

Can a SDI act as a sustainability observatory in a certain territory?

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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





Nature Conservation Protected areas

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



DEPUTACIÓN DE BADAJOZ
RESERVA NATURAL DE LAS TORRES



Superficial Water

Alqueva Dam/lake – crossborder Spain and Portugal
Biggest artificial lake in Europe – 250 km²; 120.000 ha of irrigation



Sustainability Observatory?

- Observe and monitoring the dynamics of a territory
- Integrates **data and indicators of sustainability: environmental, social and economic** and studies their **evolution**
- provides relevant and reliable information, contributing to the **dissemination** of technical / scientific information
- and **supports decision and management practices.**

The OTALEX C – Territorial and Environmental Observatory of Alentejo-Extremadura-Centro case study



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 trough **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** among the Spanish-Portuguese border



OTALEX C Project Partners - 11

nacional geographic institutes

- Partnership

regional administration



GOBIERNO DE EXTREMADURA
Consejería de Fomento, Vivienda, Ordenación del Territorio y Turismo
CCDR ALENTEJO



MINISTERIO DE FOMENTO
DIRECCIÓN GENERAL DEL INSTITUTO GEOGRÁFICO NACIONAL
CENTRO NACIONAL DE REFERENCIAS GEOGRÁFICAS
d.gTerritório



EDIA
EMPRESA DE DESENVOLVIMENTO E INFRA-ESTRUTURAS DO ALQUEVA, S.A.

enterprise



UNIVERSIDADE DE ÉVORA
INSTITUTO POLITÉCNICO DE CASTELO BRANCO

high education



cimac
DIPUTACIÓN DE BADAJOZ
ÁREA DE IGUALDAD Y DESARROLLO LOCAL
DIPUTACIÓN DE CÁCERES
ORGANISMO AUTÓNOMO PARA EL DESARROLLO LOCAL
comunidade intermunicipal do Alto Alentejo

local governments

- Cofinanced by:



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Background Project Partners

COORDSIG	PLANEXAL	GEOALEX	OTALEX	OTALEX II	OTALEX C
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 JE 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

Working Groups

- **Data and Indicators**, group leader - CIMAC
- **Cartography and WebGis**, group leader - Junta de Extremadura
- **I+D**, group leader - IGN-CNIG
- **Promotion**, group leader - Diputación de Badajoz

