



ANCPI
AGENTIA NAȚIONALĂ
DE CADASTRU ȘI
PUBLICITATE IMOBILIARĂ

INSPIRE IMPLEMENTATION IN ROMANIA

OCTOBER 2015

WHAT IS INSPIRE

- *Directive 2007/2/CE of the European Parliament and of the Council of 14 March 2007 establishing an infrastructure for Spatial Information in the European Community (INSPIRE)*
- Mandatory requirement that every member state develops its own national spatial data infrastructure (NSDI);
 - allows to efficiently put together geographical data at local and cross-border level;
 - Romanian contribution to the establishment of the infrastructure for spatial information in the European Community – INSPIRE;
 - INSPIRE envisages both technical and non-technical aspects, from standards, organizational and procedural issues and data policy to creation and maintenance of electronic services;

WHAT IS IMPORTANT?

- **To know what data we own** and to avoid duplication – *Involves collection and dissemination of metadata;*
- **To use common reference data** – in this way we will know that we speak about the same location – *Requires contracts between different departments regarding the connection mechanisms such as the reference coordinate system, cadaster reference, addresses etc.*
- **To share information related to location** – can be done easily, through a common infrastructure of standards, technologies – *Requires on going mechanisms for standards maintenance etc.*
- **To have necessary capacity**, professionals in the field of geographical information as well as experts from other professional groups who use information related to location or support their use – *Requires a vast programme of education and awareness at all levels.*
- **To have solid management and government capacity** in order to cope with the changes regarding INSPIRE implementation.
-

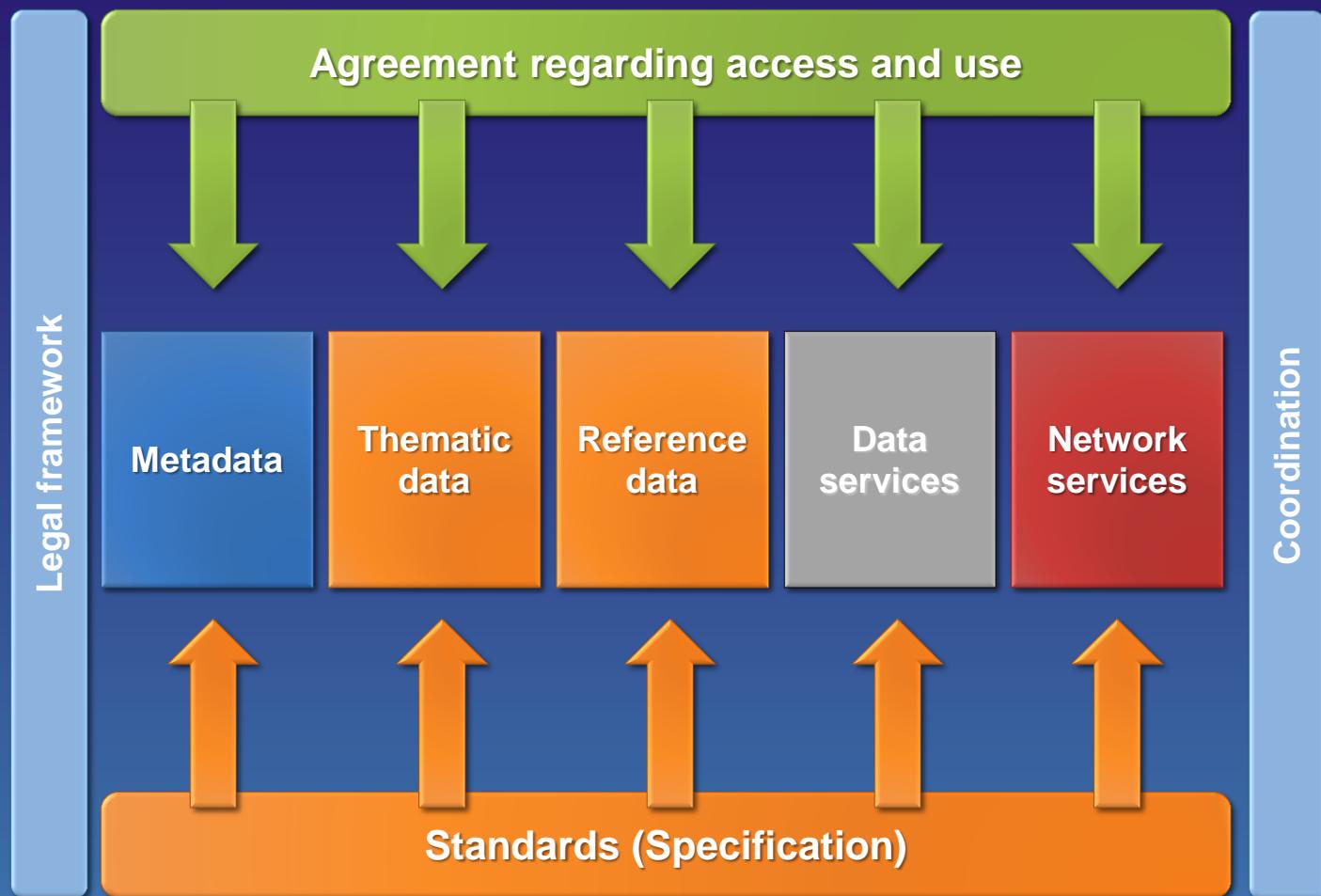
What is defining INSPIRE?

