

SDI OTALEX C. 18 YEARS OF COMMUN WORK; 9 YEARS IN THE WEB

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Lisbon, 26th May 2015

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- SDI-OTALEX (www.ideotalex.eu)
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- REMARKS AND OUTCOMES

INTRODUCTION

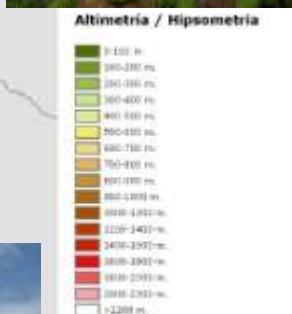


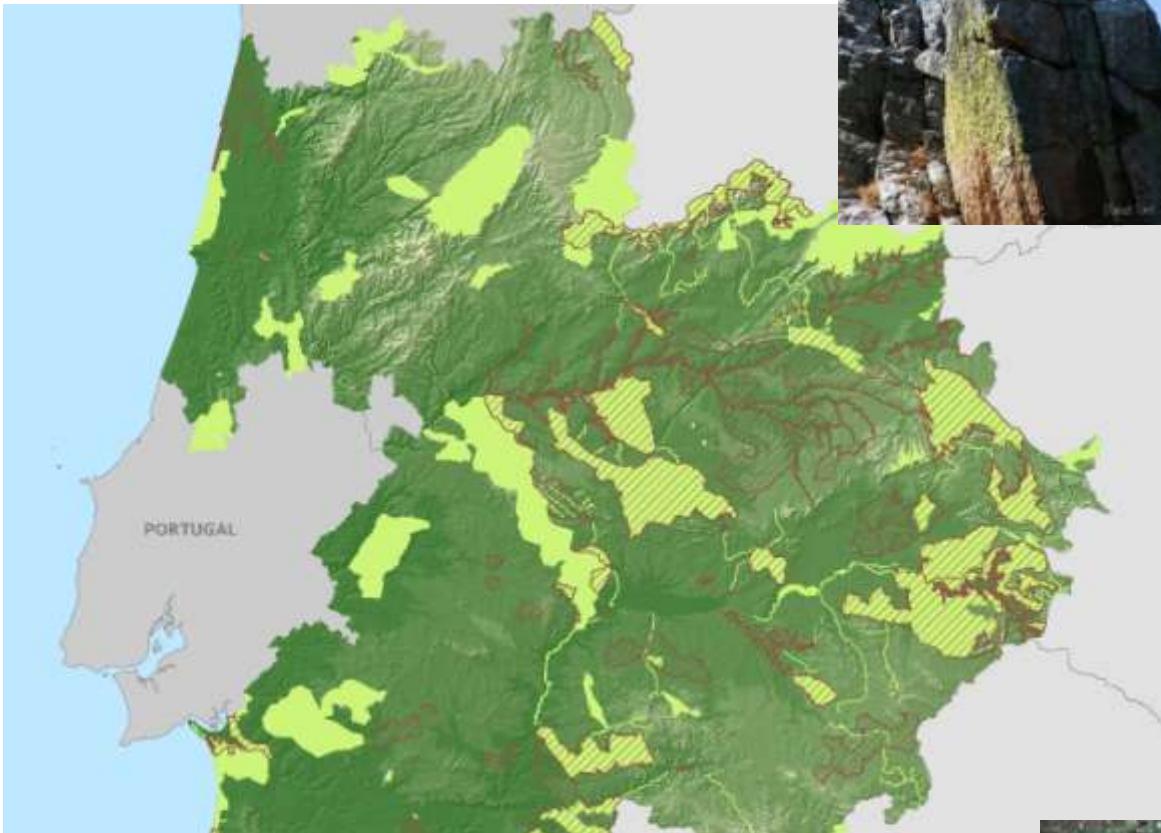
Population (inhabit./km²)

- **very low populated regions**
- **Alentejo - 18,5**
- **Extremadura - 26,5**
- **Centro - 75,3**
- **UE27 - 115,9**
- **6% of Iberia Peninsula Population**
- **Area**
- **92.532 km²**
- **16% of Iberia**