The SDI-OTALEX

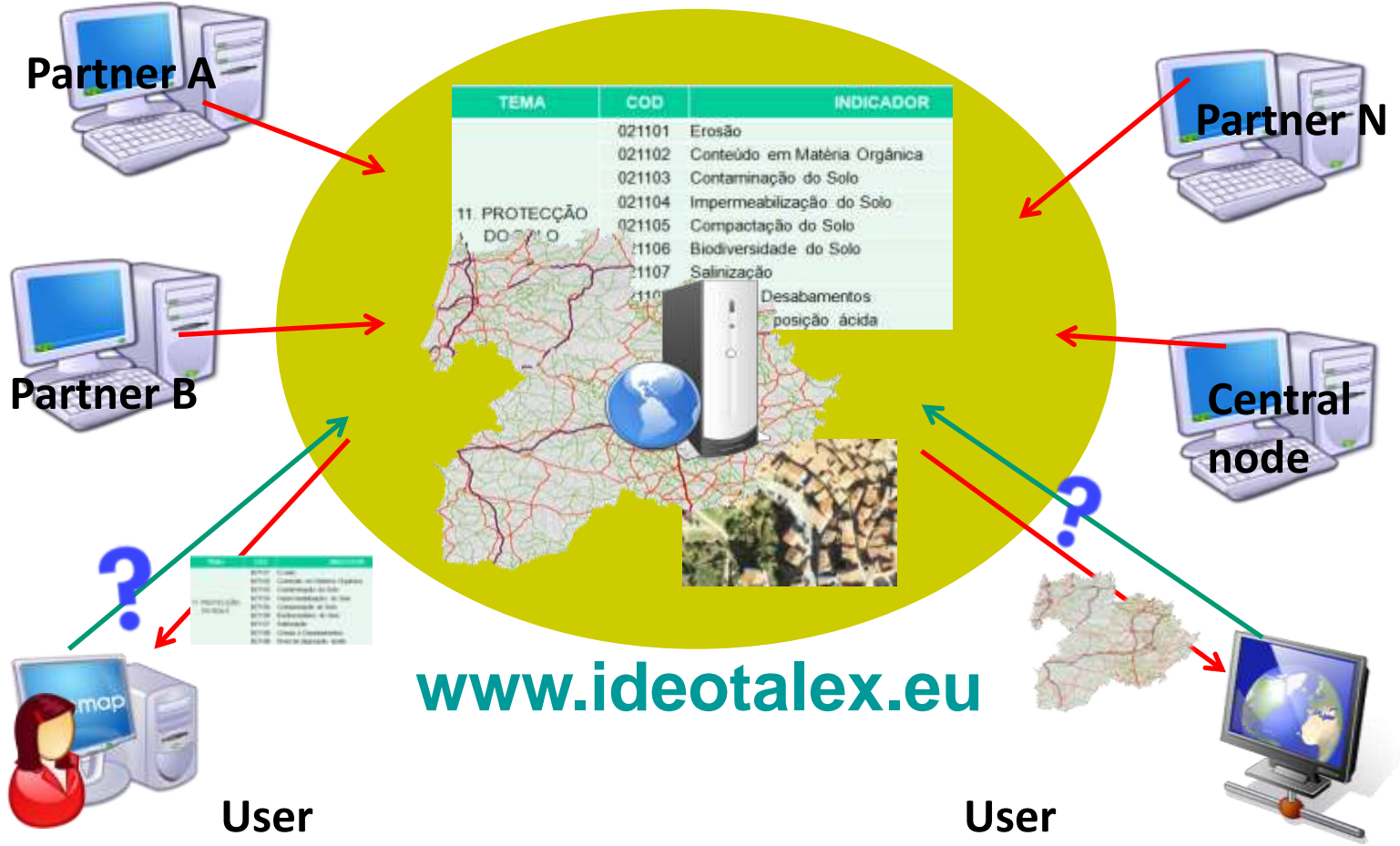
SDI-OTALEX is the first cross border SDI non pilot created in 2007 by the partnership

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

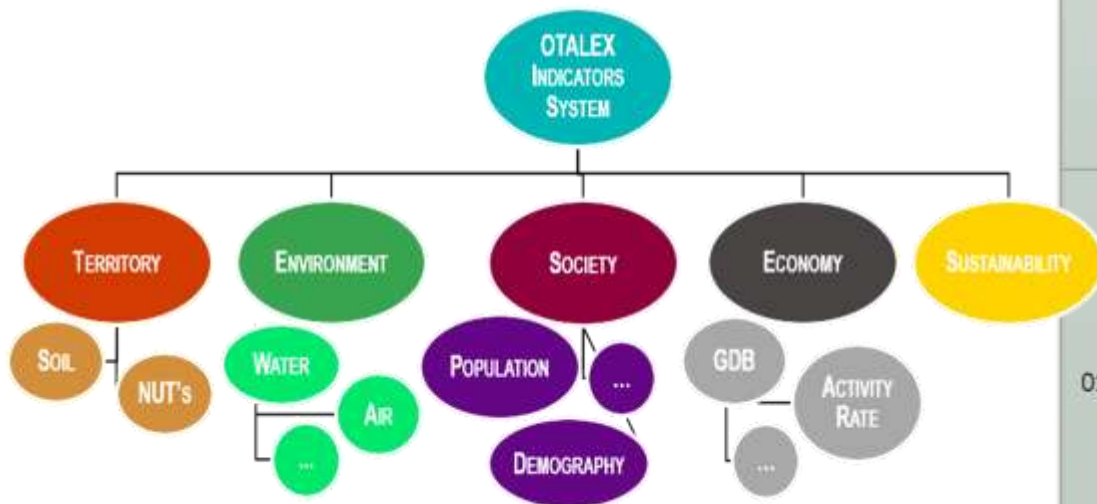


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SDI-OTALEX structure: OTALEX-OTALEX C (2006-2013)



