A Study on Data Policies in the Portuguese Public Administration in the context of SNIG

Alexandra Fonseca, Raquel Saraiva, Paulo Patrício, Mário Caetano
This presentation focuses on a study on Data Policies in Portugal that performed:

- An overview of the legal framework and best practices for data and service sharing at the national and international level

  Special focus on **Open Data practices** was given, considering the *SNIG 2020 Vision* main orientations.

- A *Survey on the present situation of SNIG entities* in what concerns their data policies.
SNIG is the Portuguese National Spatial Data Infrastructure (NSDI) which is available on the Internet since 1995.
Ever since INSPIRE Directive entered into force in 2007 major efforts have been developed in Portugal to promote INSPIRE implementation activities

- Setting the main **organizational and operational structures** involving the geographic data producers and users, most of them already involved in SNIG for several years.
- Dissemination and **capacity building** on INSPIRE issues.
- **Metadata** creation and compliance.
- **INSPIRE monitoring and reporting** involving annually the main national geographic information (GI) data producers progressively getting involved in the development of services and in the discussion of data harmonization requirements and problems.
Since 2015 a strong emphasis is being given to participated and collaborative processes for SNIG development and INSPIRE implementation.
A Spatial Data infrastructure based on an open data policy ensuring the free of costs sharing of geographic information produced by public administration entities.
A Study on Data Policies in the Portuguese Public Administration in the context of SNIG

Política de dados para informação geográfica na administração pública: Instrumentos legais, boas práticas e situação atual no acesso e partilha de dados

30-04-2017

A Study on Data Policies in Public Administration was developed, which aims to support the definition of a Data Policy for SNIG to be adopted by SNIG entities.
A Study on Data Policies in the Portuguese Public Administration in the context of SNIG
Legal Instruments

- **COM(2008) 46**
  - “Sistema Informação Ambiental Partilhada (SIB)”

- **Diretiva 2008/56/CE**
  - “Estratégia marinha”

- **COM(2010) 461**
  - “Conhecimento do meio marinho 2020”

- **COM(2010) 584**
  - “Ambiente partilha informação e vigilância domínio marítimo Europeu (CISE)”

- **COM(2011) 882**
  - “Dados abertos”

- **Regulamento 1255/2011**
  - “Programa de apoio ao aprofundamento da política marítima integrada”

- **Regulamento 377/2014**
  - “Programa Copernicus”

- **COM(2014) 442**
  - “Economia dos dados próspera”

- **Diretiva 2014/89/EU**
  - “Ordenamento do espaço marítimo”
There are numerous legal instruments related to the access and reuse of information, referring to environmental reporting obligations that involve data sets relevant to the INSPIRE Directive.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECTIVA 2000/60/CE</td>
<td>Que estabelece um quadro de ação comunitária no domínio da politica da água</td>
<td><a href="http://eur-lex.europa.eu/resource.html?uri=cellar:883e6db-3be4-4577-bd6b-72593e294eeb:0009.02/DOC_1&amp;format=PDF">http://eur-lex.europa.eu/resource.html?uri=cellar:883e6db-3be4-4577-bd6b-72593e294eeb:0009.02/DOC_1&amp;format=PDF</a></td>
</tr>
<tr>
<td>DIRECTIVA 2006/21/CE</td>
<td>Relativa à gestão dos resíduos de indústrias extractivas e que altera a Directiva 2004/35/CE</td>
<td><a href="http://eur-lex.europa.eu/resource.html?uri=cellar:170006a-063e-4dd7-8b05-52c97720742c:0017.02/DOC_1&amp;format=PDF">http://eur-lex.europa.eu/resource.html?uri=cellar:170006a-063e-4dd7-8b05-52c97720742c:0017.02/DOC_1&amp;format=PDF</a></td>
</tr>
</tbody>
</table>
The study on data sharing good practices focused:

• The **data sharing and access definitions** highlighting the topics and key points for efficient data and service sharing;

• **Good examples** in accessing and sharing geographic data at the international and national levels;

• The **importance of new open data initiatives** for the geographic information user community and the economic impact of these initiatives on society.
Data Sharing Good Practices

- **Coordination** (of data and service sharing)
- **Framework Agreements** (defining access and use conditions)
- **Transparency on the data** (availability of relevant information on the data)
- **Licences** (tools to specify the agreements’ terms)
- **Charging mechanisms** (pricing policy)
- **Public access** (public access to data and metadata)
- **Emergency Use** (use of the data in case of natural disasters,...)
- **Third party data** (use of third party data, OSM...)

