contributes to a better interoperability through sharing and collaboration. The NIF includes provisions about applicable licences, particularly about OSS with a call to use the European Public Licence (EUPL)³, about repositories and their linking, with a call to public administrations to take into account solutions available in those repositories and to publish the code of their applications.
- There is a chapter on the interoperability of electronic signatures and electronic certificates with provisions about, among others, policies, profiles of certificates and validation platforms.
- There is a chapter on the preservation and recovery of the electronic documents, with a focus on eDocuments.
- There are a number of provisions about compliance with the NIF.
- Finally, a series of technical regulations and instruments for interoperability is created (inventory of administrative procedures and services, Semantic interoperability centre, Repository of applications for free reuse) in order to facilitate the implementation of the Framework.
- The NIF systematically refers to the linking of the interoperability instruments of Spain with the equivalent ones at EU level.

Alignment NIF/EIF

Spain is fully aligned with the EIF on the 'Governance', the 'Principles' and the 'Interoperability Agreements'. It has an almost full alignment on the 'Conceptual Model' and on the 'Interoperability levels'.

³ See also: <https://joinup.ec.europa.eu/software/page/eupl>



Spain aligns with all of the twelve EIF principles.

Spain is well aligned with the EIF on the conceptual model. Due to the format of the Spanish NIF, i.e. a legal text, no graphical representation of a conceptual model as found in the EIF is provided. However, in relation to the conceptual model the NIF implements the following:

- Services provided are to be identified, their conditions of use to be known, published electronically and made available through the administrative network Red SARA.
- Administrative units and services are to be coded and inventoried in repositories and these repositories linked.
- The interoperability Agreement on mediation services (brokering services) sets the rules for the use of brokering services to access base registries describing the roles of providers and consumers and other conditions of brokering platforms.
- The role of interoperability nodes (brokering or intermediation systems and services) is explicitly recognized.
- The secure communications platform is Red SARA, together with applicable rules and security provisions
- All the well-known policies, infrastructures for interoperability of electronic identification, authentication and signature for secure data exchange/management.

Through the Data Mediation Protocol it is possible to access a number of authentic sources such as the Tax Agency, Social Security, Citizens Identification Registry, Citizens residence Registry, Cadastre Registry and many others. The Technical Interoperability Standard for Data Mediation Protocols generally defines the roles of the actors involved in mediated data exchanges and sets forth the conditions for mediated data exchange processes with the mediation platform. Furthermore, the supporting documentation, a Frequently Asked Questions



document and a presentation elaborating the EIF conceptual model linked to the Spanish NIF legislation, provide ample information.

Spain is well aligned on the interoperability levels. The Spanish NIF specifically addresses interoperability requirements related to the organizational, semantic and technical levels. The organisational level addresses a number of issues to enable organisational interoperability including aspects about conditions of services to be consumed electronically by other public bodies, the role of agreements, interoperability nodes, and repositories of administrative information (services and units), together with training of personnel in interoperability. The semantic level addresses the publication of horizontal and sectorial data models and the role of the Semantic Interoperability Centre of the Administration (CISE)⁴ where the data models are to be published. The technical interoperability level addresses the conditions in relation to the use and selection of standards.

Spain is aligned with the EIF on the interoperability agreements. The NIF describes in chapter V the criteria to select standards considering the legal framework in the EU and Spain, the notion of formalised specifications and criteria about the suitability in relation to the need to be satisfied, the conditions in relation to its use and governance and the market conditions. The Royal Decree 3/2010 regulates the National Security Framework, also foreseen in the eGovernment Law, which determines the security policy regarding the use of electronic means and made up by the basic principles and minimum requirements necessary for the adequate protection of information.

Regarding the governance framework, Spain defines rules for compliance. Special emphasis is put on the compliance with the NIF of websites and registries are ruled by the terms of the NIF and compliance declarations will have to be published accordingly. Compliance with the NIF will be included in the life cycle of services and systems. Each public entity or body has to establish its own control mechanisms to guarantee the compliance with the NIF.

More detailed information on NIF / EIF alignment is provided on the NIFO Community on JoinUp on the [Compare NIFs](#) page.