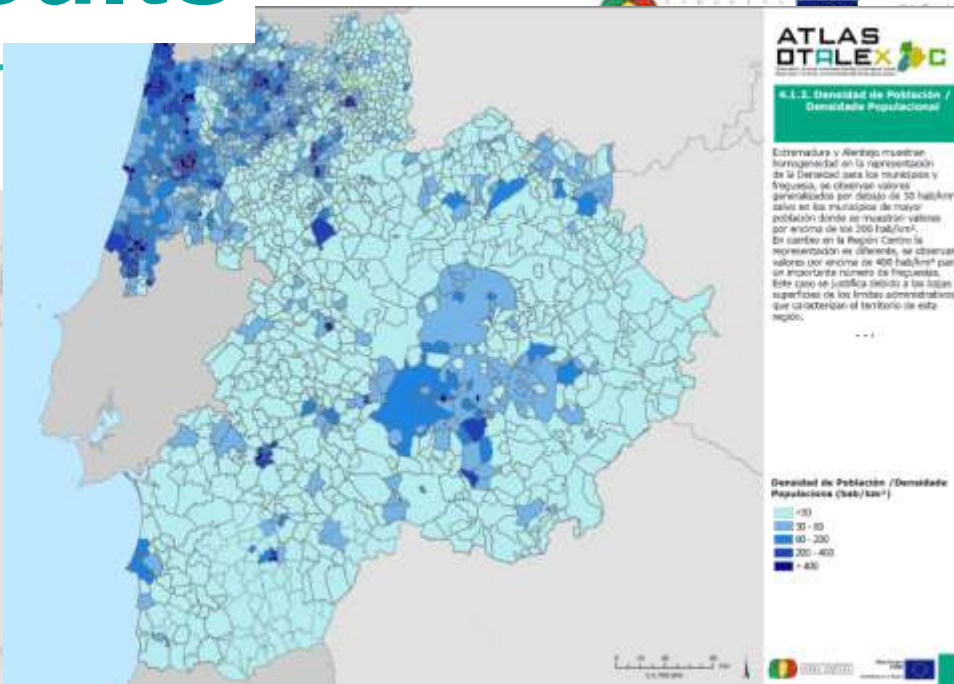
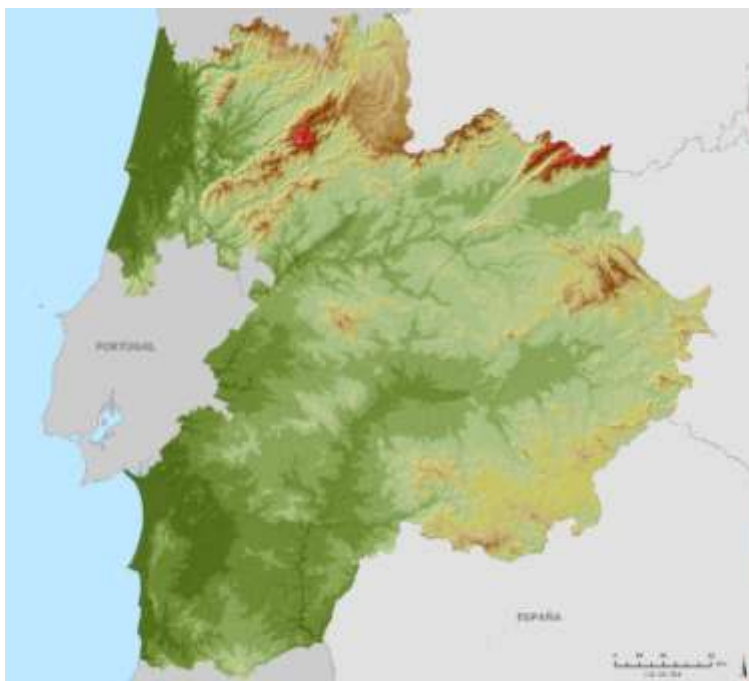
SI-OTALEX