Unique territory – UNESCO world heritage – Évora and Mérida

OTULExpo





Nature Conservation

Protected areas

- 16% of the territory
- 32% of forest area





Superficial Water

Alqueva Dam/lake – crossborder Spain and Portugal
BIGGEST ARTIFICIAL LAKE IN EUROPE – 250 km²; 120.000 ha of irrigation



Background Projects and Partners

COORDSIG

PLANEXAL

GEOALEX

OTALEX

OTALEX II

OTALEX

1997-2000

2002-04

2004-06

2006-08

2009-11

2011-15

IPCC

AMDE

JE

MMA

GA

AMDE

JE

IGP

AMDE

JE

IGN

CCDRA

AMNA

DB

GRCE

IGP

AMDE

JE

IGN

CCDRA

AMNA

DB

GRCE

UEX

UÉvora

EDIA

IGP

CIMAC

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IGN

CCDRA

CIMAA

DB

GRCE

UEX

UÉvora

EDIA

DGT

CIMAC

JE

IGN

CCDRA

CIMAA

DB

UEX

UÉvora

EDIA

Dip Cáceres

IPCB

CIMAC=AMDE

CIMAA=AMNA

DGT=IGP=IPCC

Objectives

- To **study and show** the reality of the cross border regions of Alentejo and Centro in Portugal and Extremadura in Spain: Landscape, environment, resources, people, economy, culture, heritage.
- To **share geographic information** between the Spanish-Portuguese border through SDI OTALEX
- To promote the **sustainable development** of the territory and the **quality of life** of the population
- To **articulate cross border politics** and development strategies
- To promote the **continuity of the partnership**



OTALEX C Project Partners - 11

- Partnership

Regional authorities

JUNTA DE EXTREMADURA

Consejería de Fomento, Vivienda,
Ordenación del Territorio y Turismo



DIPUTACIÓN
DE BADAJOZ

ÁREA DE IGUALDAD Y
DESARROLLO LOCAL

DIPUTACIÓN DE CÁCERES

ORGANISMO AUTÓNOMO PARA EL DESARROLLO LOCAL



enterprise



comunidad intermunicipal
da Alto Alentejo

- Cofinanced by:



União Europeia
FEDER

Investimos no seu futuro

Local
government

Hight
education

9

The SDI-OTALEX

SDI's are distributed systems, open and collaborative, composed by services directed to the community.

The screenshot shows the OTALEX website (www.ideotalex.eu/OtalexC/indexGeoportal.du) with the following details:

- Header:** OTALEX C (Observatorio Territorial e Ambiental Alentejo Extremadura Centro), Observatorio Territorial y Ambiental Alentejo Extremadura Centro, EU FEDER, FEDER funds used for this project, TERRITORIAL OBSERVATORY.
- Bienvenido/a:** a la Infraestructura de Datos Espaciales del Observatorio Territorial para el Alentejo y Extremadura.
- Final Project Seminar OTALEX C:** Presentation, Publications, Partners, Disclaimer, Contact, Map, Help.
- GEOPORTAL:** A map with two pushpins, one green and one yellow, indicating locations.
- Services:** Metadata Catalogue, Map viewer, Nomenclator (Gazetteer), Publications, Indicator System, Semantic Search, Semantic Viewer.
- Logos:** OTALEX, OTALEX II, OTALEX C.

SDI's permits that anyone with Internet and with a simple navigator can access and analyze spatial information from remote sources

www.ideotalex.eu

SDI-OTALEX conceptual model

- system interoperability,
- *opensource tecnologies*,
- modular architecture,
- standards based,
- multilingual
- According to Inspire Directive (March 2007)

