

Gestión, uso y publicación de datos de biodiversidad y patrimonio natural para gestores

Armonización y publicación de datos y metadatos conforme la Directiva INSPIRE

Especificación de datos de Lugares Protegidos Ejercicio práctico

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CNIG (IGN)

Especificación y esquemas XML

- Portal Inspire

<http://inspire.ec.europa.eu/index.cfm>

- Adoption
- Roadmap
- Implementing Rules
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- Metadata
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- Data and Service Sharing



INSPIRE
Infrastructure for Spatial Information in the European Community

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INSPIRE DIRECTIVE

In Europe a major recent development has been the entering into force of the INSPIRE Directive in May 2007, establishing an infrastructure for spatial information in Europe to support Community environmental policies, and policies or activities which may have an impact on the environment. INSPIRE is based on the infrastructures for spatial information established and operated by the 28 Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications, with key components specified through technical implementing rules. This makes INSPIRE a unique example of a legislative "regional" approach.

Legislation

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) was published in the official Journal on the 25th April 2007. The INSPIRE Directive entered into force on the 15th May 2007

To ensure that the spatial data infrastructures of the Member States are compatible and usable in a Community and transboundary context, the Directive requires that common Implementing Rules (IR) are adopted in a number of specific areas (Metadata, Data Specifications, Network Services, Data and Service Sharing and Monitoring and Reporting). These IRs are adopted as Commission Decisions or Regulations, and are binding in their entirety. The Commission is assisted in the process of adopting such rules by a regulatory committee composed of representatives of the Member States and chaired by a representative of the Commission (this is known as the Comitology procedure).

- Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) 14.03.2007
- INSPIRE Metadata Regulation 03.12.2008
- Commission Decision regarding INSPIRE monitoring and reporting 05.06.2009
- Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services 19.10.2009
- Corrigendum to INSPIRE Metadata Regulation 15.12.2009
- Regulation on INSPIRE Data and Service Sharing 29.03.2010
- COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services 08.12.2010
- Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets and services 08.12.2010
- Commission Regulation (EC) No 976/2009 as regards download services and transformation service 08.12.2010
- COMMISSION REGULATION (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services 05.02.2011
- COMMISSION REGULATION (EU) No 1253/2013 of 21 October 2013 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC as regards interoperability of spatial data sets and services 10.12.2013
- Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element 11.12.2014
- Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element 11.12.2014
- Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services 11.12.2014
- Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services 11.12.2014

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- 08-Jun-15 Short video on INSPIRE
- 20-May-15 Call for experts on Extension of Download Service Technical Guidelines for Web Coverage Services (WCS)
- 05-May-15 INSPIRE Interactive Data specification Toolkit V1.0
- 04-May-15 Updated xml



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- INSPIRE Website

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25 - 29 MAY 2015, LISBON, PORTUGAL

Years: 2011-2014

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INSPIRE data models

The INSPIRE Implementing Rules on interoperability of spatial data sets and services and the data specification guidance documents are based on the UML data models developed by the INSPIRE Thematic Working Groups. These data models are managed in a common UML repository, which also stores older revisions of the models.

This page makes different revisions of the INSPIRE UML models available in different formats and views (see below). Each of these revisions corresponds to a specific set of (draft or approved) Data Specification Technical Guidance (TG) documents and/or Implementing Rules.

Revision	Corresponding TG and IRs	Status	Feature catalogue	HTML view	Mapping Tables	EA project / XMI	SVN	GML & code lists
4618	This version corresponds to the content of the Implementing Rules (EU) No 1089/2010, No 102/2011, No 1253/2013 and the latest publicly available version of the data specifications of Annex I, II+III.							
	This distribution contains only those data models that are contained in the amendment to the Implementing Rules for Annex II+III themes, including the updates of the Annex I data themes.	APPROVED	FC	HTML	Mapping Tables	EA / XMI	SVN	Schema repository
	This distribution combines the data models contained in the amendment to the Implementing Rules (see above) and the extended data models contained in the data specification Technical Guidelines (but not in the IRs). Please note that the extended data models not included in the IRs should be considered as draft and therefore be used with caution.	APPROVED (IR models) DRAFT (extended models)	FC	HTML	Mapping Tables	EA / XMI	SVN	Schema repository (IR models) Schema repository (extended models)

Show older versions

Feature catalogue

Informative overview of the spatial object types and data types defined in the INSPIRE data specifications, which provides an easy entry point to the INSPIRE data models and data specifications for implementers and decision makers.





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		DRAFT (extended models)	FC	HTML	Mapping Tables	EA / XMI	SVN	Schema repository (extended models)

