

Nombres Geográficos

Buenas Prácticas para lograr la conformidad con INSPIRE

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Esri España

Agenda

1. Estrategia Esri
2. Propuesta de valor
3. Resumen y Buenas Prácticas



Aplicando los Principios de Datos FAIR

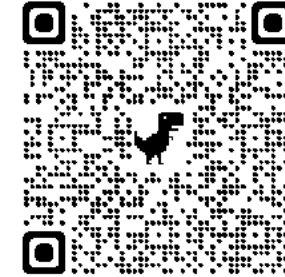
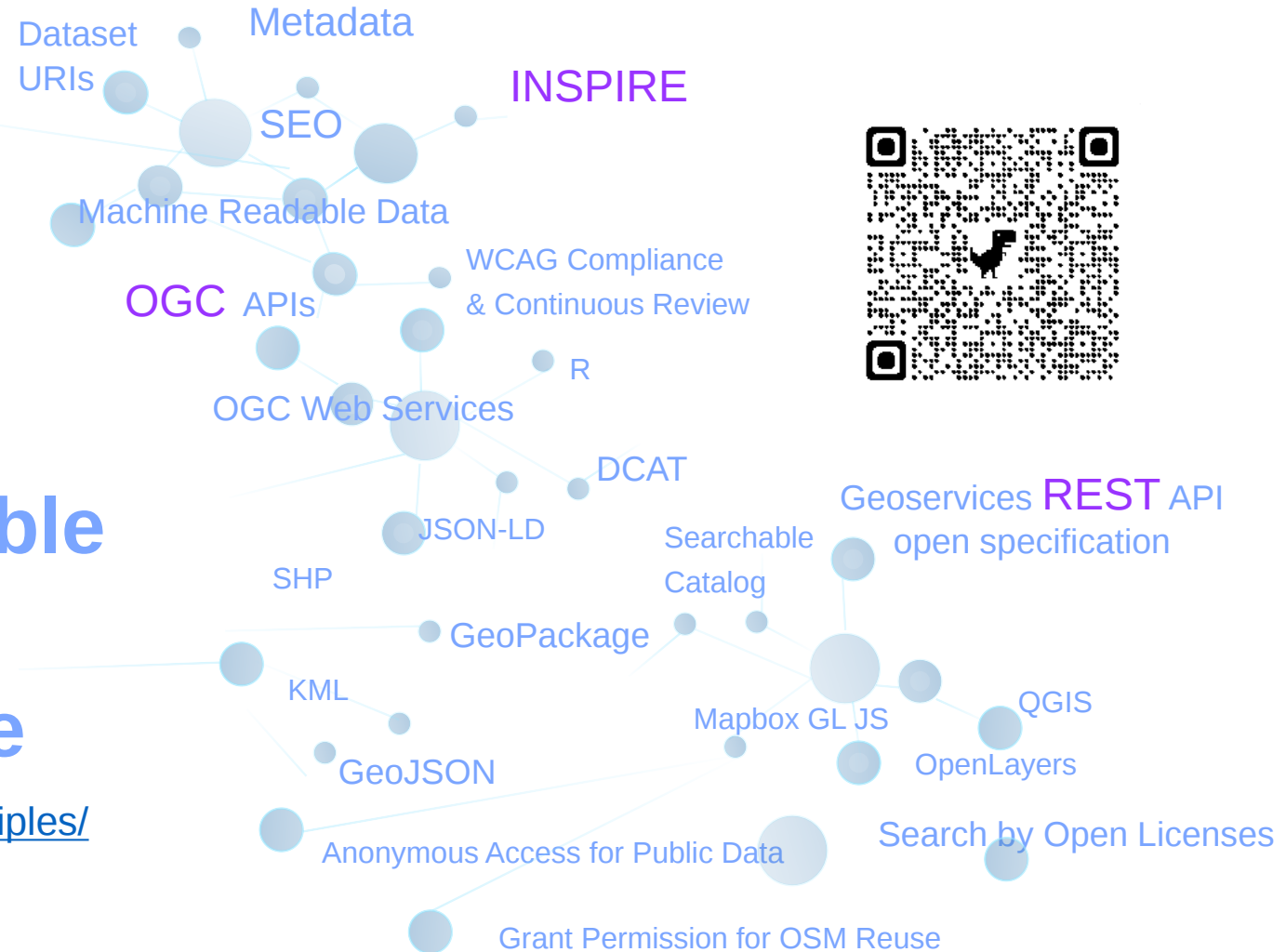
Findable

Accessible

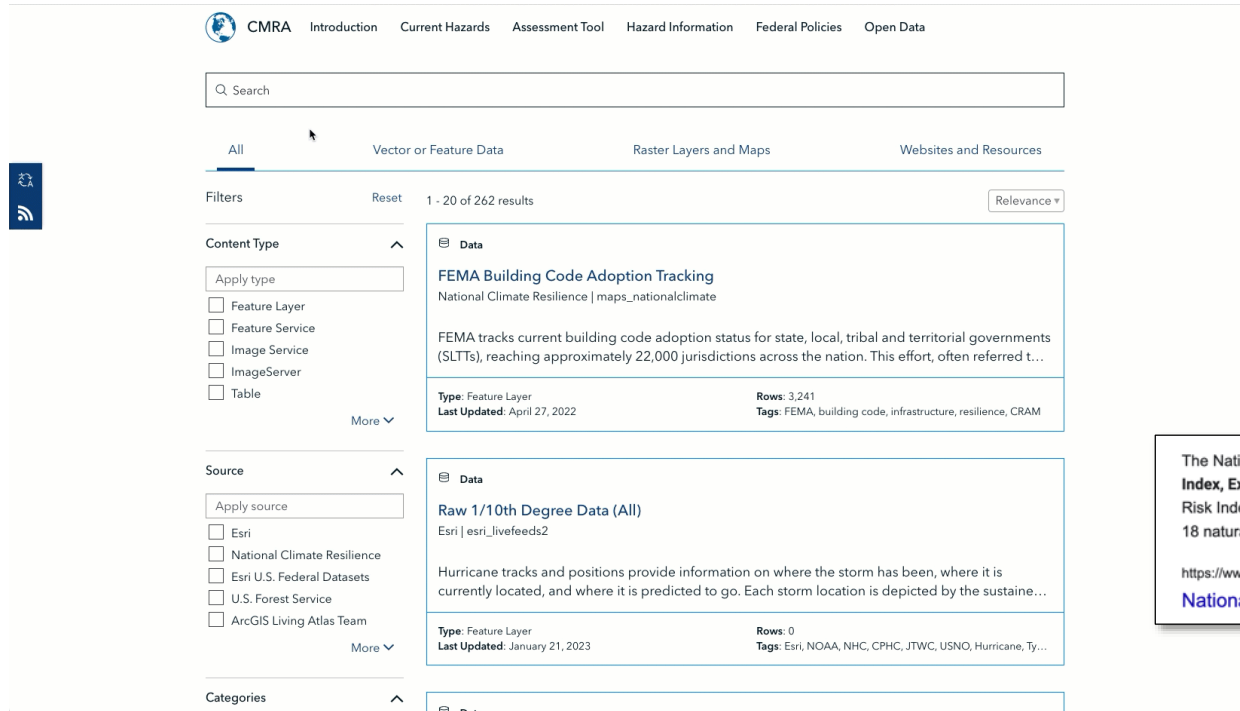
Interoperable

Reusable

<https://www.go-fair.org/fair-principles/>



Localizables (Findable)



