SNIG 2020: a participated vision for the Portuguese National Spatial Data Infrastructure

Directorate-General for the Territory

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Sistema Nacional de Informação Geográfica - SNIG

• The Portuguese Spatial Data Infrastructure (SDI) which from its geoportal allows to search, visualize and explore geographic data about the Portuguese territory, produced by public or private entities.

• Technological platform for monitoring the activities related to the application of the INSPIRE - INfrastructure for SPatial InfoRmation in Europe, Directive in Portugal.
SNIG – The Concept

• The entities register themselves on SNIG and submit the metadata of the spatial data and the metadata of the services which they produce. These metadata need to respect the National Profile of Metadata.

• Main objective: To concentrate in one only place the registration of all geographic information regularly produced in Portugal. The data can also been visualized on the geoportal, through spatial data services normalized with the OGC – Open GeoSpatial Consortium specifications, if requested by the entity.
SNIG – Steering Committee

Article 5, Decret-Law n. 180/2009, August 7

- “Approve the strategic guidelines and the general objectives of SNIG”
- “Ensure to grant public authorities the technical capacity to cross their spatial data sets and services on Internet”
- “Promote a good articulation between the members of the SNIG network, to analyze and to pronounce about possible cases of divergence of interests”
- “Approve the work program to enable the establishment and effective operation of SNIG, the corresponding financial plans and the participation of each integrated service in the costs”
- “Advise about the national technical standards for geographic information”
- “Advise about the rates for data sharing proposed by the public authorities involved”
- “Issue opinions requested under the present law”
SNIG – Steering Committee

Actual Configuration:

• Directorate-General for the Territory
• Portuguese Environment Agency
• National Association of Portuguese Municipalities
• National Authority for Civil Protection
• Institute for Nature Conservation and Forests
• Army Geographic Institute
• Hydrographic Institute
• National Statistics Institute
• National Laboratory of Energy and Geology

• Institute for the Sea and the Atmosphere
• Directorate-General for Agriculture and Rural Development
• Regional Secretariat for Tourism and Transports of Azores
• Regional Secretariat for Environment and Natural Resources of Madeira
SNIG – Historical Context

- Landmarks in the evolution of SNIG

1986
Working group for the creation of CNIG

1990
Creation of SNIG

1995
SNIG on the Internet

1996
Creation of CNIG

2001
ESDI Initiative

2002
Creation of IGP

2004
Metadata Editor

2006
SNIG’s Geoportal

2007
INSPIRE Directive

2008
Reformulation

2012
Creation of DGT

2014
Geoportal Renovation

2015
Develop SNIG

2009
INSPIRE Directive Transposition

2014
INSPIRE Directive Transposition
SNIG – INSPIRE Directive

- Directorate-General for the Territory is the National Focal Point for INSPIRE

- To monitor the implementation of the INSPIRE Directive:
  
  "... Member States shall monitor the implementation and the use of their infrastructures for spatial data and submit reports on the implementation of the Directive ."

- Annual Monitoring:
  Calculation of indicators based on the List of sets and spatial data services of each Member State

- Triennial Reports:
  Organization, coordination and quality assurance of data
  Contributions to the functioning and the coordination of infrastructure
  Usage of the Infrastructure for Spatial Information
  Data sharing agreements between public authorities
  Costs and benefits associated with the implementation of the Directive and examples of benefits
**SNIG – INSPIRE Directive**

- Implemented a network called *Focal Point Network INSPIRE Core* - covering public authorities formally responsible for the production of spatial data and national services for the themes listed in the three annexes of the Directive.

<table>
<thead>
<tr>
<th>Annex I</th>
<th>Annex II</th>
<th>Annex III</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Geographical grid systems</td>
<td>2. Land cover</td>
<td>2. Buildings</td>
</tr>
<tr>
<td>5. Addresses</td>
<td></td>
<td>5. Human health and safety</td>
</tr>
<tr>
<td>6. Cadastral parcels</td>
<td></td>
<td>6. Utility and government services</td>
</tr>
<tr>
<td>7. Transport networks</td>
<td></td>
<td>7. Environment monitoring facilities</td>
</tr>
<tr>
<td>8. Hydrography</td>
<td></td>
<td>8. Production and industrial facilities</td>
</tr>
<tr>
<td>9. Protected sites</td>
<td></td>
<td>9. Agriculture and aquaculture facilities</td>
</tr>
</tbody>
</table>

| | | 10. Population distribution and demography |
| | | 11. Area management/restriction/regulation zones/reporting units |
| | | 12. Natural risk zones |
| | | 13. Atmospheric conditions |
| | | 14. Meteorological geographical features |
| | | 15. Oceanographic geographical features |
| | | 16. Sea regions |
| | | 17. Bio-geographical regions |
| | | 18. Habitats e biotopes |
| | | 19. Species distribution |
| | | 20. Energy resources |
| | | 21. Mineral resources |
SNIG - Diretiva INSPIRE