Versión 3.0 simple

Versión 3.1 completo

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Feature Catalogue

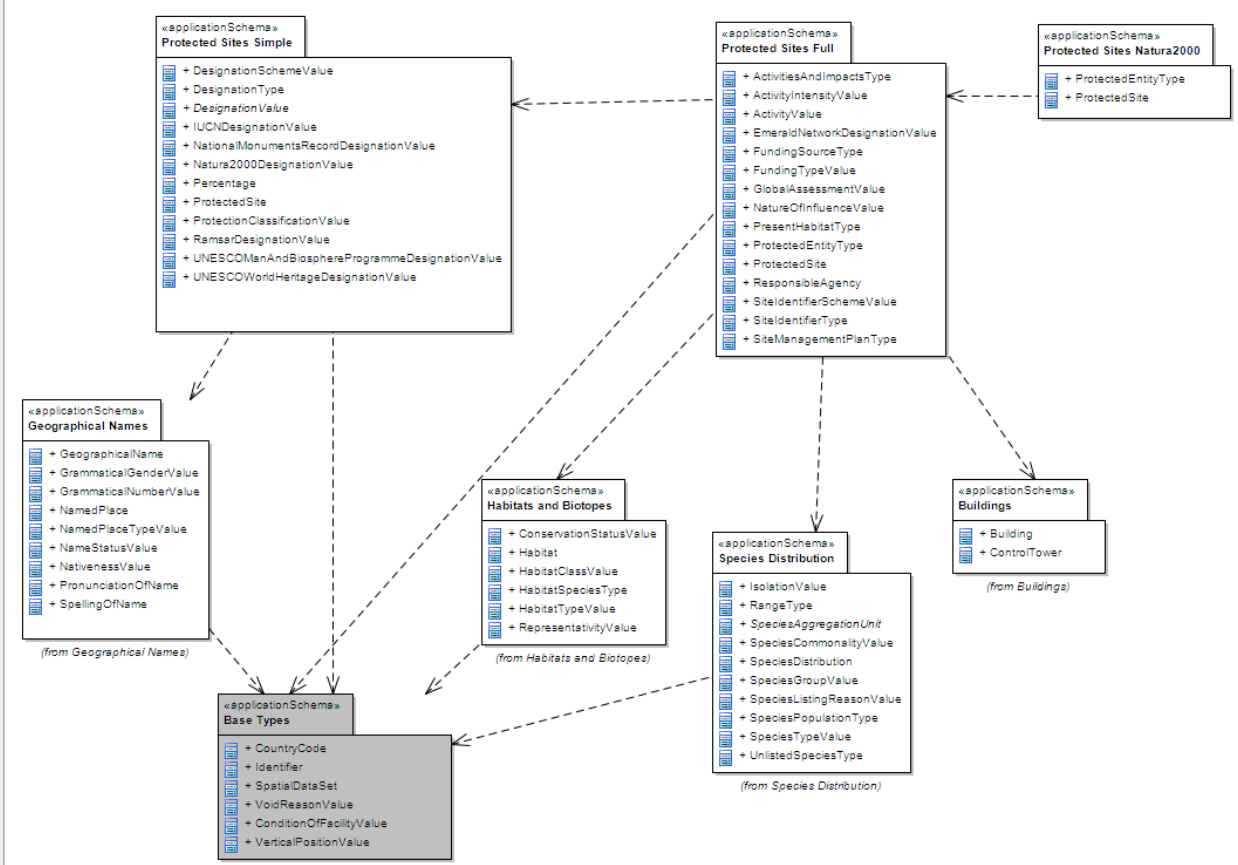
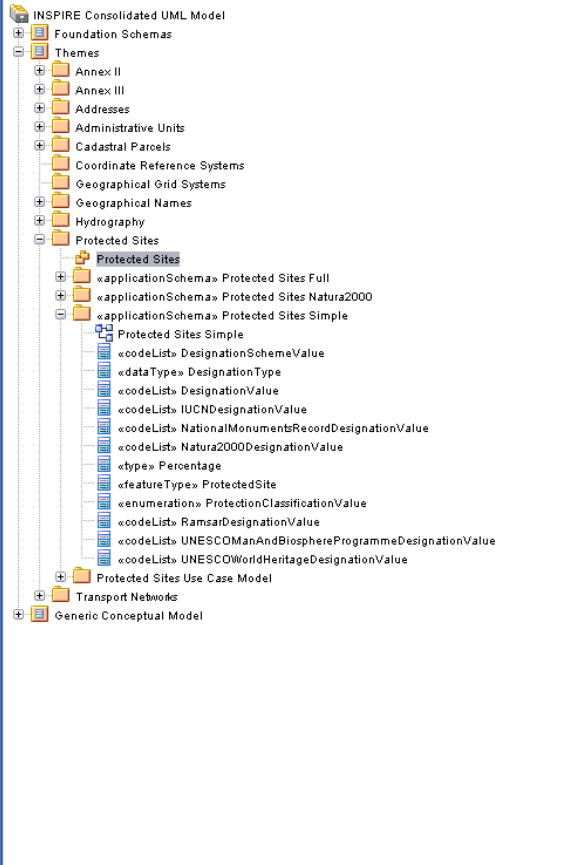
Feature catalogue
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INSPIRE Consolidated UML Model - Generated 26 April 2010 (Revision 937)



- Protected Sites
- Protected Sites Simple
- «codeList» IUCNDesignationValue

relación entre modelos
 diagrama del esquema de aplicación
 atributos, etc. de clases, listas de enumeración, ...