deegree



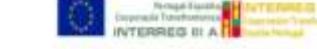
Español Português | English



Presentación | Documentación | Socios | Legislación | Contacto | Mapa | Ayuda



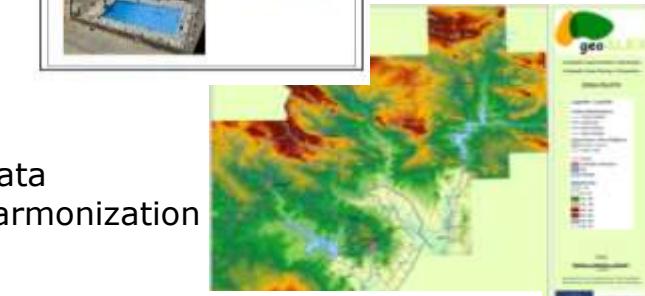
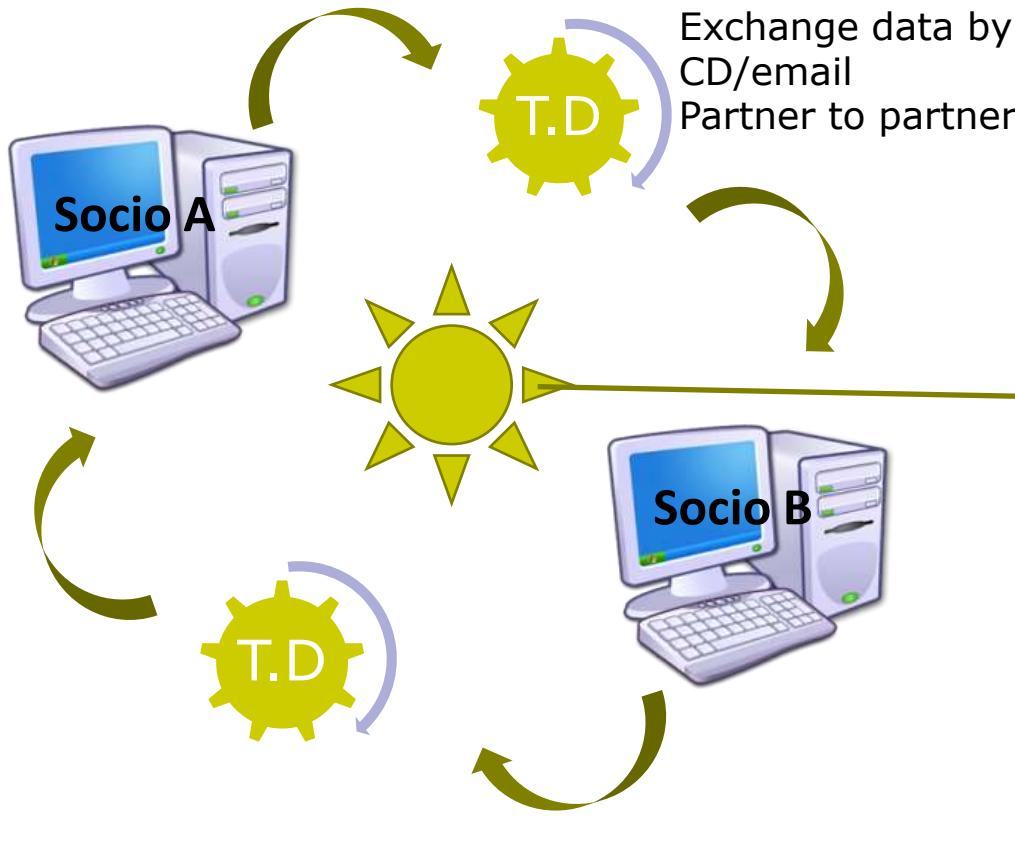
Apresentação | Documentação | Sócios | Legislação | Contacto | Mapa | Ajuda



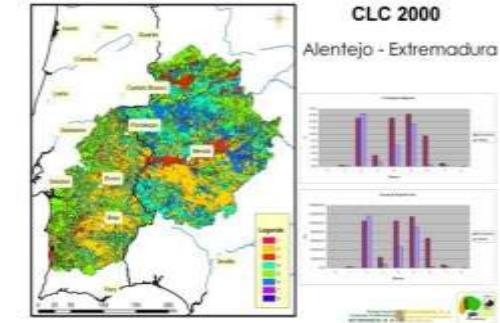
Presentation | Documentation | Partners | Legislation | Contact | Map | Help



Historic overview: COORDSIG-GEOALEX (1997-2006)