- [ArcGIS Online organization gallery](#)
- [ArcGIS Living Atlas of the World](#)
- [ArcGIS Online global search](#)
- [ArcGIS Hub global search](#)

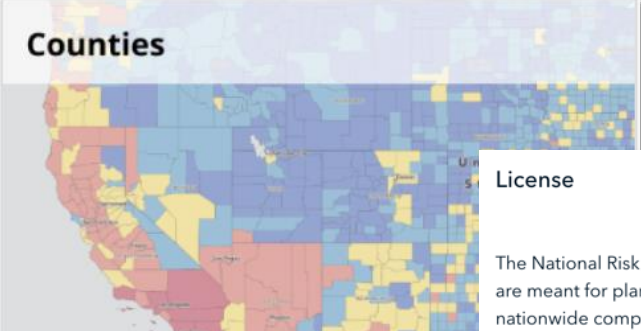
The National Risk Index Counties feature layer contains county-level data for the Risk Index, Expected Annual Loss, Social Vulnerability, and Community Resilience. The National Risk Index is a dataset and online tool to help illustrate the U.S. communities most at risk for 18 natural hazards. Oct 26, 2021

<https://www.arcgis.com/home/item>
[National Risk Index Counties - Overview - ArcGIS Online](#)

Google(TM) search result for "National Risk Index Counties"

Accessible

Counties



National Risk Index

National Risk Index County

Feature Layer

Created: Oct 26, 2021
Updated: Aug 23, 2022
View count: 77,072

FEMA_NationalRiskIndex

License

The National Risk Index (the Risk Index or the Index) and its associated data are meant for planning purposes only. This tool was created for broad nationwide comparisons and is not a substitute for localized risk assessment analysis. Nationwide datasets used as inputs in many cases, not as accurate as available local data for each National Risk Index risk factor. Substituting the Risk Index data with local data will result in a more accurate risk index. If you decide to download the Risk Index data and substitute it with local data, you assume responsibility for the data and any resulting data index.

The methodology used by the National Risk Index is based on the work of subject matter experts in the fields of natural hazard analysis, mitigation planning, and emergency management. The methods used to create the National Risk Index are similar to those from other natural hazard risk assessments, but on a smaller scale. The breadth and combination of data sources (GIS) and data processing techniques used in the National Risk Index enable it to incorporate multiple hazards, manage its nationwide scope, and capture what other methods cannot.

The National Risk Index Map

Use the interactive National Risk Index Map to visually explore natural hazard risk data across the United States.

Explore the Map

What Is the National Risk Index?

Gain insight into what the National Risk Index is, how it's made possible, and how it can help.

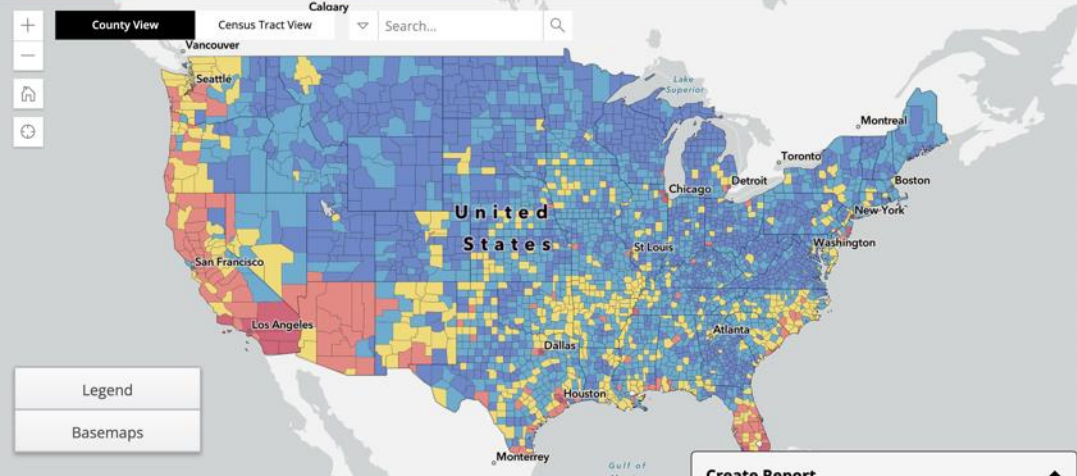
Learn about the National Risk Index

FEMA National Risk Index

Explore the Map Learn More Take Action Get Help

Risk Index Expected Annual Loss Social Vulnerability Community Resilience Help

County View Census Tract View Search...



Legend Basemaps

Create Report

Esri, Garmin, FAO, NOAA, USGS, EPA | FEMA, Compass, CDM Smith, ABS Consulting, FAU, and the Arizona State Univ... Powered by Esri

Flujos de trabajo interoperables

DOMAIN DATA MODELS

INSPIRE
FGDC
ISO LADM, ...
IHO S-57 / S-100 series
NENA
...

METADATA

FGDC CSDGM
ISO 19115 / 19139
INSPIRE
North Am. Profile
Dublin Core
...

WEB SERVICES/APIs

GeoServices REST
OGC WFS, WMS, WMTS
OGC API Features, Tiles,
I3S
...

SECURITY

Data Sovereignty
Trust
Identity
GAIA X

ENCODINGS

JSON
XML
GML
RDF

CATALOG & SEARCH

DCAT
DCAT-AP
SEO practices
OGC CSW
OGC API Records
...