⁴ See:

http://administracionelectronica.gob.es/pae_Home/pae_Estrategias/pae_Interoperabilidad_Inicio/pae_Centro_Interoperabilidad_semantica.html?idioma=en#.U5B1AvmSxio

Example of alignment – EIF Principle 3: Inclusion and Accessibility

In Spain, the inclusion and accessibility principle is included in Law 11/2007, Article 4, General principles:

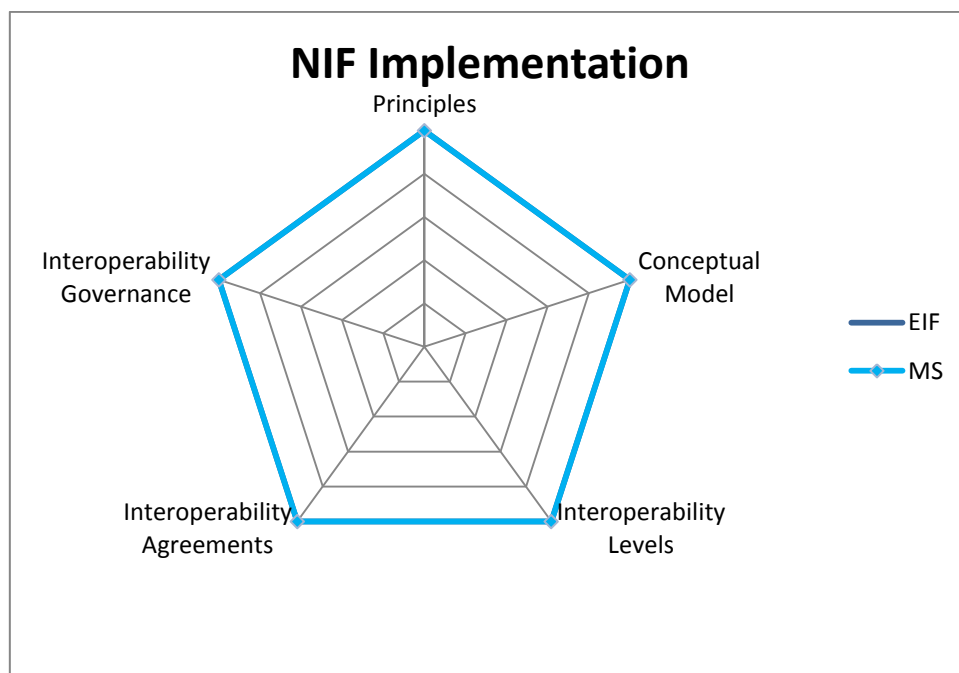
- b) The principle of equality with the objective that the use of electronic media under no circumstances shall imply the existence of restrictions or discrimination for the public in their relations with Public Administration bodies by non-electronic media, both in respect to access to the provision of public services and with respect to any administrative procedure or action, without prejudice to the measures aimed at promoting the use of electronic media.
- c) The principle of accessibility of information and services by electronic media in the terms established by regulations in force on the issue, through systems which enable such information and services to be obtained securely and comprehensibly, ensuring in particular universal accessibility, designed for all media, channels and environments with the objective that all members of the public shall be able to exercise their rights under equal conditions, incorporating the characteristics required to ensure accessibility for those groups which require them.

See Law 11/2007, Article 4:

http://www.seap.minhap.gob.es/dms/es/publicaciones/centro_de_publicaciones_de_la_sgt/Otras_Publicaciones/parrafo/0118/text_es_files/Law-11-2007-access-public-services.pdf

Implementation of NIF

Spain has provided extended information concerning the implementation of the NIF for all dimensions, providing numerous examples of practical application of the principles and interoperability governance dimensions in particular, as well as the conceptual model, interoperability levels and interoperability agreements.



All EIF principles are implemented with practical examples, mostly online services, websites and platforms.

As regards the conceptual model, the main implementation example provided is the Intermediation (brokering) platform⁵.