<http://inspire.ec.europa.eu/schemas>

Repositorio de esquemas:

Index of /schemas

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
Parent Directory		-	
ac-mf/	2015-04-29 10:03	-	
act-core/	2015-04-29 10:03	-	
ad/	2015-04-29 10:03	-	
af/	2015-04-29 10:03	-	
am/	2015-04-29 10:03	-	
au/	2015-04-29 10:03	-	
base/	2015-04-29 10:03	-	
base2/	2015-04-29 10:03	-	
br/	2015-04-29 10:03	-	
bu-base/	2015-04-29 10:03	-	
bu-core2d/	2015-04-29 10:03	-	
bu-core3d/	2015-04-29 10:03	-	
bu/	2015-04-29 10:03	-	
omop/	2015-04-29 10:03	-	
omor/	2015-04-29 10:03	-	
ompr/	2015-04-29 10:03	-	
omso/	2015-04-29 10:03	-	
pd/	2015-04-29 10:03	-	
pf/	2015-04-29 10:03	-	
plu/	2015-04-29 10:03	-	
ps/	2015-04-29 10:03	-	
readme.txt	2012-07-05 15:41	8.0K	
sd/	2015-04-29 10:03	-	
selu/	2015-04-29 10:03	-	
so/	2015-04-29 10:03	-	
sr/	2015-04-29 10:03	-	
su-core/	2015-04-29 10:03	-	
su-grid/	2015-04-29 10:03	-	
su-vector/	2015-04-29 10:03	-	
su/	2015-04-29 10:03	-	

PS (Protected Sites)



- v4.0 of the ProtectedSites.xsd schema is still under discussion in the INSPIRE thematic clusters (see <https://themes.jrc.ec.europa.eu/discussion/view/26866/correcting-percentageunderdesignation-bug-in-ps-simple-xml-schema>). Once the open issues are resolved, it will be published in this folder.

Nuestros datos

- Conjuntos de datos espaciales (CDE) a transformar
- Estudiar mi Modelo de datos (matching table):
 - **Atributos Inspire vs. Atributos mi Modelo de Datos**
 - Atributos que puedo completar
 - Atributos que no puedo completar
 - **Transformar el CRS a ETRS89**
- Publicar mis datos transformados a través de los servicios de catálogo (metadatos) y visualización o descarga



Matching table

Application Schema 'Protected Sites Simple' (version 3.0)								
Type	Documentation	Attribute / Association role	Association Constraint	Attribute / Association role / Constraint	Values / Enumerations	Multiplicity	Voidable / Non-Voidable	Type
ProtectedSite	An area designated or managed within a framework of international, Community and Member States' legislation to achieve specific conservation objectives. Each protected site has a boundary defined through formal, legal or administrative agreements or decisions. The establishment of a protected site is normally underpinned by legislation and thus given weight in decisions about land use change and spatial planning. Each Site is normally selected as a representative example of a wider resource and selected through a formal criterion based approach. A protected site can be a contiguous extent of land/sea or a collection of discrete areas that together represent a single formal Protected Site. This class has the attributes, constraints and associations that are part of the Simple application schema.	geometry		The geometry defining the boundary of the Protected Site. The geometry may be determined by a wide	GM_Object	1		
		inspireID		External object identifier of the protected site. NOTE	Identifier	1		
		legalFoundationDate		The date that the protected site was legally created.	DateTime	1	voidable	
		legalFoundationDocument		A URL or text citation referencing the legal act	CI_Citation	1	voidable	
		siteDesignation		The designation (type) of Protected Site. At least	DesignationType	1..*	voidable	
		siteName		The name of the Protected Site. NOTE 1 Several names in different languages may be expressed. NOTE 2 It is recommended that the language of the name (part of the GeographicalName data type) be filled where ever possible. This is an important identifying attribute of a Protected Site.	GeographicalName	0..*	voidable	
		siteProtectionClassification		The classification of the protected site based on the	ProtectionClassificationValue*	1..*	voidable	
Percentage	A percentage value, being an integer between 0 and 100 inclusive.							
DesignationType	A data type designed to contain a designation for the Protected Site, including the designation scheme used							

Programa para transformar

Tracasa



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Productos

Cuatro herramientas en una

<http://www.geobide.es>

Geobide / Productos



Geobide Converter

Convertor universal entre formatos geográficos y sistemas de referencia geodésicos. Transforma tus datos a un nuevo modelo y automatiza el proceso. Imprescindible. [Leer más...](#)



Geobide Builder

Crea tus propios diagramas de geoprocamiento. Tan complejos como tú quieras. Más de 30 herramientas disponibles. [Leer más...](#)



Geobide RasterConverter

Convertor universal entre formatos geográficos ráster y sistemas de referencia geodésicos. [Leer más...](#)