ACCESSIBILITY

WCAG
W3C

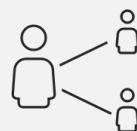
(Meta)data &
Analytics



Web Services &
(Meta)data



People &
Partners



Open & Secure
Content Catalogs



Maps & Apps /
Tools & Solutions



Geospatial
Ecosystems



produce

publish

collaborate

share / discover

use / reuse

interconnect



ArcGIS Pro

Extensions



ArcGIS Enterprise



ArcGIS Online

Apps & App Builders



ArcGIS Hub Basic

ArcGIS Hub Premium

Esri Geoportal

Interoperables

GeoServicios REST API

OGC API Features

OGC WFS

OGC WMTS

Servicio de descarga INSPIRE

Servicio de visualización INSPIRE

CSV, SHP, Geopackage, FGDB,

...

GeoJSON

Detalles

Origen: [Feature Service](#)

Creado desde: [GN, Service definition](#)

Publicado como:

[GN WMTS, Tile layer](#)

[GN WFS, WFS](#)

[GN OGC Feature, OGC Feature Layer](#)

Límites de Comunidades Autónomas (I)



Servicio de límites

OGC Feature Layer de [EsriEspanaContenidos](#)

Elemento creado: 30 dic 2022 Elemento actualizado: 30 dic 2022 Ver recuento: 32

Poblaciones de España



Agregar a favoritos

Poblaciones de España.

Feature layer de [EsriEspanaContenidos](#)

Elemento creado: 6 jun 2022 Elemento actualizado: 30 jul 2023 Ver recuento: 32

Living Atlas



Ver recursos de API

Pruebe el Explorador de API

Geoservicio

Vista

<https://services9.arcgis.com/UILu2wREgF>



GeoJSON

Vista

<https://services9.arcgis.com/UILu2wREgF>



Abrir en el Explorador de API

Personalice la consulta acorde con sus necesidades

ArcGIS INSPIRE Open Data

CSV

[Descargar CSV](#)

Shapefile

[Descargar Shapefile](#)

Geodatabase SQLite

[Descargar geodatabase de SQLite](#)

GeoPackage

[Descargar GeoPackage](#)

Geodatabase de archivos

[Descargar geodatabase de archivos](#)

Captura de entidades

[Descargar conjunto de entidades](#)

GeoJSON

[Descargar GeoJSON](#)

Excel

[Descargar Excel](#)

Recursos adicionales

Estas opciones no se pueden filtrar

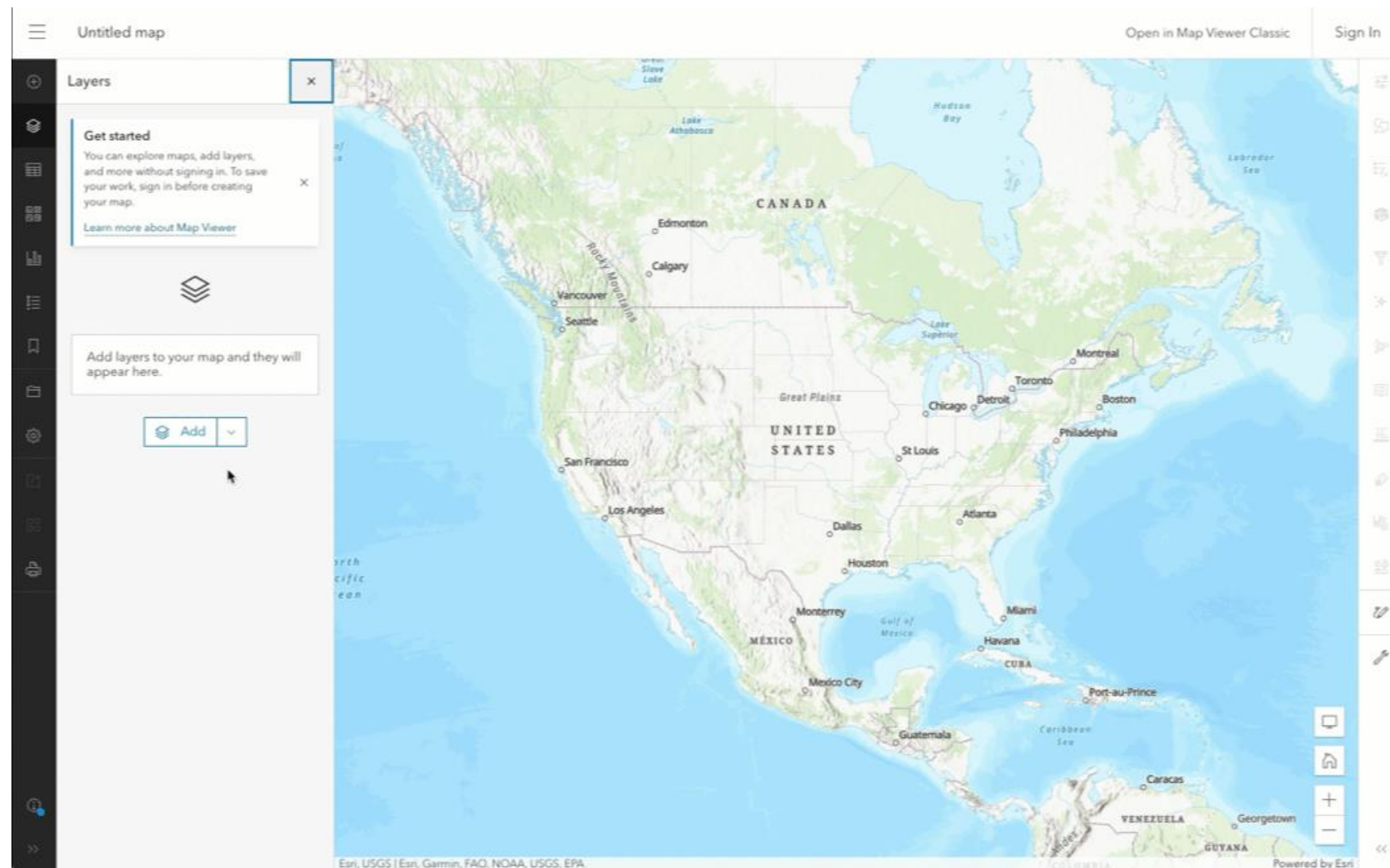
- [ArcGIS GeoService](#)
- [INSPIRE Download service \(OGCFest\)](#)
- [INSPIRE View Service \(OGC WMTS\)](#)