• Entities of the Focal Point Network INSPIRE Core

Administração Central do Sistema de Saúde
Agência Portuguesa do Ambiente
ANA - Aeroportos de Portugal
Autoridade Nacional de Protecção Civil
Autoridade Tributária e Aduaneira
Correios de Portugal
Direção-Geral de Estatísticas da Educação e Ciência
Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos
Direção-Geral do Património Cultural
Direcção Geral de Agricultura e Desenvolvimento Rural
Direcção Geral de Energia e Geologia
Direcção Geral de Saúde
Direcção Geral do Território
Estradas de Portugal
Gabinete de Estratégia e Planeamento
Instituto da Conservação da Natureza e das Florestas
Instituto da Habitação e da Reabilitação Urbana
Instituto da Mobilidade e dos Transportes
Instituto da Vinha e do Vinho
Instituto de Financiamento da Agricultura e das Pescas
Instituto de Infra-Estruturas Rodoviárias
Instituto Geográfico do Exército
Instituto Hidrográfico
Instituto Nacional da Aviação Civil
Instituto Nacional de Emergência Médica
Instituto Nacional de Estatística
Instituto Nacional de Investigação Agrária e Veterinária
Instituto Português do Mar e da Atmosfera
Laboratório Nacional de Energia e Geologia
Navegação Aérea de Portugal
Rede Ferroviária Nacional
Secretaria Regional do Ambiente e Recursos Naturais da Região Autónoma da Madeira
Secretaria Regional do Turismo e Transportes da Região Autónoma dos Açores
SNIG – 2014 Renovation

- Technological upgrade of the platform architecture
- Design renovation
- Diversification of the methods for metadata registration
- Configuration and publication of INSPIRE services
- New search functionalities
  - Scale
  - Resolution
  - Producer
  - Type of Resource
  - ...etc
- New possibilities for visualization and comparison between added themes on the viewer
- ...etc.
SNIG – 2014 Renovation

Metadados

Gestão Metadados

Título do documento:
UUID do Documento:
UUD da site:
Proprietário: Qualquer
Estado: Qualquer
Método de publicação: Qualquer
Protocolo: Qualquer
Alteração entre: ... e ... (aaaa-mm-dd)

Para os registos selecionados: Definir como Publicado

Nenhum resultado encontrado.

<table>
<thead>
<tr>
<th>Opção</th>
<th>Título</th>
<th>Proprietário</th>
<th>Estado</th>
<th>Método</th>
<th>Data</th>
</tr>
</thead>
</table>
SNIG – 2014 Renovation

CATÁLOGO

- Entidades Responsáveis
- Anexos INSPIRE
- Temas INSPIRE Anexos I e II
- Temas INSPIRE Anexo III
- Informação Geográfica de Base
- Serviços de Mapas
- Serviços de Catálogo

SNIG

- Início
- Apresentação
- Como integrar a Rede
- Edição e Publicação de Metadados
- Outras IDE

INICIAR SESSÃO

- Dados Perfil
- Matadados
- Repositórios

Terminar Sessão

NOVIDADES

- Últimos Registos Publicados
- Notícias

CATÁLOGO

» Palavra(s) a Pesquisar

» Critérios Alfanuméricos
CATÁLOGOS

- TIPO/FORMATO [ ] Serviços de Mapas
- ESCALA de 1: [ ] 0:1 [ ]
- RESOLUÇÃO de 1: [ ] 0:1 [ ] (metros)
- DATA DE REFERÊNCIA

- Data Criação
- Data Publicação
- Data Revisão
- Data Extensão
- De: [ ] (aaaa-mm-dd)
- Até: [ ] (aaaa-mm-dd)
- Opções adicionais para Pesquisa Avançada

» Critérios Geográficos

- Quaisquer
- Intersecção pela extensão
- Contidos na extensão

Ir para:

(Ex: Rua Julieta Ferão, Lisboa)
SNIG – 2014 Renovation

Viewer
SNIG – 2014 Renovation
SNIG – 2014 Renovation

- Adding a WMS Service
SNIG – 2014 Renovation

- Adding several WMS Services
Developing SNIG

- This year the Directorate-General for the Territory created a survey on the internet to understand the level of awareness of SNIG among the users of geographic data.
Developing SNIG

• The analysis of the results of the survey and the global feedback from the different users will help to define a more adequate and efficient approach to the development of SNIG.

• Until the end of 2015 we plan to complete the diagnosis of SNIG, which will allow the definition of the next steps in the development of this SDI and the consolidation of a strategy for the next years – SNIG 2020.
Strategy SNIG 2020

Global principles to consider:

• Strengthen the specific role of SNIG as a SDI with a global nature and independent from all the thematic, regional and local SDI

• Mobilize, encourage and support all the entities which produce geographic information to register those data in SNIG

• Promote the use of SNIG’s database by all entities which coordinate the remaining SDIs, through the use of search services as REST or CSW
Strategy SNIG 2020

Global principles to consider:

- Make the access to the data more easy and friendly through the creation of more OCG services
- Increase the number of platform users through more regular publicity of SNIG
- Continue to monitor the application of the INSPIRE Directive, through concerted strategies defined within the Steering Committee of SNIG
- Build a strategy for the development of SNIG with the participation of all the data providers and the users of geographic data
Workshops, Friday, 29th
Workshops - Programa

Sexta, 29 de maio

Workshop 1 - 09:00 – 10:30
  Infraestruturas de informação Geográfica em Português à volta do Mundo

Workshop 2 - 11:00 – 12:30
  Rumo ao SNIG 2020 e Mentes Criativas

Workshop 3 - 14:00 – 15:30
  Serviços de Dados Geográficos INSPIRE

Workshop 4 - 15:30 – 17:00
  Panorama atual e evolução dos metadados INSPIRE em Portugal
Thank you.