Geobide Map

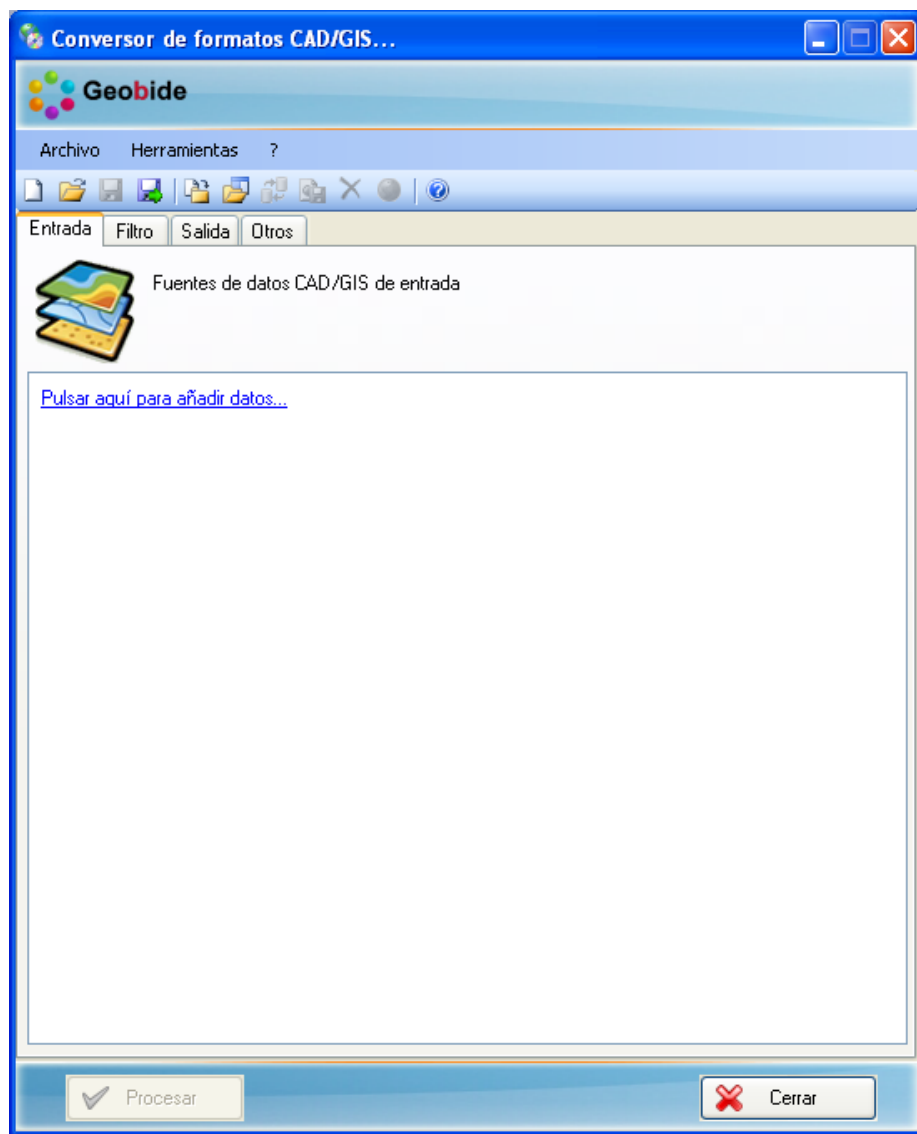
Cliente para acceder a fuentes de datos GIS y CAD. Muy fácil y muy rápido. Edita tus propios datos y crea mapas de calidad. [Leer más...](#)



Instalación

- Geobide (<http://www.geobide.es>)
 - Geomap: es el visualizador
 - Geoconverter: herramienta que permite trabajar con la información geográfica cambiando formatos, transformando modelos de datos y cambiando sistemas de referencia. Más información.
 - Correo con enlace de descarga y licencia
 - Ejecutar
 - Geobide Desktop for Windows.msi





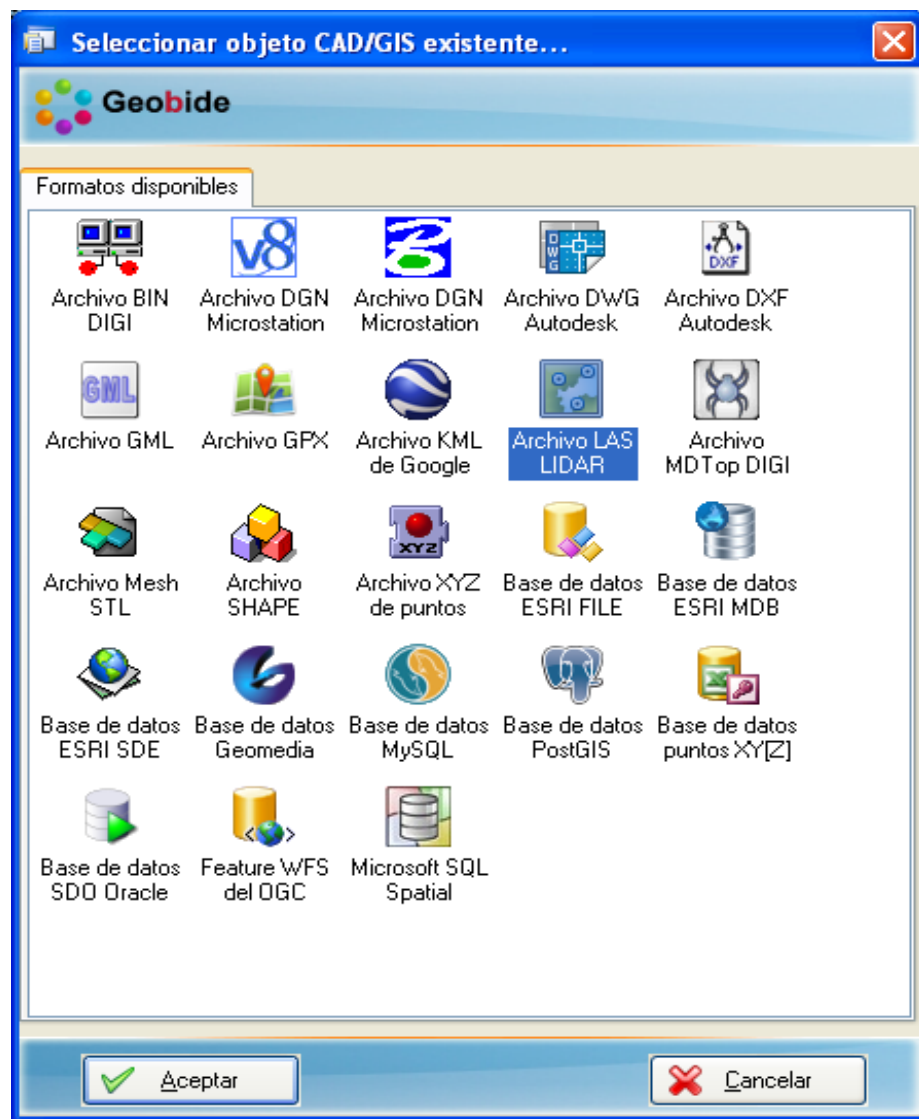
GeoConverter:

Facilita la transformación de los conjuntos de datos (CD) en 4 pasos:

- CD(s) de entrada (opción filtrado por atributos)
- CD(s) de salida
- CRS de los CD de entrada
- CRS de los CD de salida

Realiza:

- Transformación de formatos de archivo
- Es posible la unión de varios archivos de entrada en uno de salida
- Transformación de modelos de datos
- Transformación del Sistema de Referencia (CRS)
- Utiliza las rejillas oficiales NTV2 para garantizar la exactitud de la transformación

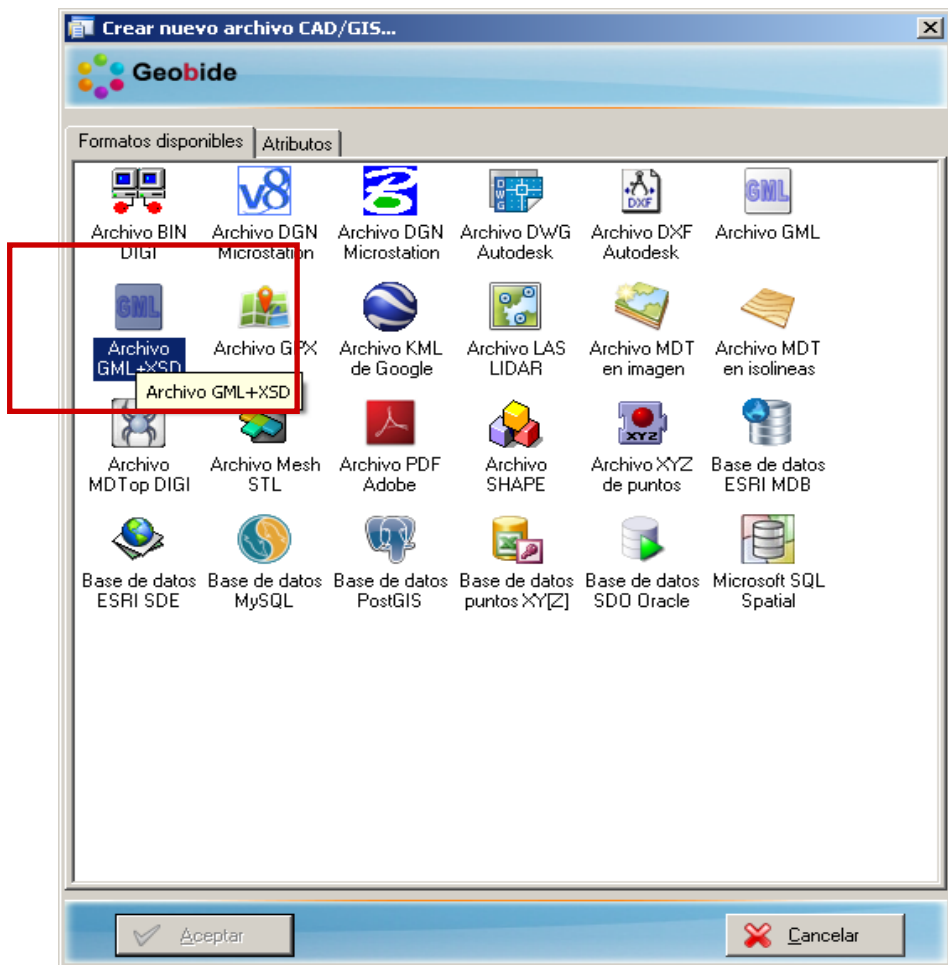


GeoConverter:

Paso 1

Selección del formato de cada CD de entrada

Shape, Geodatabase, BD-Oracle...