THE
SCIENCE
OF
WHERE®

XIV Jornadas Ibéricas de Infraestructuras de Datos Espaciais

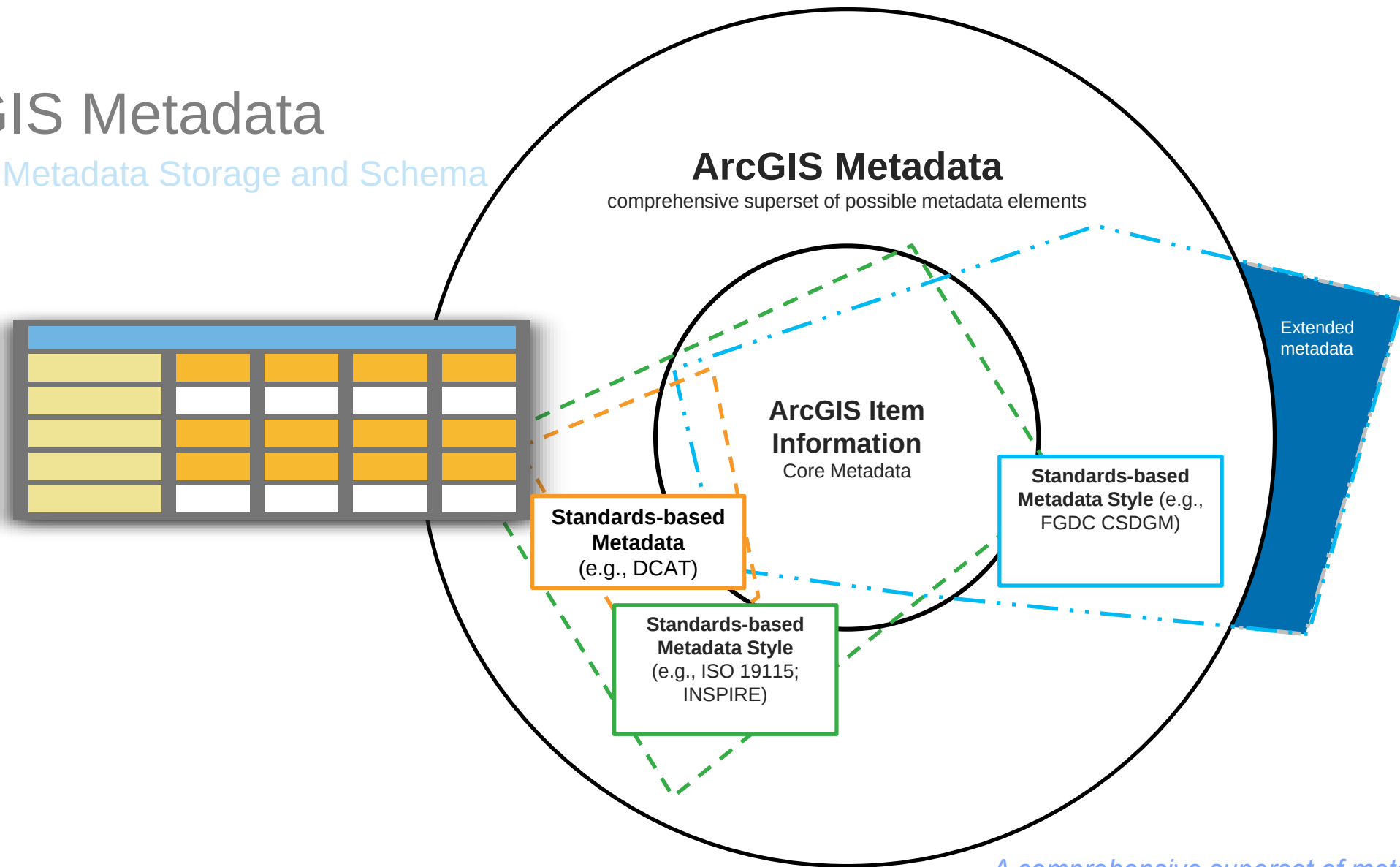
6, 7 e 8 de novembro de 2023

Reusable



ArcGIS Metadata

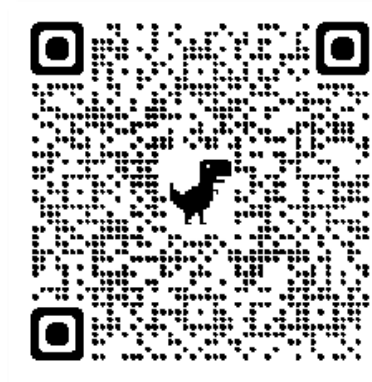
Internal Metadata Storage and Schema



... A comprehensive superset of metadata elements.

Estándares de Metadatos Soportados

FGDC CSDGM Metadata
INSPIRE Metadata Directive
ISO 19139 Metadata Implementation Specification GML3.2
ISO 19139 Metadata Implementation Specification
Item Description
North American Profile of ISO19115 2003
ISO 19115-3 XML Schema Implementation



[Create and Manage Metadata in ArcGIS Pro \(esri.com\)](https://esri.com/arcgis/pro/metadata)

[Create INSPIRE Metadata v2 with ArcGIS \(esri.com\)](https://esri.com/arcgis/pro/metadata/inspire)

Federación de Sitios de Datos Abiertos

Los metadatos y el contenido se comparten en el catálogo del Hub y automáticamente se actualiza al federar datos abiertos

The image illustrates the process of federating open data sites. It features three main components:

- ArcGIS INSPIRE Open Data:** A web interface for managing and sharing open data. It includes a search bar, a map, and a sidebar with options like 'Create a Story', 'View API Re', 'View Data Source', 'View All Metadata', and 'Open in ArcGIS Online'.
- data.europa.eu:** The official portal for European data, showing search results for datasets. It includes a search bar, a list of datasets, and a 'View' button.
- Explore Feeds:** A window that lists various feeds (RSS, DCAT US 1.1, DCAT AP 2.1.1, OGC Records API) with their respective URLs and a 'View' button.

A large blue arrow points from the ArcGIS interface to the data.europa.eu portal, indicating the flow of data and metadata.

Federar datos abiertos con
DCAT-AP

DCAT-AP
OGC API Records

New ways to share and reuse an ArcGIS Hub site catalog (esri.com)

XIV Jornadas Ibéricas de Infraestructuras de Datos Espaciais
6, 7 e 8 de novembro de 2023

Nombres Geográficos

Nomenclátor Geográfico Básico de España

- Flujo de trabajo
 - Producir, publicar y compartir
- Fuente de datos
 - 1'164.481 registros
- Opciones
 - ArcGIS for INSPIRE Classic
 - ArcGIS INSPIRE Open Data