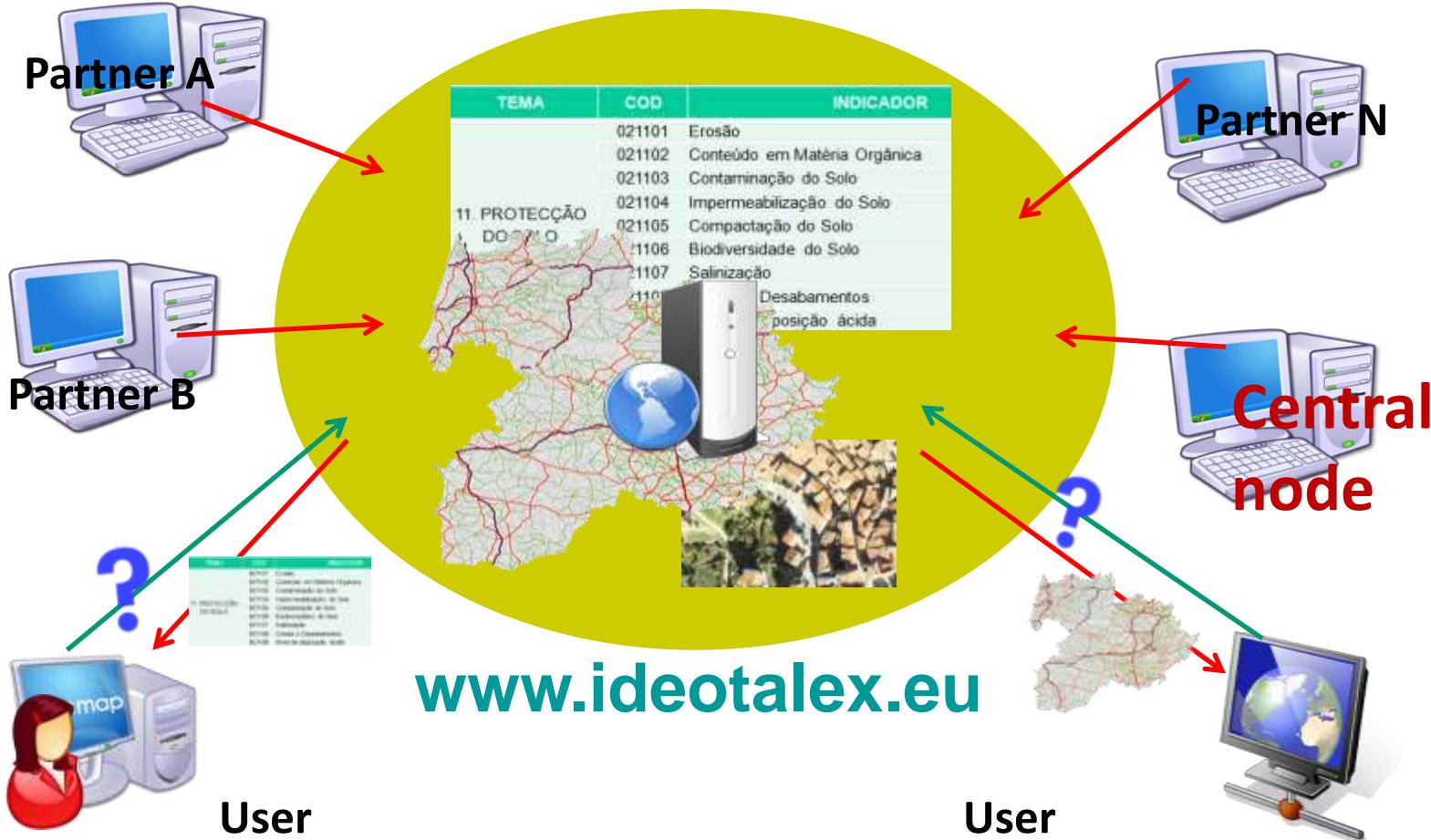


Data
harmonization



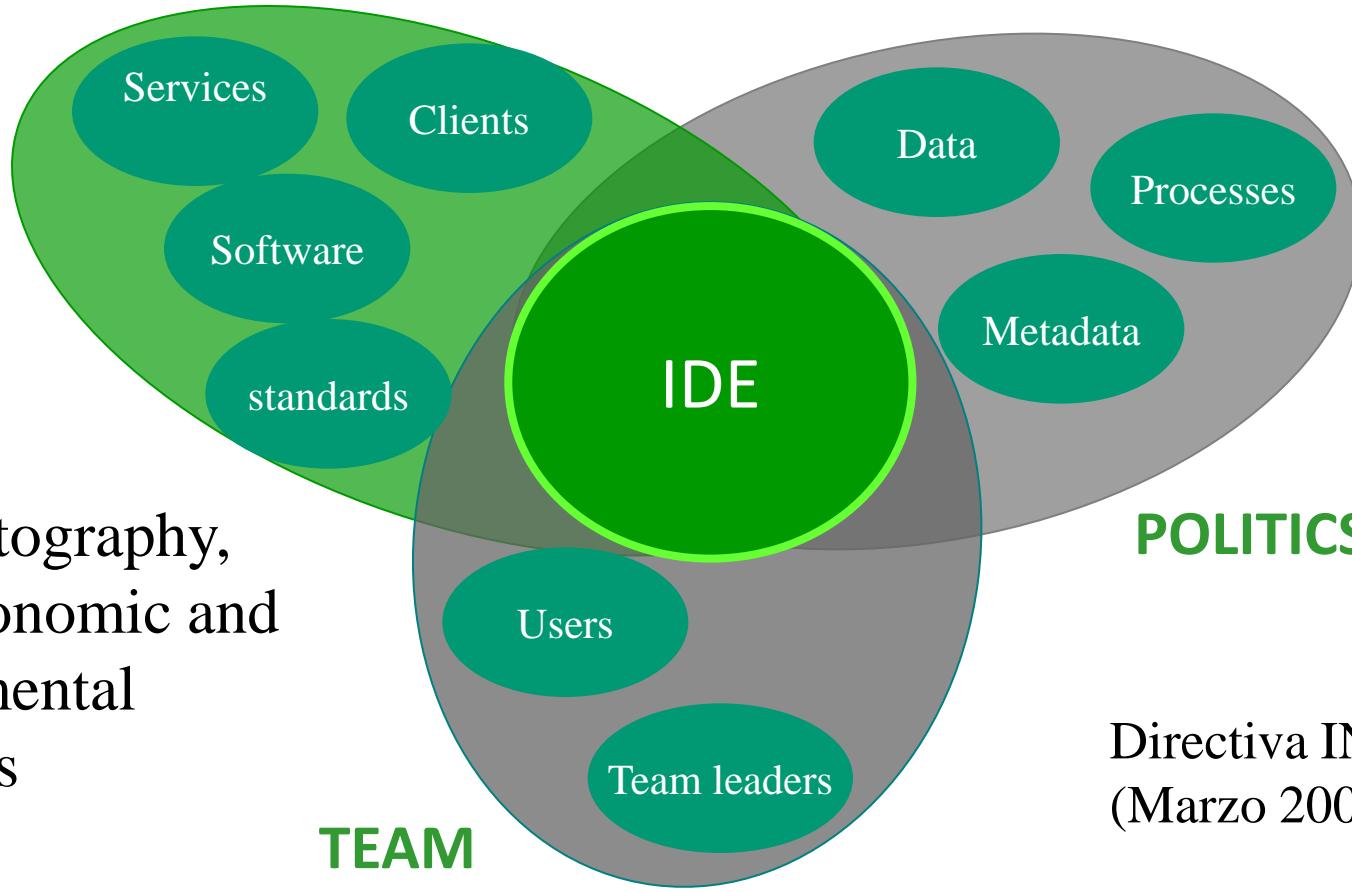
Indicators
harmonization

SDI-OTALEX structure: OTALEX-OTALEX C (2006-2015)



SDI-OTALEX C

TECNOLOGY



Development



- 2006. Proposal of SDI OTALEX in the OTALEX Project (first crossborder SDI non pilot). Directiva INSPIRE (March 2007)
- 2006 agreements:
 - Services (Data Viewer, metadata and names search)
 - Basic Information (main hydrographic network, main roads and rails, cities with more than 10.000 inhabitants)
 - White book of SDI OTALEX (data model design, SDI OTALEX design, requirements and attributes)
- 2007 SDI-OTALEX in production