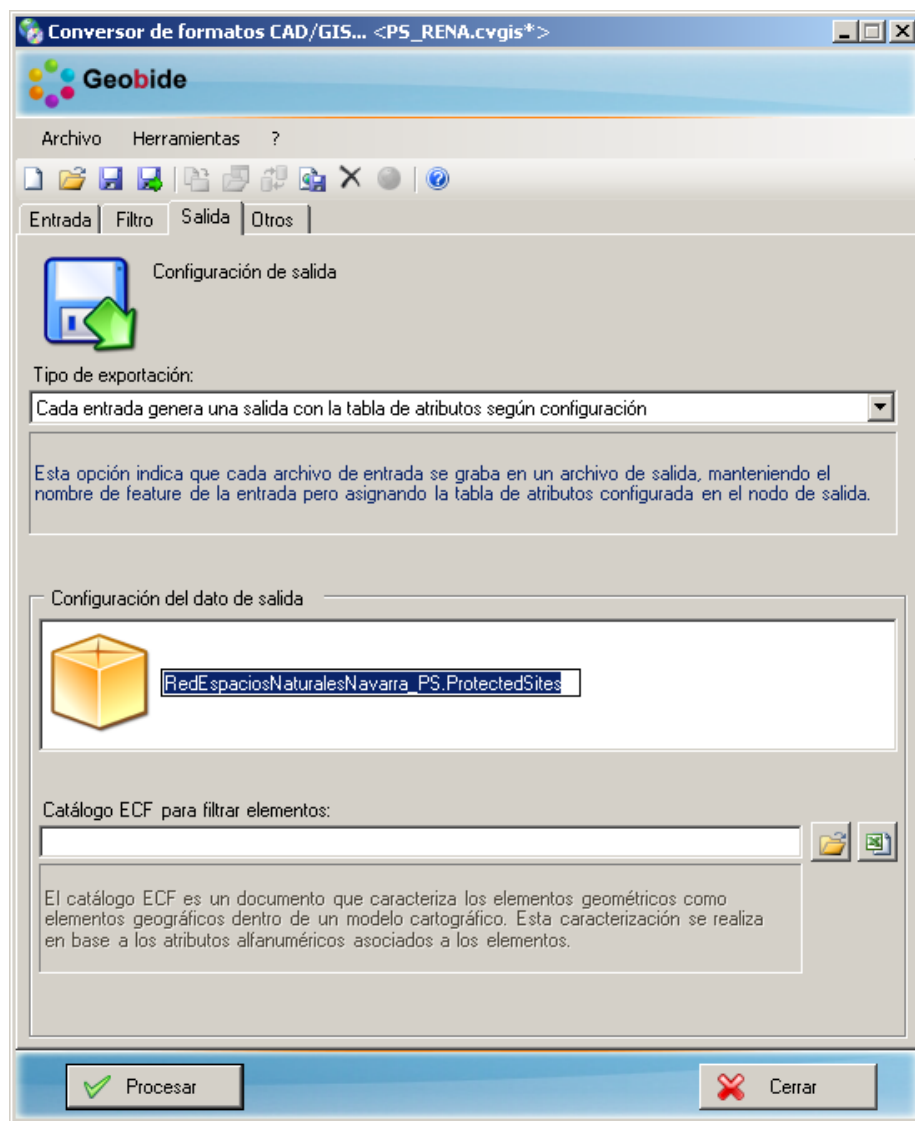


GeoConverter:

Paso 2

Formato del/los CD de salida:

Para INSPIRE: GML+XSD (esquema XML que marca el modelo de datos del GML)



GeoConverter:

Paso 2

Nombre del CD de salida:

Para INSPIRE:

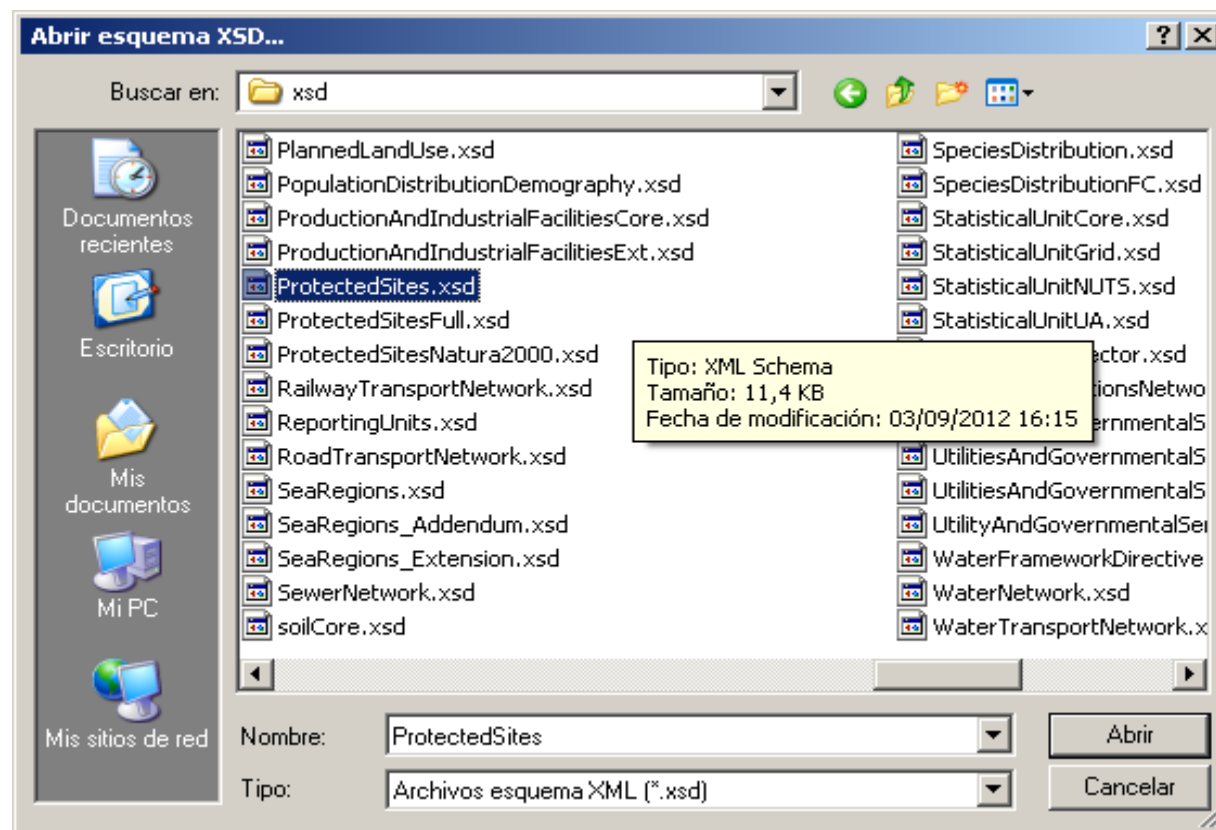
Nombre del CD, ':PS.ProtectedSites'
(Guidelines - 11.1 Layer Types)