Data sets by

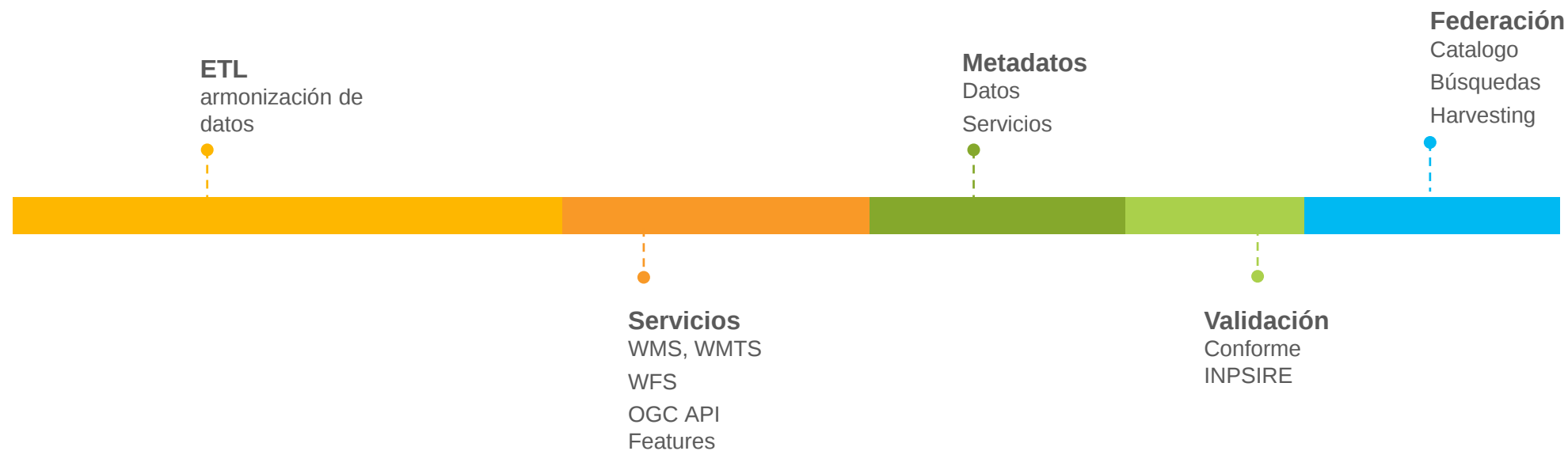
Theme:  Geographical names

Country:  Spain



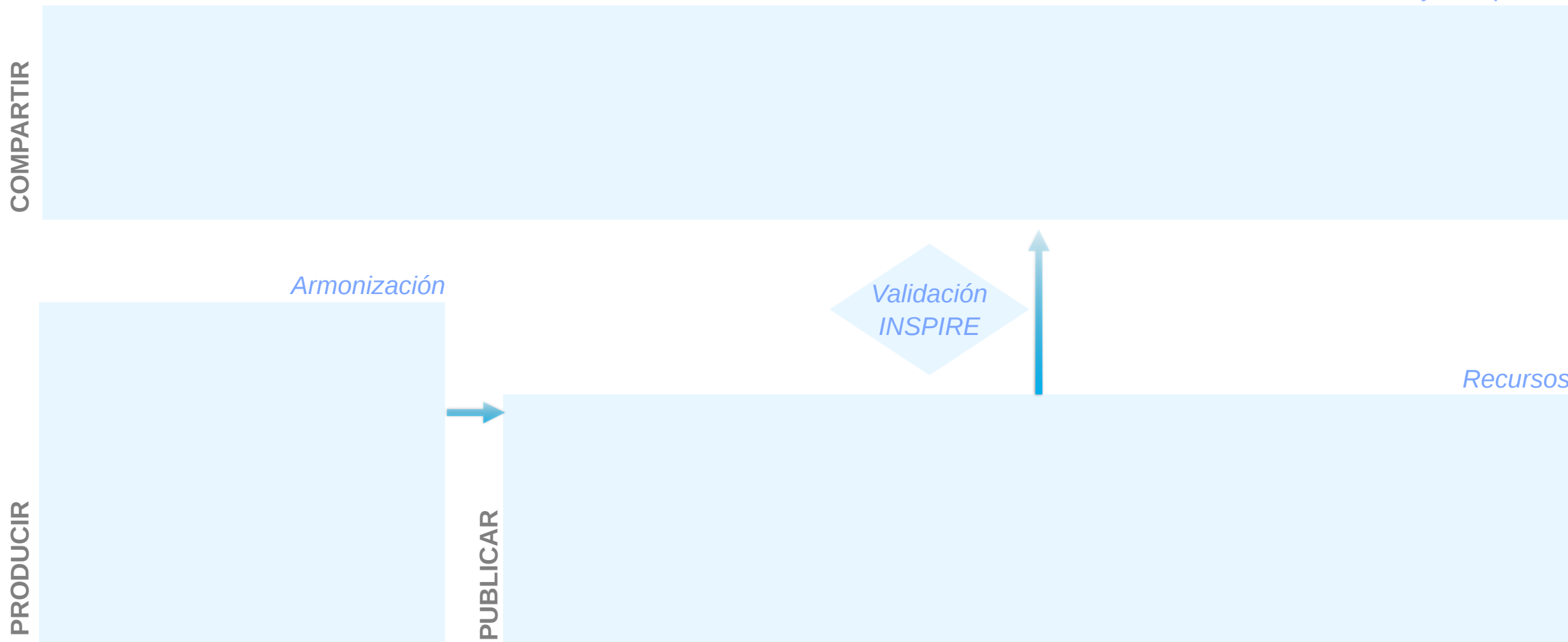
Flujo de trabajo

Nomenclátor Geográfico Básico de España