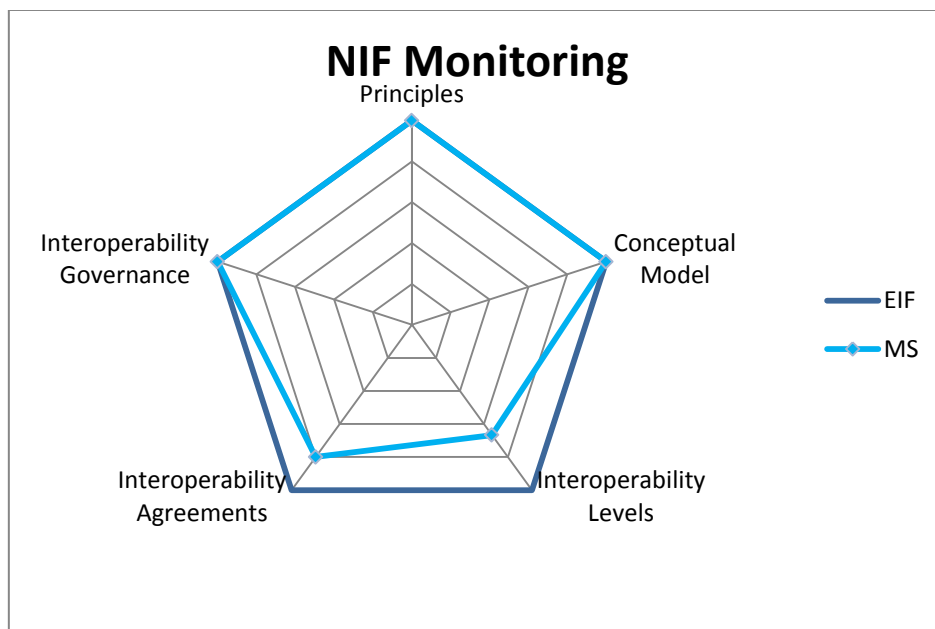
For the interoperability levels dimension, practical examples are provided for all criteria, mainly presenting the Sistema de Información Administrativa (SIA)⁶ which aims to integrate administrative procedures and electronic services in the public administration as a whole. A new version of the [Semantic Interoperability Center](#) was launched in July 2014, aiming at encouraging the sharing and reuse of semantic assets.

Practical examples in the interoperability agreements are focused around the EIF elements of open and formalised specifications such as the catalogue of standards and the minimum service requirements for secure data exchange.

The interoperability governance is established through the Sectorial Committee of eGovernment, which joins all public administrations of Spain.

Monitoring of NIF

Spain has provided extended information concerning the monitoring of the NIF, covering all dimensions.



⁵ <http://administracionelectronica.gob.es/ctt/verPestanaGeneral.htm?idIniciativa=svd#.U5AYYvnV-Hh>

⁶ http://administracionelectronica.gob.es/pae_Home/pae_Estrategias/Racionaliza_y_Comparte/sistemas_informacion_transversales/SIA.html?idioma=en#.U3YvbfmSxio



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All principles are monitored. As regards the conceptual model, the observatory for electronic administration (OBSEA) monitors and publishes indicators on e-government⁷ on a monthly basis. The monitoring includes indicators on the platform for data and information exchange⁸.

The Ministry of Finance and Public Administration performs monitoring⁹ of the interoperability levels. On the legal level, the Agency of data protection conducts inspections¹⁰ of public authorities and private companies that manage personal data.

The evolution of the Sistema de Información Administrativa (SIA) is followed-up as part of the effort to monitor the general conformance of public administrations to ENI¹¹. In consequence, the monitoring score on multiple of the EIF Interoperability levels criteria (Business Process alignment, Inter-governmental coordination, Organisational relationships or Change management) has raised.

In the area of interoperability agreements, the uptake of standards and technical specifications is monitored and the resulting report is available online¹². The Central Government signed a cooperation agreement¹³ with regional governments for the provision of mutual basic solutions. The National Observatory for Open Source Software (ONSFA)¹⁴ is the centre of excellence for the analysis and monitoring of free and open source software in Spain, which implements open standards.

The yearly monitoring¹⁵ process of the implementation of the NIF in the National and Regional governments is managed by the Directorate General of Administrative modernization.