Evolution



OTALEX
Observatorio Territorial Arentejo Extremadura



Portugal-España
Cooperación Transfronteriza
INTERREG III A
INTERREG III A
Programa Fondo Europeo de Desarrollo Regional

Presentación | Documentación | Socios | Legislación | Contacta | Mapa | Ayude

GEOPORTAL



Catálogo de Metadatos

Bienvenido/a a la Infraestructura de Datos Espaciales del Observatorio Territorial para el Arentejo y Extremadura.

Visor de Mapas

Nor (G)

basic carto
socio-econ

basic cartography, socio-economic and environmental indicators

Geoportal Homepage evolution 2007-2015



Observatorio Territorial e Ambiental Alentejo Extremadura
Observatorio Territorial y Ambiental Alentejo-Extremadura



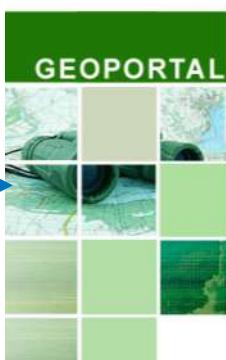
Invertir en su futuro



COOPERACIÓN TRANSFRONTERIZA
ESPAÑA-PORTUGAL
COOPERATION TRANSFRONTERICE
ESPAGNE-PORTUGAL

[Presentación](#) |
 [Publicaciones](#) |
 [Socios](#) |
 [Legislación](#) |
 [Contacto](#) |
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 [Ayuda](#)

GEOPORTAL



Catálogo de Metadatos

Publicaciones

Visualizador de Mapas

Nomenclador (Gazetteer)

Bienvenido/a a la
Infraestructura de Datos
Espaciales del Observatorio
Territorial para el Alentejo y
Extremadura.



OTALEX II



OTALEX II



OTALEX II



UE
FEDER
Invertir en su futuro



COOPERACIÓN TRANSFRONTERIZA
ESPAÑA-PORTUGAL
COOPERATION TRANSFRONTERICE
ESPAGNE-PORTUGAL

The screenshot shows the OTALEX website's main navigation bar at the top, featuring links for Spanish (Español), Portuguese (Português), and English (English). Below the navigation is a banner for the "INTERREG V-A Portugal-España Program" with the text "CÁPSULAS DE CONOCIMIENTO" and "OTALEX: ALLENTEJO Y EXTREMADURA". The main content area is titled "GEOPORTAL" and includes several search and analysis tools:

- Metadata Catalogue
- Map viewer
- Nomenclator (Gazetteer)
- Publications
- Indicator System
- Semantic Search
- Semantic Viewer