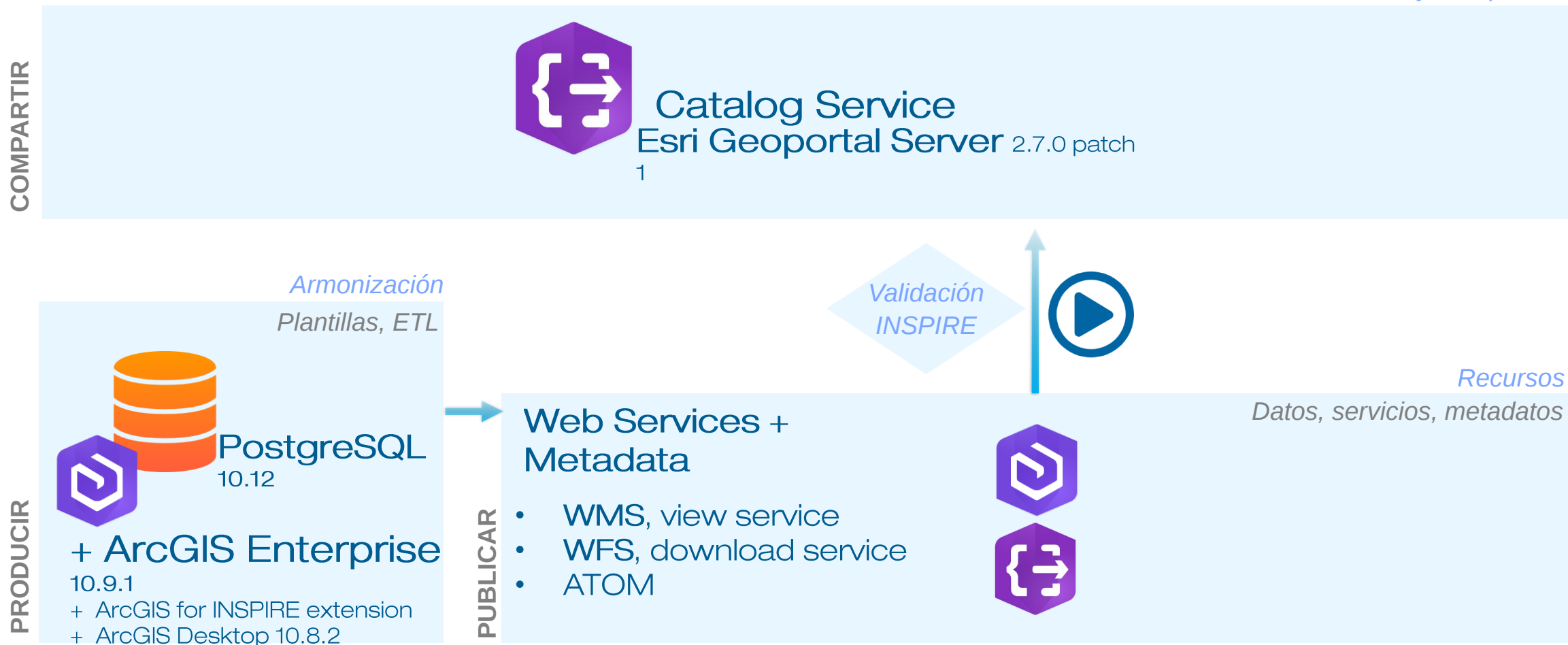
Arquitectura y flujo de trabajo con ArcGIS

Federación y Búsquedas



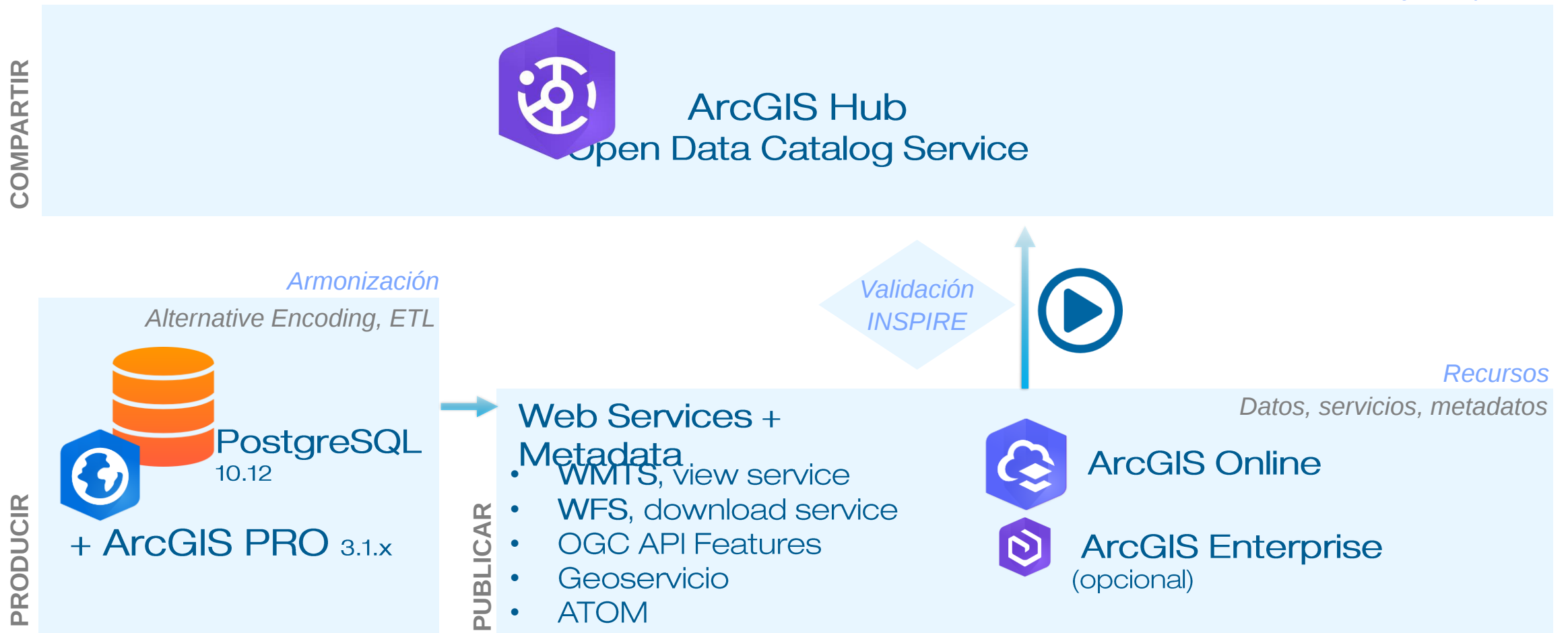
Arquitectura y flujo de trabajo con ArcGIS for INSPIRE Classic