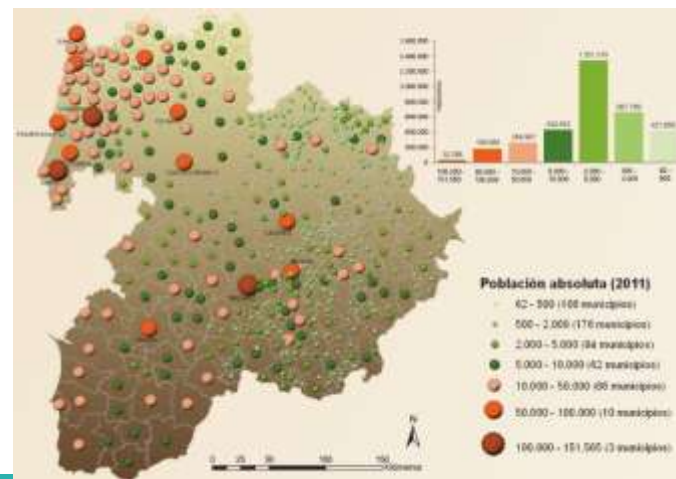
More than 60 indicators are already harmonized for the Alentejo-Centro and Extremadura regions

VECTOR	THEME
01. TERRITORY	01. Climate
	02. Geology and Geomorphology
	03. Hydrography
	04. Soil
	05. Administrative structure
02. ENVIRONMENT	01. Air
	02. Water
	03. Waste
	04. Pollution sources
	05. Land Use
	06. Environmental performance of urban spaces
	07. Noise
	08. Energy
	09. Nature Conservation
	10. Landscape
	11. Soil Protection
03. SOCIAL	01. Population
	02. Demographic structure
	03. Equipment's and Services Network
04. ECONOMIC	01. Economic Activities
05. SUSTAINABILITY	01. Territorial matrix
	02. Sustainable transport

ATLAS OTALEX C.



Data harmonization and indicators



I+D

- SOS (sensor observation services)
- Linked Data and WEB semantic



OTALEX C Environmental Station (EMA) – Évora Portugal

Español | Português | English

OTALEX C
Observatório Territorial e Ambiental ALENTEJO Extremadura Centro
Observatorio Territorial y Ambiental ALENTEJO Extremadura Centro

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

Proyectos

- OTALEX
- OTALEX II
- OTALEX C

GEOPORTAL

Metadata Catalogue | Map viewer | Nomenclator (Gazetteer) | Publications

Indicator System | Semantic Search | Semantic Viewer

SIOTALEX

Main conclusions

- **Can SDI-OTALEX help the promoters and authorities to monitoring the development of the territory?**
- YES, it can!
- Since integrates territorial, environmental, social and economic information of several years and administrative units
- It is updated by the producers/partners

Main conclusions

- **Can SDI help citizen and administrations into climate change adaptation and civil protection?**
- Yes it can!
- Since it can integration dynamic meteorological data providing risk information of extreme events (SOS)
- Adding more natural and technological hazard cartography
- For fire fighting - Water resources and Land cover
- Include civil protection partners

Critical issues

- Maintaining the SIO up to date;
- To promotion of SDI-OTALEX among users;
- Financial resources available

Outcomes

- Continue the improvement of SDI-OTALEX, specially the SIO trough the integration of Sensor Observation Services (SOS) and sustainability indicators



Thank You for your attention!

www.ideotalex.eu

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Gobierno de Extremadura