Map Viewer



2007-2015



Evolution



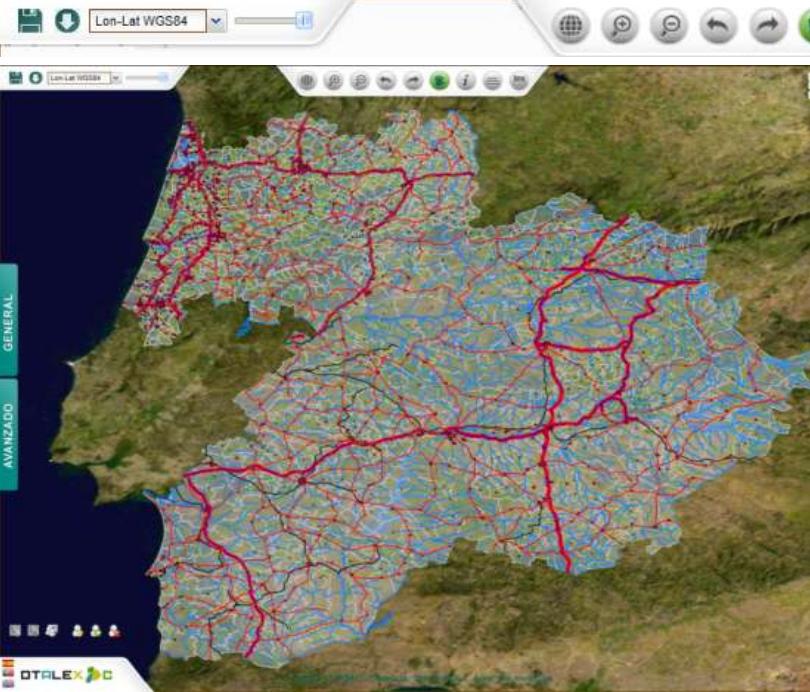
Remote administration



<<Inicio>



Evolution



Funcionalities

Tools:

1. Navigation
2. Identification of features
3. Measures
4. Impression
5. Add, remove services or layers
6. Upload and download of layers
7. Legend
8. User registration
9. Add local files
10. Geoprocessing
11. Transparency
12. Drawing
13. Search for WFS
14. Indicators
15. Client SOS
16. SDI mobile

INNOVATION IN OTALEXC

- Remote Data Administration
- WPS (WEB PROCESSING SERVICES)
- Working with local/remote layers
- Identify tool in remote layers
- Social and cultural indicators
- Draw tool
- SOS (Sensor Observation Services)
- Indicator System – SIOTALEX
- Linked data

The screenshot shows the OTALEX software interface with a map of water bodies. A buffer layer of 10 km has been applied to the water bodies, resulting in a dense cluster of green circles of varying sizes. The software interface includes a toolbar at the top, a legend on the left, and a 'Vista de capas' (Layers View) window on the right displaying the layers used for the analysis.

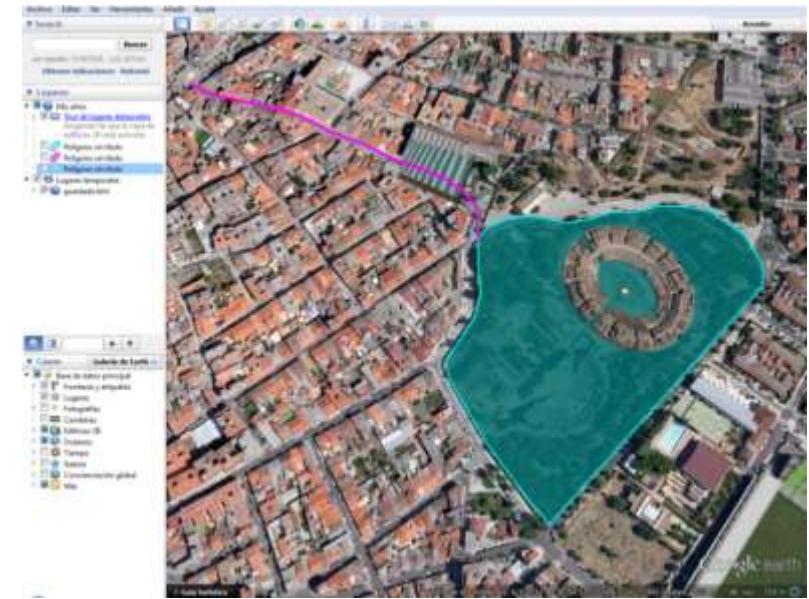
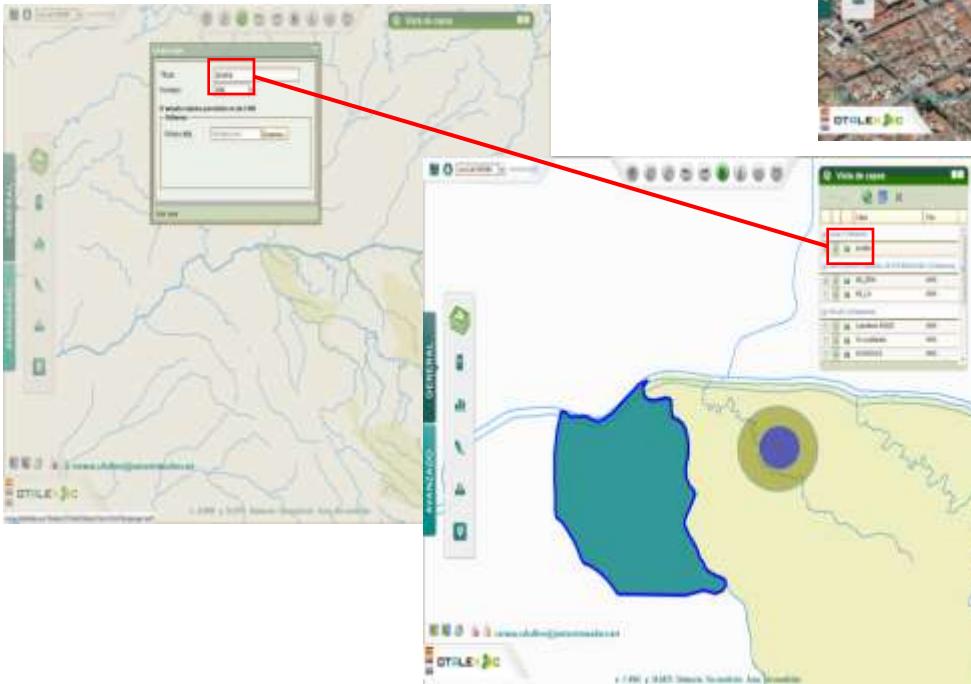
Buffer 10 km Layer water bodies