Federación y Búsquedas



Arquitectura y flujo de trabajo con ArcGIS INSPIRE Open Data

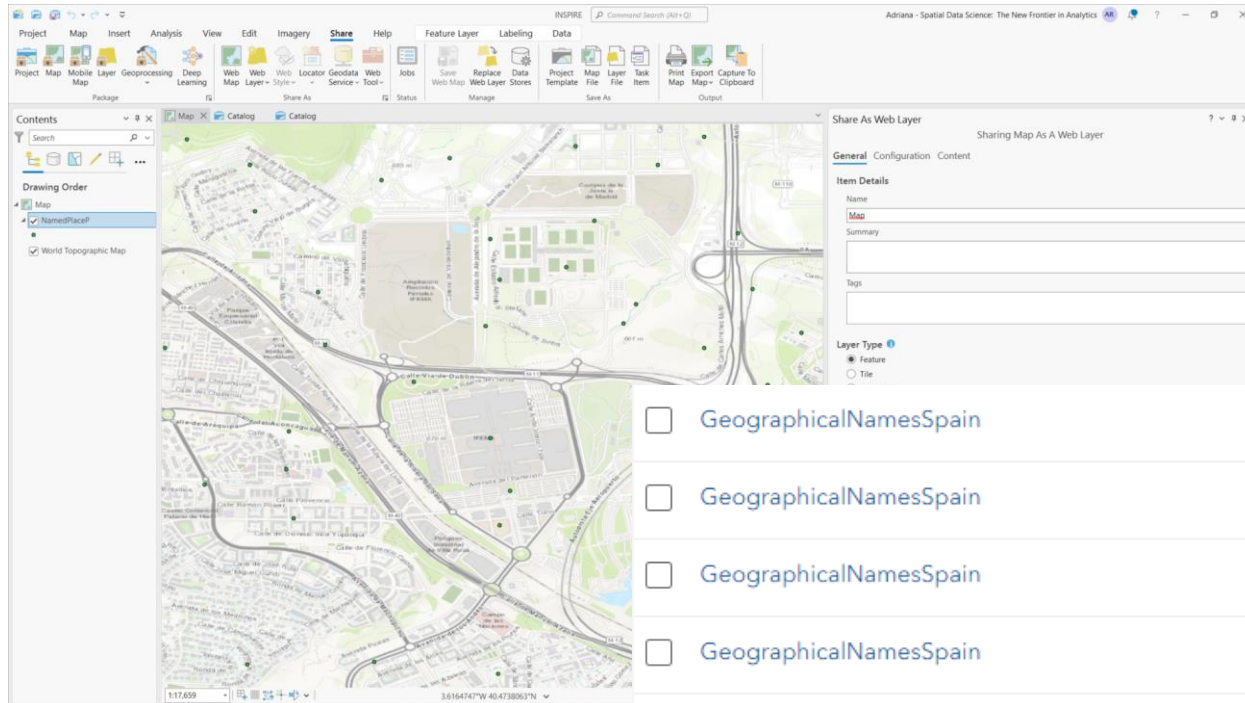
Federación y Búsquedas



Sesión práctica

Nombres Geográficos

Buenas Prácticas para lograr la conformidad con INSPIRE



☐	GeographicalNamesSpain	 Tile layer (hosted)	 + 	☆ ...	27 Sept 2023
☐	GeographicalNamesSpain	 OGC Feature Layer (hosted)	 + 	☆ ...	27 Sept 2023
☐	GeographicalNamesSpain	 WFS (hosted)	 + 	☆ ...	27 Sept 2023
☐	GeographicalNamesSpain	 Feature layer (hosted) ▼	 + 	☆ ...	27 Sept 2023
☐	GeographicalNamesSpain	 Service definition		☆ ...	27 Sept 2023

XIV Jornadas Ibéricas de Infraestructuras de Datos Espaciais

6, 7 e 8 de novembro de 2023

ArcGIS INSPIRE



[ArcGIS INSPIRE Open Data](#)

[ArcGIS for INSPIRE Classic](#)

[Trust Center](#)

[Contact Esri](#)

[Report Abuse](#)

[Contact Us](#)



INSPIRE Layer Wizard



[Help](#)

This wizard allows you to add INSPIRE compliant layers to your map. The layer structure is designed to match the requirements of the ArcGIS for INSPIRE View Service. You have to execute the following steps to add an INSPIRE layer to your map:

1) Select the INSPIRE Geodatabase

Path:

2) Select the INSPIRE Layers to be created

(Geodatabase Template Version: 10.4)

Addresses

☐ Select all layers

Addresses

☐ Addresses

Administrative units

☐ Select all layers

Administrative units

☐ Administrative boundary

☐ Administrative unit

☐ Condominium

Maritime Units

☐ Baseline

☐ Contiguous Zone

☐ Continental Shelf

☐ Exclusive Economic Zone

☐ Internal Waters

Create

Cancel



Location:

- Home - Documents\ArcGIS
- Folder Connections
 - C:\00_WORKSPACE\01_Datos
- Toolboxes
 - My Toolboxes
 - System Toolboxes
- Database Servers
- Database Connections
 - Add Database Connection
 - Inspire.sde
 - INSPIREall.sde
 - PlantillaINSPIREall.sde
- GIS Servers
 - Add ArcGIS Server
 - Add ArcIMS Server
 - Add WCS Server
 - Add WMS Server
 - Add WMTS Server
 - server on standards.esri.com (publisher)
- My Hosted Services
- Ready-To-Use Services



Layers

- ☒ Geographical Names
 - ☒ Geographical Names [Point]
 - ☒ Geographical Names [MultiPoint]
 - ☒ Geographical Names [Line]
 - ☒ Geographical Names [Surface]

Service Editor

Connection: server on standards.esriab.es (publisher) Service Name: GN_2023_FullData_fixextend

Editing the InspireView properties

Select one of the following options for defining INSPIRE View service metadata

- ☐ Enter a url referencing the INSPIRE metadata record describing this INSPIRE View service
- ☒ Enter all INSPIRE metadata element values, these will be exposed directly in the service capabilities document

Properties of the service

Required fields are marked yellow.

Properties

Title

Abstract

Common keywords

Access constraints

Fees

Online resource

External GetFeatureInfo URL

Authority Name

Authority URL

Metadata URL

Metadata published at (YYYY-MM-DD)

Metadata contact organisation

Metadata contact mail

Service created at (YYYY-MM-DD)

Service last revised at (YYYY-MM-DD)

Service published at (YYYY-MM-DD)

Individual temporal extent value covered by the service (YYYY-MM-DD)

Begin of temporal extent covered by the service (YYYY-MM-DD)

End of temporal extent covered by the service (YYYY-MM-DD)

Degree of conformity

GEMET keywords

English

INSPIRE View Service

This service provides INSPIRE Data.

WMS,INSPIRE,ViewService,infoMapAccessService

CC BY 4.0 ign.es

no conditions apply

https://standards.esriab.es/server/rest/services/Inspire/GN_2023_FullData_fixextend/MapServer/exprts/InspireView/service

IGN

http://www.ign.es

<https://www.ign.es/csw-inspire/srv/spa/csw?Service=CSW&Version=2.0.2&Request=GetRecordById&outputSchema=http://www.iso>

2022-10-10

IGN

ign@fomento.es

2023-03-17

Not evaluated

Close

Cancel

ArcGIS INSPIRE



ArcGIS INSPIRE Open Data

ArcGIS for INSPIRE Classic

[Trust Center](#)

[Contact Esri](#)

[Report Abuse](#)

[Contact Us](#)