- Metadata;
- Interoperability of spatial datasets and services;
- Services (discovery, view, download, transformation, invoke) available through European Geo-portal;
- Sharing the spatial data and services (policy);
- Coordination and measures for monitoring and reporting;

INSPIRE Transposition

- Government Ordinance 4/2010 regarding establishment of national spatial information infrastructure (INIS) in Romania, republished
- General objective is to facilitate public access to existent spatial data and put together resources and services for enforcing development policy and environment policy using minimal resources
- Subsequent Acts:
 - Government Decision no. 493/2010 regarding approval of Regulation for organization and functioning of INIS Council
 - Draft of Government Decision regarding assignment of public authorities responsibility

Which are the components of INIS/ INSPIRE?



INIS Functionality

Coordination structure:

INIS Council – COORDINATION structure for establishment and maintenance of national spatial information infrastructure (INIS) in Romania

INIS Council Presidency and Secretariat – National Agency for Cadastre and Land Registration – contact point for EC

INIS Council Vice-presidency – Ministry of Environment and Climatic Changes

INIS Benefits



- *Coordination among public authorities for putting together data*
- *Increase services quality and efficiency*
- *Standards harmonization*
- *Facilitating an open and transparent decision making process*
- *Services for citizens and business environment*
- *Efficient use of state resources*
- *Identification and access to spatial information from many sources, from local to global level*
- *Interoperability for various users*
- *Instrument for research, spatial analysis and modelling*
- *Support for environment protection and competitive economy*
- *Create opportunities for services development*
- *Increase security and citizens protection*



National Geoportal



INIS geoportal

Standarde | Accesibilitate | Interoperabilitate | Conformitate | Afii Proiecte

HOME SEARCH BROWSE

SEARCH

Welcome to Romanian INSPIRE Geoportal

In Europe a major recent development has been the entering in 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 27 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...

In this context, **INIS Geoportal** is ensuring interoperability and expanding the access to spatial data, metadata, web services and applications as part of the romanian national spatial infrastructure... [find out more](#).

SITE NAVIGATION

- About INSPIRE
- Legislation
- INSPIRE RoadMap
- INSPIRE Geoportal
- INIS Council
- About GeoPortal

FUNCTIONALITY

- Discovery
- Viewer
- Metadata Editor
- Metadata Validation

PARTICIPATE

We believe the active involvement of a people interested in NSDI helps enrich the portal and aggregate important national spatial data information. [How to get involved...](#)

SITE STATISTICS

Online users: 82
Registered users: 992

DISCOVERY VIEWER METADATA EDITOR

Maps

Meteo Ortofoto

« »

Flood zones
Biodiversity
Roads, railway
Hydrography
Land use
Master plan
Properties
Utilities
Elevation
Ortophotos
Topographical map

- ANCPI ensures access to metadata, spatial data sets and services through INIS geo-portal
- Geoportal link:
<http://geoportal.ancpi.ro/geoportal>
(Romanian and English)
- Spatial data types provided by the organizations can be used simultaneously as layers in different user applications
- National point of access, connected to INSPIRE geoportal of EC;
- Geoportal search service ensures access to resources (data sets/ services) available at Romania level – visual impact of results of INSPIRE monitoring report