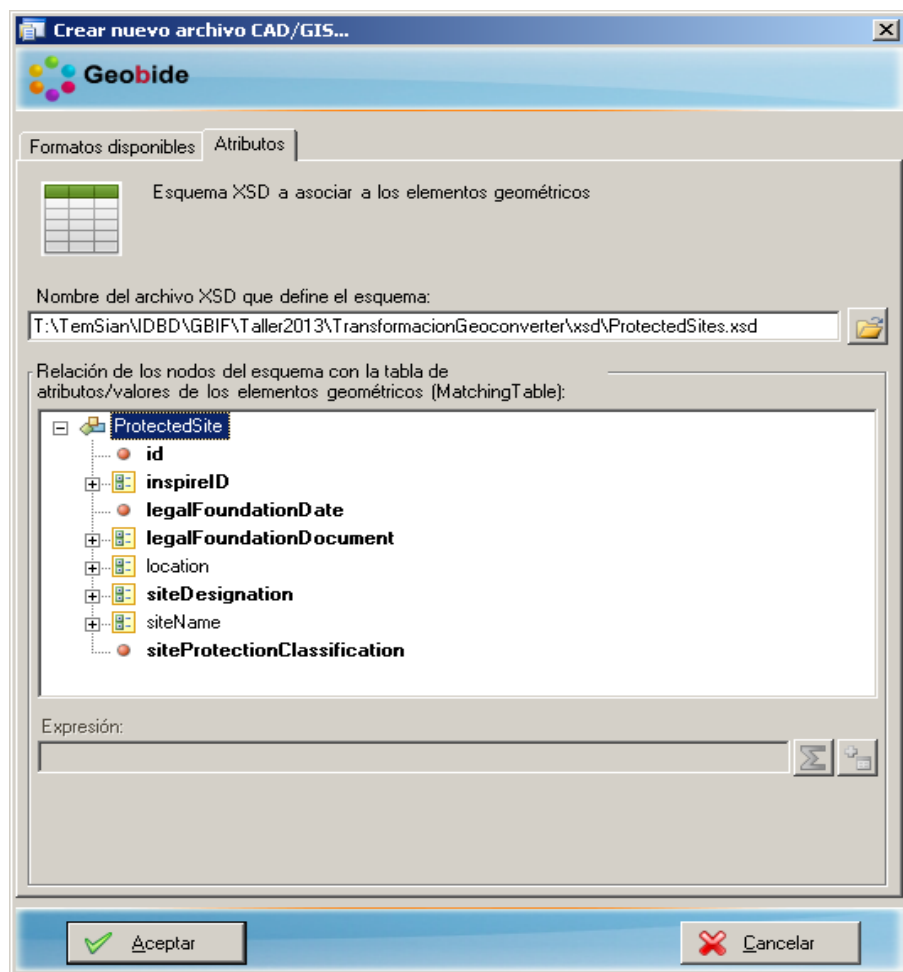
GeoConverter:

Paso 2

Selección del esquema:

► ProtectedSites





GeoConverter:

Paso 2

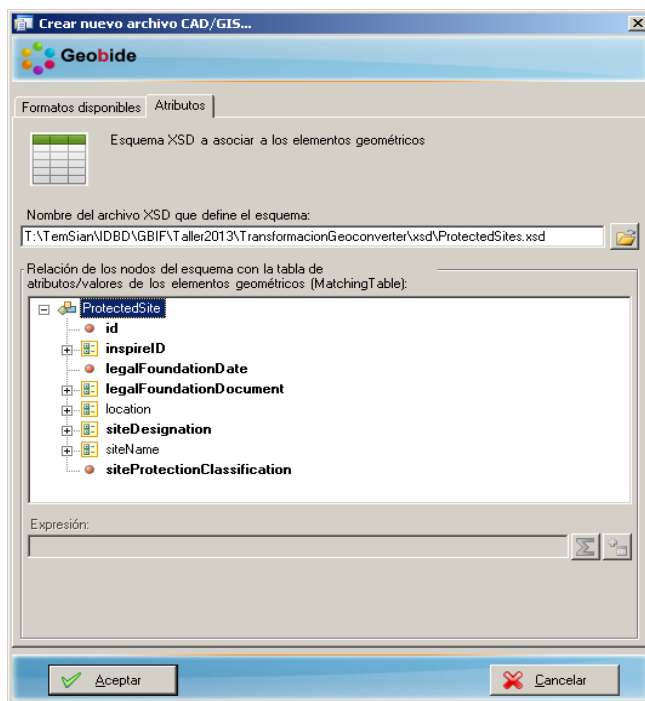
Ajustamos el modelo de datos de nuestro CD al modelo INSPIRE

Aquí es básico:

- Haber preparado una *matching table*
- Conocer qué datos nos faltan

GeoConverter:

Paso 2



Id_localid = [SITE_CODE]

Id_namespace =

'EU.EUROPA.ENVIRONMENT.PS.CDDA.IEPNB.ESP.'

legalFoundationDate = [YEAR] && 'T00:00:00' (formato date/Time)

legalFoundationDocument

CI_Citation

Title = [NORMA]

Date

CI_Date

legalfundationdate=[DATE]