Project **Map** Insert Analysis View Edit Imagery Share Help

Cut

Copy

Copy Path

Paste

Clipboard

Explore

Bookmarks

Go To XY

Navigate

Basemap

Add Data

Add Graphics Layer

Layer

Select

Select By Attributes

Select By Location

Clear

Zoom To

Selection

Measure

Locate

Infographics

Coordinate Conversion

Inquiry

Pause

Lock

View Unplaced

More

Labeling

Convert

Download Map

Sync

Remove

Offline

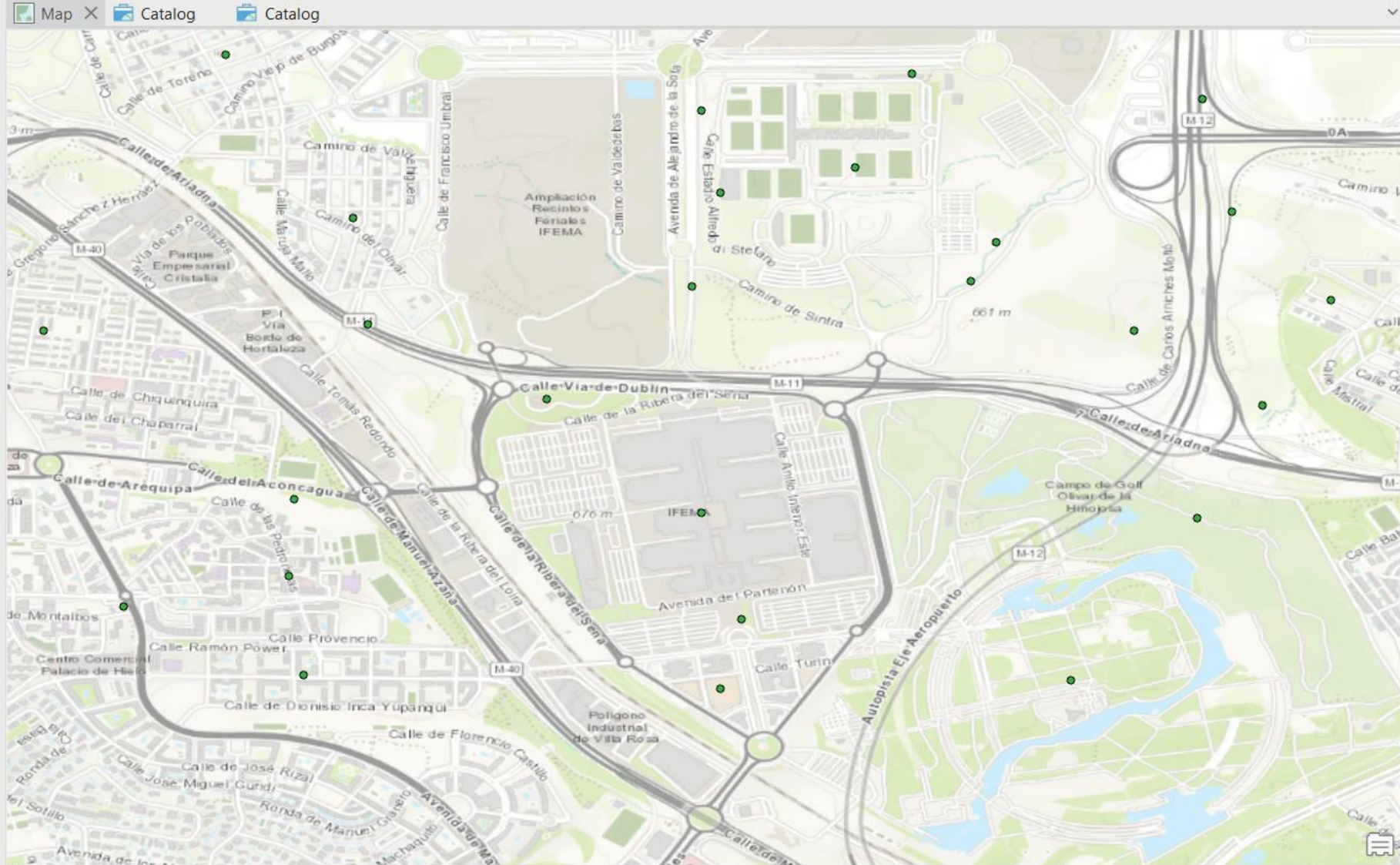
Contents

Search



Drawing Order

- Map
- ☒ NamedPlaceP
- ☒ World Topograp...



1:17,659 3.5972680°W 40.4742764°N Selected Features: 0

Catalog

Project Portal Computer Favorites

Search Project

- Maps
- Toolboxes
- Databases
- Styles
- Folders
 - INSPIRE
 - Data
 - Plantillas
 - AlternativeE...
 - GeographicalNames
 - GeographicalNames.gdb
 - NamedPlaceL
 - NamedPlaceP**
 - NamedPlaceS
- Locators

[Iniciar sesión](#)

ArcGIS INSPIRE Open Data

Open Data

Resources

ArcGIS INSPIRE Open Data



 Search for data

This is a **Demonstration Hub** for ArcGIS INSPIRE Open Data, a modern solution for the European INSPIRE Directive and PSI-2/Open Data Directive.

Colecciones

☐

Todo

Aplicaciones y mapas

🔍 Buscar elementos

Restablecer

Ordenar: Fecha de actualización ▾ ⌵⋮

Más ▾

1

5

Geographical Names Spain - INSPIRE Directive

Resumen Arquitectura

COMPARTIR



ArcGIS Hub: Open Data Catalog Service

Share



Hub Content Group

Source Data
& Metadata

Publish

Feature Layer
& Metadata

Parent Service

Child Service

Tile Layer

OGC WMTS / Metadata

Child Service

OGC WFS

OGC WFS / Metadata

Child Service

OGC Feature Layer

OGC API Features / Metadata

PRODUCIR



ArcGIS Pro

PUBLICAR



ArcGIS Online: Web Services



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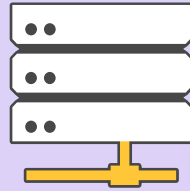
Resumen Buenas Prácticas

- Buenas Prácticas
- Arquitectura moderna y más simplificada
- Resultados de la POC



Resultados

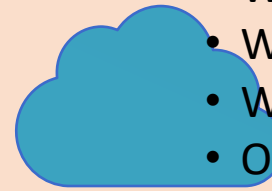
1. An environment where Esri technology is configured to produce and publish INSPIRE-compliant services



Infraestructura y Software

2. Data and Services

- Sample data (just over 100 records)
- Full data (just over one million records)
 - WMS
 - WFS
 - WMTS
 - OGC API Features



Servicios y Datos

3. Serve metadata using Esri software and validate them



Metadatos

Workshop



4. A workshop at the IDE conference to showcase the results of the POC



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