Geoportal Functionality

INIS Geoportal offers the following functionality:

- *Metadata publication services*
- *View services*
- *Discovery services*
- *Transformation services*
- *Download services*

METADATA



PAGINA DE START CAUTARE RASFOLIRE

CĂUTARE

INIS geoportal Standard Accesibilitate Interoperabilitate Conformitate Harta

Bine ați venit pe Geoportalul INSPIRE al României

Intrarea în vigoare a Directivei INSPIRE 2007/2/CE în Mai 2007 a constituit un eveniment major în Uniunea Europeană. Se permite astfel stabilirea unei infrastructuri de informații spațiale, necesare suportului cerut de politicele comunitare legate de protecția mediului, precum și a politelor în domeniul care pot avea un impact asupra mediului..

INSPIRE are la baza o infrastructură de date spațiale realizată și întreținută de fiecare dintre cele 27 de state membre ale Uniunii Europene. Directiva adresează un număr de 34 de teme de date spațiale, necesare sprijinului politiciilor de protecție a mediului, fiecare din teme fiind definită prin componente cheie și norme de aplicare.

STIRI | EVENIMENTE

CALENDAR

June 2013

Mo Tu We Th Fr Sa Su

DISCOVERY

INIS geoportal Standard Accesibilitate Interoperabilitate Conformitate Harta

HOME SEARCH BROWSE

Validate Metadata

Please use the Browse button to select the metadata file from your desktop or network to validate. Your file should be in FGDC or ISO metadata standard and in Extensible Markup Language (XML) format. Please click the Validate button to validate your file.

File: Browse...

Validate

* Bold-Italic labels indicate a required field

This Geoportal was built using the

Manage Add

Manage Resources

Document title:
Document UUID:
Site UUID:
Document owner: Approval status: Publication method: Protocol Type:
Update date between: and (yyyy-mm-dd)

Search

For selected records: Execute Action

Results 1-50 of 66 record(s)

Action	Title	Owner	Status	Method	Date	Access
	Plan topografic digital scara 1:2000 pentru județul Giurgiu	ANCPI	Posted	Editor	2012-05-30	Unrestricted
	Ortofotoplan color scara 1:5000	ANCPI	Approved	Editor	2012-04-19	Unrestricted
	Tunel de tip linie TOPROS	ANCPI	Approved	Editor	2012-04-10	Unrestricted
	Ortofotoplan color scara 1:2000	ANCPI	Approved	Editor	2011-10-05	Unrestricted
	Hartă cadastrală de ansamblu scara 1:5000, 1:10000, 1:20000, 1:25000	ANCPI	Approved	Editor	2011-10-05	Unrestricted
	Drumuri de tip linie TOPROS	ANCPI	Approved	Editor	2011-10-05	Unrestricted
	Limite administrativă TOPROS	ANCPI	Approved	Editor	2011-09-29	Unrestricted