Geo-geoss, Copernicus, One Geology, EUMETSAT, Geoplatform,
British Geological survey, Danish SDI
Data Sharing Good Practices

- Data Sharing Good practices examples

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Coordination</th>
<th>Agreement</th>
<th>Transparency</th>
<th>Licenses</th>
<th>Charging</th>
<th>Public Access</th>
<th>Emergency</th>
<th>Third Party Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO-GEOSS</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copernicus</td>
<td></td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Geology</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUMETSAT</td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geoplatform</td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Geological Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIG Dinamarquesa</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Open data

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Link</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Knowledge Foundation</td>
<td><a href="https://okfn.org/">https://okfn.org/</a></td>
<td>Worldwide non-profit network</td>
</tr>
<tr>
<td>European Union Open Data Portal</td>
<td><a href="http://data.europa.eu/euodp/en/data/">http://data.europa.eu/euodp/en/data/</a></td>
<td>Point of access to data sets from institutions and other bodies of the European Union</td>
</tr>
<tr>
<td>Open Access in Horizon 2020</td>
<td><a href="https://www.openaire.eu/open-access-in-horizon-2020">https://www.openaire.eu/open-access-in-horizon-2020</a></td>
<td>Initiative to make the data resulting from the Horizon 2020 projects, open, interoperable and reusable</td>
</tr>
<tr>
<td>Digital Single Market</td>
<td><a href="https://ec.europa.eu/commission/priorities/digital-single-market_en">https://ec.europa.eu/commission/priorities/digital-single-market_en</a></td>
<td>Single market to ensure the free movement of goods, capital, services and persons within the European Union</td>
</tr>
</tbody>
</table>
A questionnaire was prepared for SNIG public authorities focusing on the following issues:

- Data Policy existence
- Key points of the data policy or of the delivery mechanisms
- GI data access conditions
- GI delivery (type of requests, response time, format, delivery support, type of data)
- Feed-back on Public Administration GI data sharing present situation
- Existence of restrictions to access and use GI data from other entities
53% of the entities that answered the questionnaire claimed to have a data policy, but only a small percentage have a document that characterizes this policy.

The vast majority of entities identified as the fundamental key point for effective sharing and access to geographic information, the establishment of agreements.

It is more frequent the use of collaboration protocols for the sharing of geographic information between public entities.

But there is still little cooperation among Public Administration institutions.
**Frequency with which the GI is generally made available to third parties according to the type of user**

- It is frequent to make GI available to public entities.
- There are still entities that never make information available to the general public.
- The availability of GI to companies (both public and private) is practiced by almost half of the entities on a frequent basis.
- The availability to the research centers is made more occasionally.

**Frequency with which the GI of the entity is made available to third parties according to the conditions of access**

- The free availability with use license is the most frequent.
- For 38% of the entities it is frequent selling GI.
Frequency of GI made available according to the conditions of access:

to public entities

There is a greater frequency of availability of geographic information to public entities for free, through the use of a license, followed by the access and use through the payment of fees. Availability to the general public is preferably done openly, without registration. Research centers to GI is more often available by agreement or openly, and the widespread sale of geographic information for this type of user is not common. For public companies, frequently occur GI availability both open and free of charge as well as through sale. For private companies the availability of GI is made more often through sale, and the availability for free is uncommon.
Regarding the average time available for the provision of geographic information to third parties, the vast majority of entities reported that the availability is usually between 1 and 5 working days.

As for the format of availability of geographic information, the vast majority of entities reported being sporadic or occasional the availability of geographic information through network services, with a greater frequency of the direct availability through geodatabase or shapefile datasets.

SNIG entities also mentioned difficulties in accessing to specific datasets and services from other public entities due to the high costs of the information or to problems in identifying or interpreting the applicable data policies.
29 of the 34 INSPIRE Annex themes were identified by the entities.

The most referred INSPIRE Annex themes were:

- Altitude (II.1)
- Land cover (II.2)
- Management / restriction / regulation areas and reference units (III.11)
- Hydrography (I.8)
- Orthoimages (II.3)
Conclusions

• There are still many barriers to efficient information sharing in public administration in Portugal.

• The study of on legal instruments and good practices on data and services sharing under the INSPIRE Directive and other approaches has made it possible to take stock of the situation at European and world/international level and to highlight key points for effective access and sharing of data.

• Through the on-line survey it was verified that the SNIG entities do not evidence having a clear and meaningful data policy. Although 53% of the entities claim to be data policy holders, only a small percentage claim to have and provide a document characterizing that policy.

• Key points for effective sharing and access to geographic information are the establishment of agreements, followed by bilateral protocols for data sharing between public administration entities.
Conclusions

• There is a differentiation in the conditions of access according to the type of user and the type of information being the main criteria presented for the differentiation, the confidentiality and protection of personal data, the representation scale, the thematic detail and the study area.

• The sale of GI among public entities is very frequent, a situation that should be the subject of debate and ample reflection on both the GI community and CO-SNIG.

• The vast majority of entities reported being infrequent or occasional the availability of geographic information through spatial data services.

• In general, the entities agree that it is necessary to create a specific legal basis for Public Administration in Portugal that establishes a simplified agreement for the sharing of geographic information without restrictions of access and use, free of costs, with a view to the development of public nature tasks.
SNIG aims to continue to evolve to an open, flexible, interoperable and participated SDI, able to guarantee an effective and reliable access to spatial data and services provided by public authorities in Portugal.

- SNIG Data Policy Strategy discussion at CO-SNIG
- Definition and adoption of a data sharing license template for SNIG
- Updating of Data Policy fields in SNIG metadata catalogue
- Survey on GI sales revenue
THANK YOU

Alexandra Fonseca
afonseca@dgterritorio.pt