WPS tools

- Calculation of the number of bands of the layer which receives as input Raster;
- Calculation of the maximum and minimum value of the raster band;
- Multipart to Singlepart operations;
- Buffering;
- Indication if a layer WFS is in contact with another WFS layer;
- Maps Intersection operations;
- Calculation of the maximum and minimum value of raster map;
- Symmetric difference of two vector maps;
- Conversion of GML layer to shape format;
- Polygons generalization;
- Vector maps combination;
- Maps bonding;
- Distance between two maps;
- Mathematical operations of: Cross, disjoint, contains, equal, within, contact and superimposed.

20

Add local data



Drawing and Geoprocessing tools



GEOSPATIAL WORLD FORUM™



Español | Portugués | English

OTALEX Observatorio Territorial e Ambiental Alentejo Extremadura Centro
COOPERACIÓN TRANSFRONTERIZA ESPAÑA-PORTUGAL COOPERACAO TRANSFRONTEIRIZA

Presentation | Publications | Partners | Legislation | Contact | Map | Help

Bienvenido/a a la Infraestructura de Datos Espaciales del Observatorio Territorial para el Alentejo y Extremadura.

Proyectos

OTALEX
OTALEX II
OTALEX IIC

GEOPORTAL

Metadata Catalogue | Map viewer | Nomenclator (Gazetteer) | Publications
Indicator System | Semantic Search | Semantic Viewer

www.ideotalex.eu



AWARDS

"Best Practices Inform of the INTERREG IIIA Program Spain-Portugal, 2000-2006" - OTALEX – reference project in **Best Practices** of Exe 1 -Infrastructures, planning and development of trans border rural territory.

Honor mention of the European SDI Best Practices Award 2009 – eSDInet+ project

OTALEX is member of the CODIIGE – Consejo Directivo of SDI of Spain

ANÁLISIS DE LOS PROYECTOS INCLUIDOS EN EL PROGRAMA INTERREG IIIA DE COOPERACIÓN TRANSFRONTERIZA ESPAÑA-PORTUGAL 2000-2006 Y PREPARACIÓN DE UN DOCUMENTO DE DIVULGACIÓN

Informe de Buenas Prácticas



INTERREG IIIA
Programa Transfronterizo
INTERREG IIIA
Programme Transfrontalier

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Conclusions and outcomes

- The partnership is committed in continue the work by promoting the use and usability of SDI-OTALEX;
- By maintaining updated the indicator system and the cartographic information
- To continue the improvement of SDI-OTALEX, specially the indication system trough the implementation of Annex III of INSPIRE
- To study also climate change indicators and extreme events alerts, in order to help civil protection and security in climate change adaptation

Thank You for your attention!

www.ideotalex.eu

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Gobierno de Extremadura