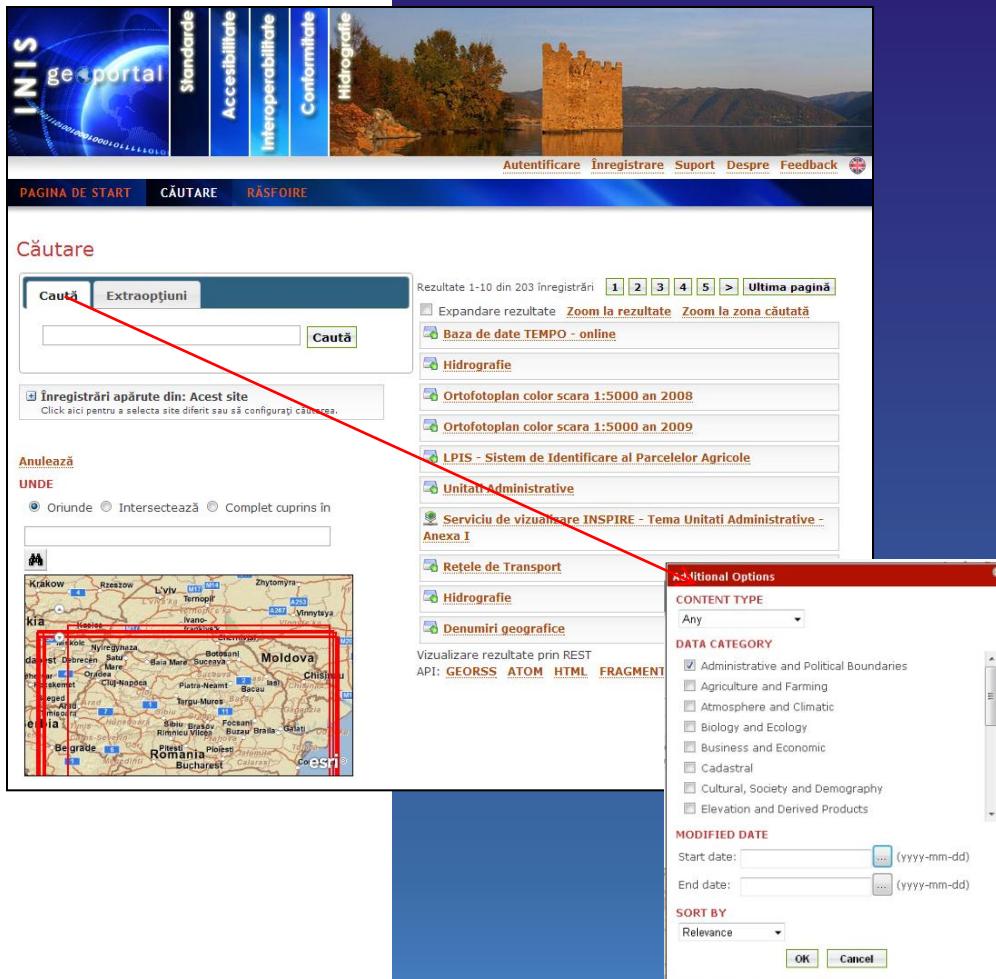
➤ Metadata

- Information about data: content, quality, conditions for use and other characteristics of data.
- Represent the totality of information used to clearly and coherently describe data (spatial data sets / services).

➤ Service for metadata publication has 3 modules:

- Metadata Editor – ensures compliance with Regulation for Metadata
- Metadata Validator
- Metadata Management

Discovery Service



PAGINA DE START CĂUTARE RĂSFOIRE

Căutare

Căută Extraopțiuni Căută

Înregistrări apărute din: Acest site

Click aici pentru a selecta site diferit sau să configurați căutarea.