In August 2016, a new guidebook, titled ¡Digitaliza-t! (Digitalise yourself!) was published by the ICT department of Spain's Ministry for Public Administration. It explains to local administrations how to transpose two national eGovernment laws (law 39/2015 and law 40/2015)

⁷ See:

http://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/OBSAE/pae_Notas_Tecnicas/2012-12_nota_tecnica_interoperabilidad_EN/2012-12_nota_tecnica_OBSAE_interoperabilidad_EN.pdf

⁸ See data transmissions (SVD):

https://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/OBSAE/pae_Boletines/2016-12_Dossier_of_eGovernment_Indicators.pdf&ct=ga&cd=CAEYMyoUMTM5NDg1NjkzMDc3NDU1OTcxNDEyHDc4MzFINzQ1NWJkM2M5YTQ6Y29tOmVuOIVTOkw&usg=AFQjCNEVqIJ2CuMZ0yKMnpTP49b2BEceDw

⁹

http://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/Estrategias/pae_Interoperabilidad_Inicio/pae_Eschema_Nacional_de_Interoperabilidad/Informe-progreso-adequacion-eni-2013/Informe_progreso_adequacion_eni_2013.pdf

¹⁰ http://www.agpd.es/portalwebAGPD/LaAgencia/informacion_institucional/conoce/inspeccion-datos-iden-idphp.php

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https://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/OBSAE/pae_Notas_Tecnicas/2015_0228-nota-OBSAE-tecnica-ENI-99-FINAL_EN.pdf

¹²

http://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/Estrategias/pae_Interoperabilidad_Inicio/pae_Eschema_Nacional_de_Interoperabilidad/Informe-progreso-adequacion-eni-2013/Informe_progreso_adequacion_eni_2013.pdf

¹³ <http://www.boe.es/boe/dias/2008/04/29/pdfs/A22095-22117.pdf>

¹⁴ http://observatorio.cenatic.es/index.php?option=com_content&view=article&id=5&Itemid=4

¹⁵ See last report published:

http://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/Estrategias/pae_Interoperabilidad_Inicio/pae_Eschema_Nacional_de_Interoperabilidad/Informe-progreso-adequacion-eni-2013/Informe_progreso_adequacion_eni_2013.pdf

that give a strong impetus to the digitalisation etc..... The guide also explains how to take profit of ICT solutions made available by the ministry's ICT department. ¹⁶.

More information on all the implementation and monitoring examples is provided on the NIFO Community on JoinUp on the [Compare NIFs](#) page.

Example of implementation/monitoring – Interoperability Agreements: a structured, transparent and objective approach to assess and select formalised specifications

The interoperability of Spanish government services is established by the Resolution of the Secretary of State for Public Administration of 3 October 2012 regarding the Catalogue of Standards

- In particular, the Resolution establishes the National Interoperability Framework (NIF), under the responsibility of the Ministry of Presidency, whereas Law 11/2007 of 22 June aims to create the basic elements of technical, semantic and organisational interoperability in the public administration in relation to e-access to public services. The law is complemented by the Royal Decree 4/2010 of 8 January introducing Additional Provision 1 on the development of the series of Technical Interoperability Standards, which should be used by the public administrations. Article 11 of the NIF is an article on standards applicable to all public administrations. The article includes a paragraph on the criteria that are important for the selection of standards. They link to the procurement framework of the EU and to the EIF (European Interoperability Framework) together with additional criteria based on CAMSS v0.1 such as suitability, potential, openness or market conditions. The NIF provides the national adoption process for standards and specifications.

See <http://www.boe.es/boe/dias/2012/10/31/pdfs/BOE-A-2012-13501.pdf>

Also monitoring is performed.

- The uptake of standards and technical specifications is monitored and the resulting report is available online.

See

http://administracionelectronica.gob.es/pae_Home/dms/pae_Home/documentos/Estrategias/pae_Interoperabilidad_Inicio/pae_Eschema_Nacional_de_Interoperabilidad/Informe-progreso-adecuacion-eni-2013/Informe-progreso-adecuacion-eni-2013.pdf

Other initiatives on interoperability

Spanish public administrations now have an interoperability audit guide. This tool allows to assess, through a list of controls, the compliance with the National Interoperability Framework (Esquema Nacional de Interoperabilidad – ENI). This audit guide contains a set of appropriate mechanisms to assess compliance with the provisions of controls about the fulfilment of the requirements of the National Interoperability Framework¹⁷.