CI_dateTypeCode

CodeList =

http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/ML_gmx/Codelists.xml#CI_DateTypeCode

CodeListValue = 'publication' (publicación, creación o revisión)

GeoConverter:

Paso 2

SiteDesignation

DesignationType

designationSchema = 'IUCN'

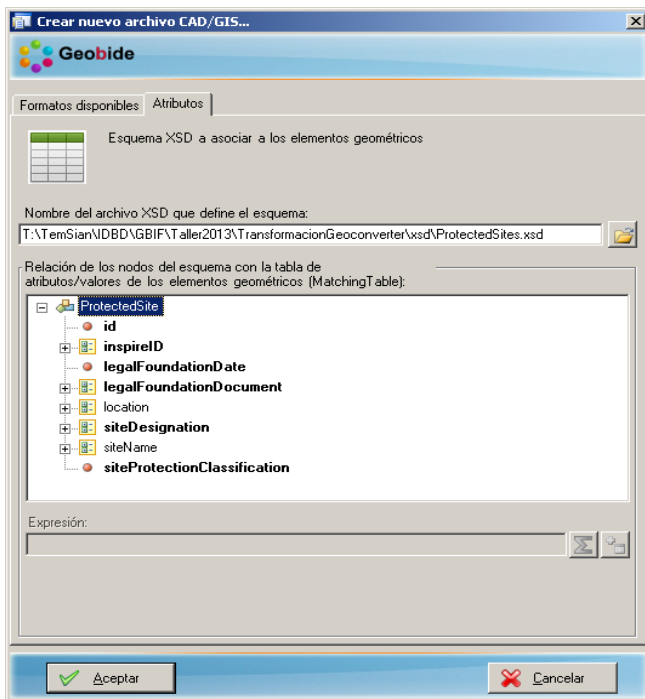
CodeSpace =
'http://inspire.ec.europa.eu/codelist/DesignationSchemeValue/'

designation=[SITE_DESII]

Codespace =
'http://inspire.ec.europa.eu/codelist/IUCNDesignationValue/'

percentageUnderDesignation = [PERCENTAGE]

SiteProtectionClasificacion = 'natureConservation'

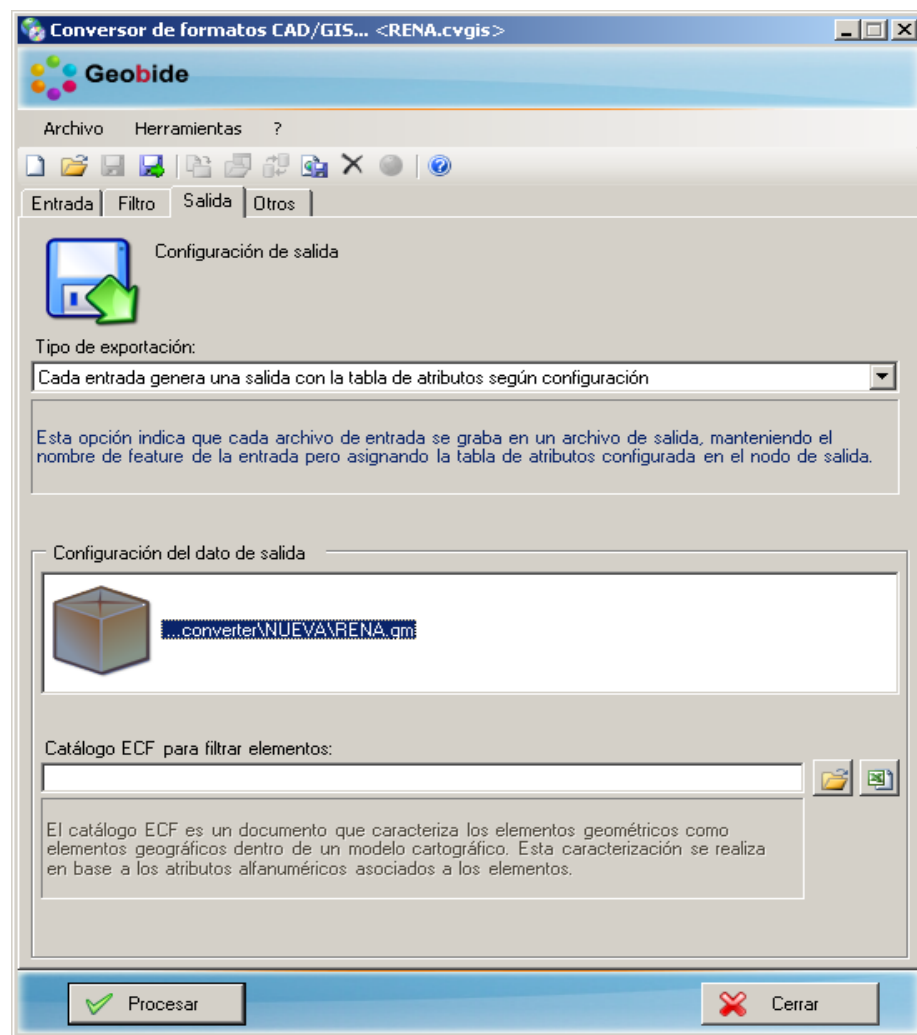


GeoConverter:

Paso 2

Al final de este proceso tenemos definido cómo será nuestro CD de salida:

GML 3.2.1 conforme al MD-INSPIRE



Gracias por vuestra atención

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