Anulează UNDE

Oriunde Intersecție Complet cuprins în

Retetele de Transport

Hidrografie

Denumiri geografice

Vizualizare rezultate prin REST API: GEORSS ATOM HTML FRAGMENT

1 2 3 4 5 > Ultima pagină

Expandare rezultate Zoom la rezultate Zoom la zona căutată

Baza de date TEMPO - online

Hidrografie

Ortofotoplan color scara 1:5000 an 2008

Ortofotoplan color scara 1:5000 an 2009

LPIS - Sistem de Identificare al Parcelelor Agricole

Unitati Administrativ

Serviciu de vizualizare INSPIRE - Tema Unitati Administrativ

Anexa I

Administrative and Political Boundaries

Agriculture and Farming

Atmosphere and Climatic

Biology and Ecology

Business and Economic

Cadastral

Cultural, Society and Demography

Elevation and Derived Products

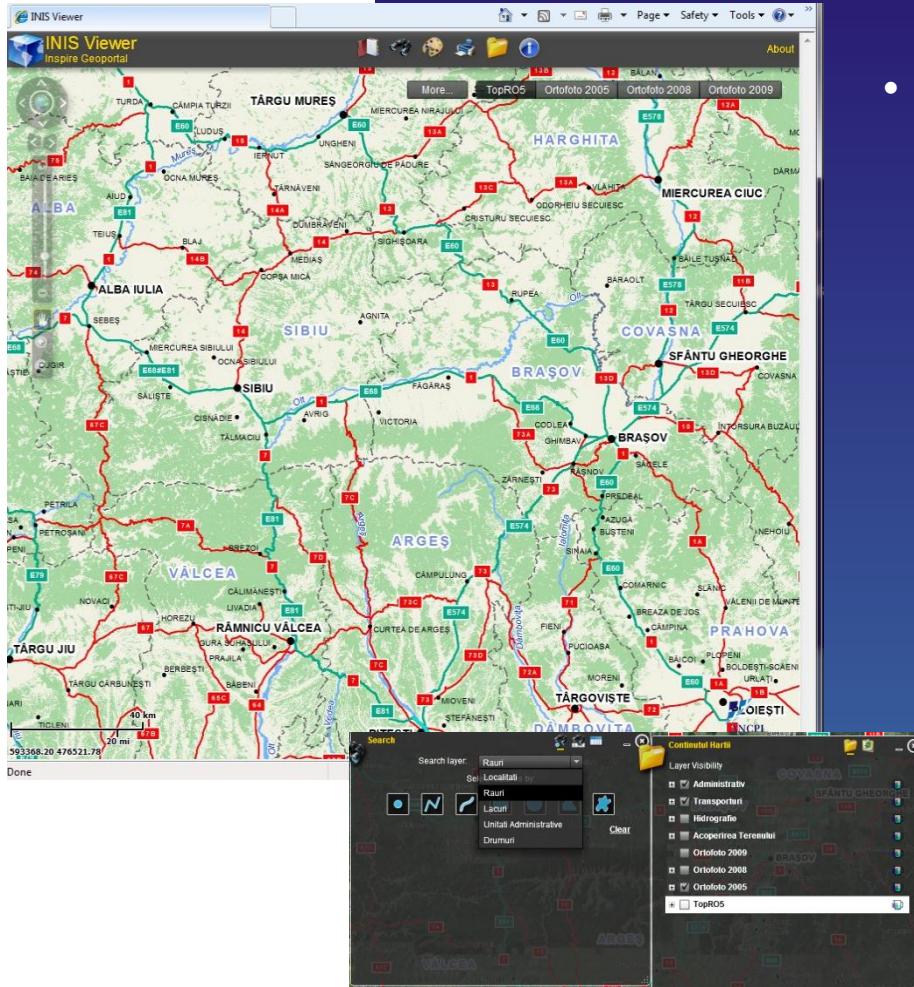
Start date: End date: (yyyy-mm-dd) (yyyy-mm-dd)

Relevance

OK Cancel

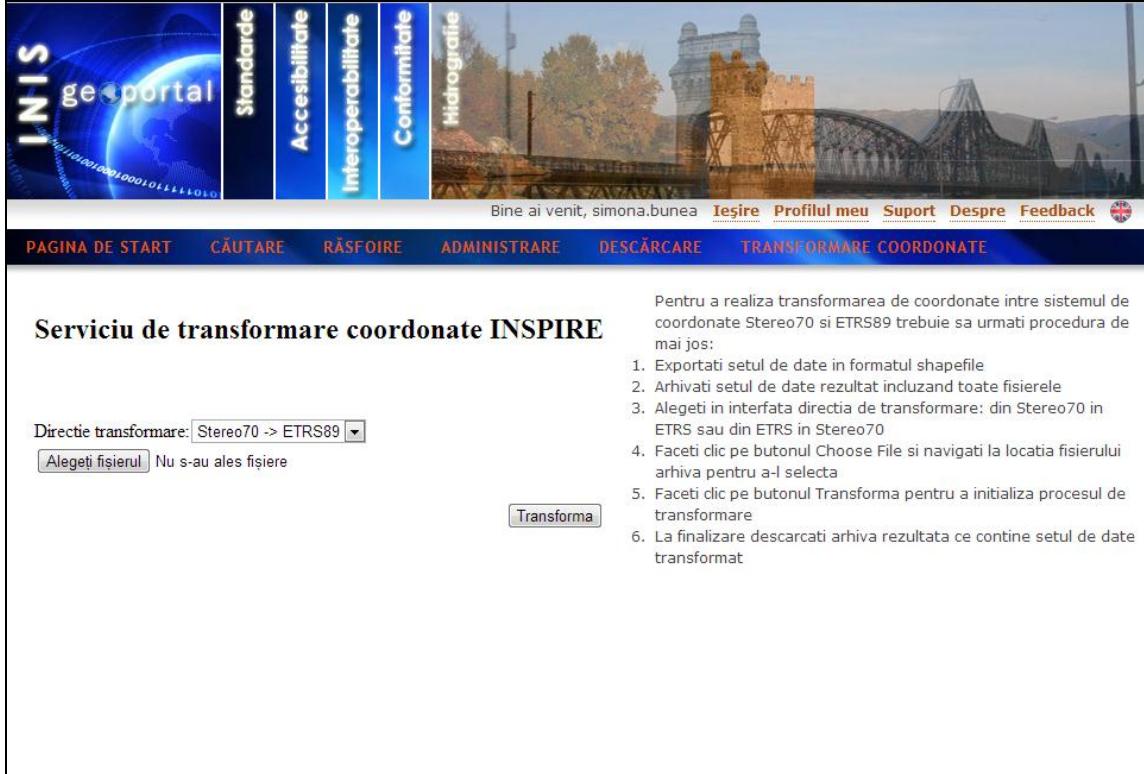
- Ensures searching resource catalogue using various criteria:
 - Resource name
 - Spatial extension of map (with following option for spatial query: *Wherever, Intersection*)
 - Extraoptions including searching after: *Type of content, Category of data, Data for modification of resource*