Among the objectives of the [Digital Transformation Plan](#) of the General State Administration and its agencies (ICT Strategy 2015-2020), is the setup of plans for ministries to reach a new

¹⁶ <https://joinup.ec.europa.eu/community/epractice/news/egovernment-guide-spain%E2%80%99s-local-administrations>

¹⁷ <https://joinup.ec.europa.eu/community/nifo/case/spain-goes-step-forward-its-interoperability-audit>



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delivery model for services, articulated around the idea of shared services. In addition, it develops the idea of common infrastructures in the field of Information Technology and Communications.

The General Access Point, available at administracion.gob.es facilitates the relationship between citizens and the government, being the gateway via internet to public services.

The Resolution of 10 October 2014, of the Ministry of Finance and Public Administrations, sets the standard technical conditions for the general entry point of e-invoices.

The Standardization Technical Committee on Intelligent Cities (AEN / CTN 178), created within the Spanish Association for Standardisation and Certification (AENOR), with the support of the State Secretariat for Telecommunications and Information Society (SETSI) - worked on the standard "Smart cities. Open Data".

Datos.gob.es (<http://datos.gob.es/>) is the Spanish open data portal that provides access to national datasets. The portal is currently providing access to over 12.750 datasets (<http://datos.gob.es/catalogo>), which is in permanent progression (multiplied by 5 in two years' time). These are also accessible via ODIP (<http://opendataportal.eu>), the pan-European single point of access to European datasets. More than 170 applications (<http://datos.gob.es/aplicaciones>) have reused one or more datasets that are available on the portal.

Spain continue to develop and improve the common infrastructure and services to further enhance interoperability. Some relevant common infrastructures and services for interoperability are the following:

- The communications platform Red SARA allows the interconnection of the Spanish Public Administrations enabling the cooperation and the exchange of information and services between them as well as with the UE and other Member States through the link with sTESTA.
- The Transparency Portal¹⁸. Its technology platform is provided by the Directorate for Information Technology and Communications (DTIC), of the Ministry of Finance and Public Administrations, as a common solution for all central government.
- The channel for citizens "Your Social Security" is an integrated web portal that provides personalized information services to citizens according to their profile (age, active, retired ...) and allows to perform the most common operations related to the field of competence of the National Institute of Social Security.
- the portal "empleate.es", operated by the National Public Employment Service, provides a tool for job-seekers to find job vacancies, and integrates both native and external job vacancies from other portals.
- Electronic identification, authentication and signature:
 - The national eID card (DNLe) makes it possible to digitally sign electronic documents and contracts, identify and authenticate citizens in a secure digital environment. Spain currently operates version 2.0 of the DNLe.

¹⁸ <https://joinup.ec.europa.eu/community/nifo/case/spain%E2%80%99s-transparency-portal>

- The national platform (@firma) for electronic signatures supports the creation, validation as well as time stamping services.
- The Intermediation Platform simplifies administrative procedures, so that citizens or businesses do not have to deliver data or documents already held by public authorities.
- The Registry Integrated System (SIR) is an exchange system between registry offices to achieve the exchange of registry entries.
- The Payment Gateway is a platform that allows organizations of the General State Administration (Central Government) to enable electronic payment of their fees.
- The <http://eugo.es/> website is the Point of Single Contact, in line with the Services Directive (SD), provides online public services to businesses.
- Reuse of services and information is provided through:
 - The Technology Transfer Centre (TTC) offers a general directory, repository, of applications and services and whose aim is to favour the re-use of solutions by all the Public Administrations.
 - The national portal <http://datos.gob.es/> that organizes and manages the Catalogue of Public Information, the single point of access to data sets of the General State Administration, which takes over the Aporta project and takes its commitment to opening up public sector information.
- The Platform Interoperability of the Balearic Islands (Pinbal) is a technology solution developed by the Government of the Balearic Islands that enables interoperability between the Balearic government and the rest of the state. Pinbal allows queries (either through a web application or via web services) to the services available through the State Mediation Platform and the services defined in the scope of the Autonomous Community of the Balearic Islands.

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