INIS View Application



- View resources TopRO5, ortho imagery 2005, 2008, 2009, 2010-2013
- Available tools - TopRO5:
 - Spatial searching in available layers of TopRO5: *Localities, Rivers, Lakes, Administrative units, Roads;*
 - Searching using name of the element in available layers of TopRO5
 - Map content, legend and layers transparency
 - Identification
 - Book sign
 - Printing
 - Drawing
 - Measuring

Transformation application



The screenshot shows the INIS geoportal homepage with a banner featuring a bridge over water. The top navigation bar includes links for Standard, Accesibilitate, Interoperabilitate, Conformitate, and Hidrografie. Below the banner, a welcome message "Bine ai venit, simona.bunea" is displayed, along with links for Ieșire, Profilul meu, Suport, Despre, and Feedback, and a British flag icon.

The main content area has a sub-navigation bar with links for PAGINA DE START, CĂUTARE, RĂSFOIRE, ADMINISTRARE, DESCĂRCARE, and TRANSFORMARE COORDONATE.

Serviciu de transformare coordonate INSPIRE

Directie transformare:

Nu s-au ales fișiere

Pentru a realiza transformarea de coordonate intre sistemul de coordonate Stereo70 si ETRS89 trebuie sa urmati procedura de mai jos:

1. Exportati setul de date in formatul shapefile
2. Arhivati setul de date rezultat incluzand toate fisierile
3. Alegeti in interfata directia de transformare: din Stereo70 in ETRS sau din ETRS in Stereo70
4. Faceți clic pe butonul Choose File si navigati la locatia fisierului arhiva pentru a-l selecta
5. Faceți clic pe butonul Transforma pentru a initializa procesul de transformare
6. La finalizare descarcati arhiva rezultata ce contine setul de date transformat

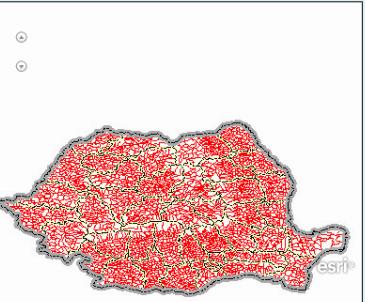
- Allows coordinate transformation between national coordinate system Stereografic 1970 and ETRS89 and vice versa.
- Supports shape format for input data.

Download Application

PAGINA DE START CĂUTARE RĂSFOIRE ADMINISTRARE DESCĂRCARE TRANSFORMARE COORDONATE

Descarcă

Step 1: Zoom in și selectați o zonă
Pan/zoom cu  Desenează aria dorită: 



Step 2: Selectare Date

- NUTS Region
- Condominium
- Administrative unit
 - Administrative unit 1st Order
 - Administrative unit 2nd Order
 - Administrative unit 3rd Order
 - Administrative unit 4th Order
 - Administrative unit 5th Order
 - Administrative unit 6th Order
- Administrative boundary
 - Administrative boundary 1st Order
 - Administrative boundary 2nd Order
 - Administrative boundary 3rd Order
 - Administrative boundary 4th Order
 - Administrative boundary 5th Order
 - Administrative boundary 6th Order

Step 3: Completăți detaliile și dați click pe "Descărcare"

e-mail:

Feature format:

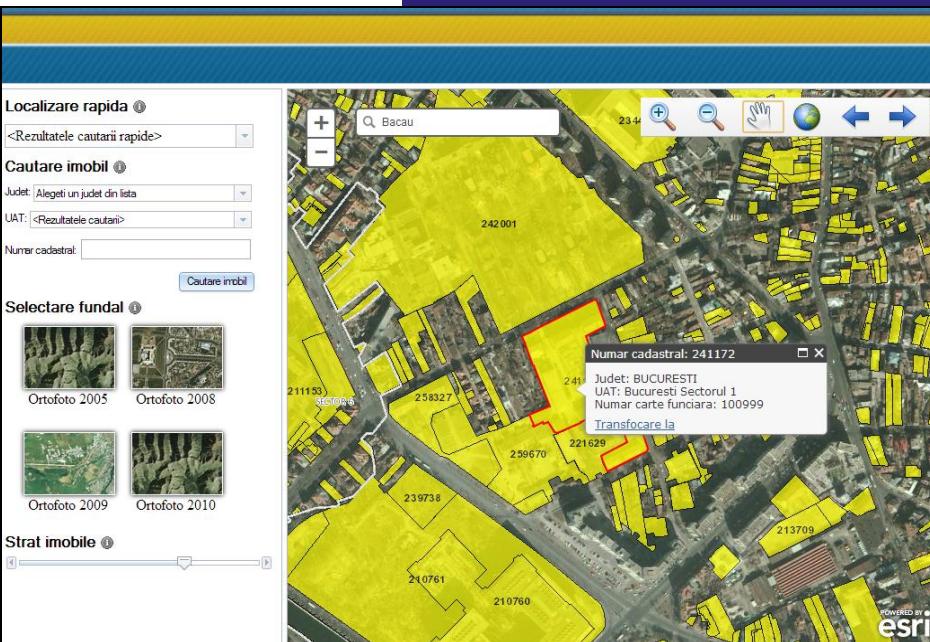
Raster format:

Descărcare

- Allows administrative boundaries download in various formats *shape*, *dxf*, *file geodatabase*, *dgn*, after user authentication;
- Selection criteria for download:
 - *Zone of interest*
 - *Hierarchical Order within territorial administrative of Romania*

<http://geoportal.ancpi.ro/geoportal/catalog/download/download.page>

Immovables View Application



- View *Immovables, Administrative boundaries, ortho imagery 2005, 2008, 2009, 2010*
- Available tools:
 - Quick search using name of a locality or name of a street
 - Search immovable using name of the county, UAT and cadastral number
 - Layer transparency
 - Immovable identification by clicking the respective immovable

<http://geoportal.ancpi.ro/geoportal/imobile/Harta.html>

- **General Objective** of the project is to enhance quality and efficiency of services provision;
- **Scope of the project** is to create the technical and legal framework needed for the establishment of spatial data infrastructure in Romania in order to comply with the European exigencies required by INSPIRE Directive.
- **Target group:**
 - Spatial data managers;
 - Persons who practice liberal professions;
 - Private firms/companies;
 - Romanian citizens.

„INSPIRE – Coherent fundamental decisions at national level, a unitary European framework”

- Expected results:
 - Legal framework
 - INSPIRE Strategy
 - Drafts of Acts regarding fees policy, data exchange policy and spatial data sets access policy.
 - Technical framework – activities
 - Inventory of data managers in Romania;
 - Collection/generation of metadata related to spatial data sets which are included in INIS
 - Development of services for information and correlation of cadastral information within the context of INSPIRE Directive.

„INSPIRE – Coherent fundamental decisions at national level, a unitary European framework”

- New technical framework which allows unitary coordination of different aspects of spatial data owned by spatial data managers:
 - technical aspects regarding interoperability;
 - use of data services;
 - principles that are governing data access and related costs;
 - national coordination;
 - access facilitated to a series of information which will ease data searching and data quality valuation.

Conclusions



- COLLABORATION IS THE KEY OF SUCCESS
- DATA ARE PRODUCED AND MAINTAINED AT THE LEVEL OF THE RESPONSIBLE CENTRAL/LOCAL AUTHORITY
- DATA REMAIN IN PROPERTY/ADMINISTRATION OF PRODUCERS/MANAGERS
- ANCPI ENSURES COORDINATION, INTEGRATION AND TECHNICAL SUPPORT THROUGH GEOPORTAL



Thank you!