

# Meeting between Commission and Portugal experts on the implementation of the INSPIRE Directive

February 11th, 2016

**DGT**

**Directorate General for Territory Development**

9:30	1.	Welcome by DG Environment, Deputy Head of Unit, Mr. D'Eugenio Joachim
9:40	2.	Introduction on identification of spatial data sets and priority setting
		Discussion
10:20	3.	Introduction on compliance of "Interoperability of spatial data sets and services"
		Discussion
10:40	4.	Introduction on compliance with metadata under Annex I-III
		Discussion
11:00	5.	Introduction on compliance of Spatial Data Services (discovery, view and download services)
		Discussion
11:20	6.	Introduction on compliance with data-sharing between authorities and public access to environmental information
		Discussion
11:40	7.	Discussion with Member States experts on funding opportunities
12:00	8.	Transposition of INSPIRE – presentation of planning by PT based on open EU Pilot
12:30	9.	Conclusions and next steps
13:00	10.	Close

## Council for the SNIG Strategic Coordination (CO-SNIG)

- **ANMP** - National Association of Portuguese Municipalities
- **ANPC** - Portuguese National Authority for Civil Protection
- **APA** - Portuguese Environment Agency
- **CIGeoE** - Army Geospatial Information Center
- **DGADR** - Directorate General for Agriculture and Rural Development
- **DGRM** - General Directorate for Natural Resources, Safety and Maritime Services
- **DGT** - Directorate-General for Territorial Development
- **DGTF** - Directorate General of Treasury and Finance
- **ICNF** - Institute for Nature Conservation and Forests
- **IFAP** - Agriculture and Fisheries Financing Institute
- **IH** - Hydrographic Institute
- **INE** - Statistics Portugal
- **IPMA** - Portuguese Sea and Atmosphere Institute
- **LNEG** - National Laboratory of Energy and Geology
- Regional Service responsible for mapping and geographic information activities in the **Autonomous Region of Madeira**
- Regional service responsible for mapping and geographic information activities in the **Autonomous Region of Azores**

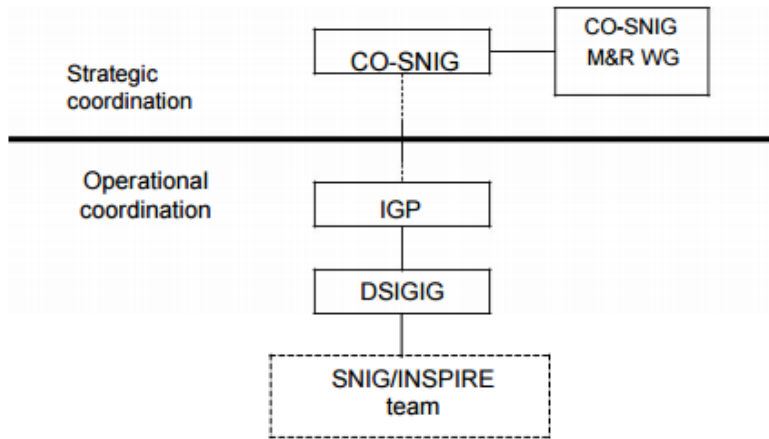
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### Observers

- **ACD** - Cohesion and Development Agency
- **AMA** - Agency for Administrative Modernisation
- **EMEPC** - Task Group for the Extension of the Portuguese Continental Shelf

# 0.1 INSPIRE Organizational aspects in Portugal: Coordination

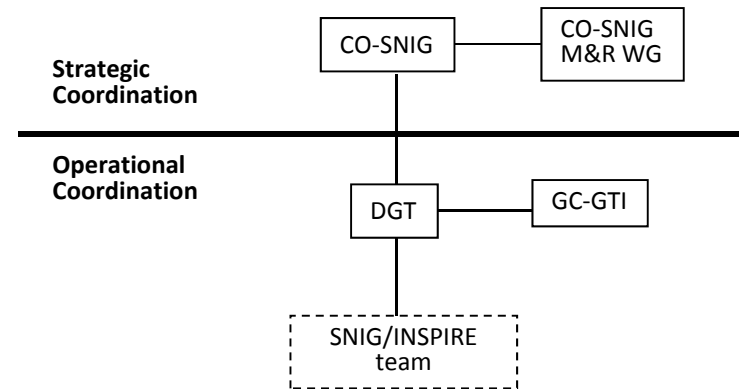
## IGP, 2010 - 2011



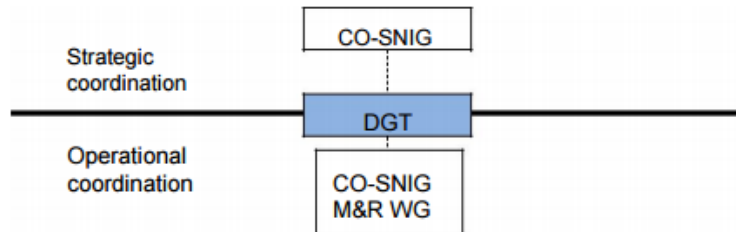
To understand INSPIRE implementation in Portugal we need to take into account three DG cycles of IGP and DGT (different dynamics, priorities and human resources allocation):

- 2010-2011 - IGP
- 2012-2014 - DGT
- 2015-2020 - DGT

## DGT, 2015 -2020



## DGT, 2012 - 2014



CO-SNIG – Council for the SNIG Strategic Coordination

CG-GTI – Coordination Group of INSPIRE national working groups (e.g Technical WG, Thematic WGs, CO-SNIG M&R WG)

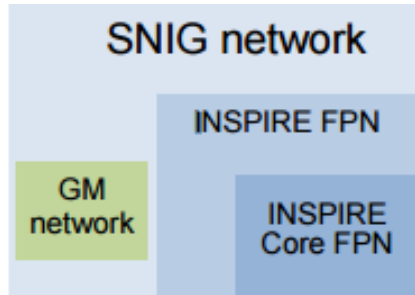
## 0.1 INSPIRE Organizational aspects in Portugal: Coordination

INSPIRE implementation in Portugal has been carried out at Central level of Public Administration

The National SDI (SNIG) does not discriminate the national, regional and local level of Public Administration

DGT wants to expand INSPIRE implementation to regional and local level of Public Administration – legal aspects have to be studied

# 0.1 INSPIRE Organizational aspects: INSPIRE-PT Networks



Number of members

## IGP, 2010

SNIG network	158
INSPIRE FPN network	85
INSPIRE CORE FPN network	29
MD Managers network	71

## DGT, 2013

SNIG network	286
INSPIRE FPN network	110
INSPIRE CORE FPN network	34
MD Managers network	207

## DGT, 2016

SNIG network	274
INSPIRE FPN network	120
INSPIRE CORE FPN network	30
MD Managers network	184
INSPIRE Working Groups	76

Stakeholder	Role in the development and maintenance of the SNIG
DGT	INSPIRE NCP SNIG coordinator Public authority producing and using SDSs and services
CO-SNIG	Strategic coordination of the SNIG Support to the NCP in relation to the INSPIRE obligations.
SNIG network	Creation, editing and publication of metadata for the SDSs and services Creation, publication and maintenance of spatial data services Description of their SDSs and services.
INSPIRE FPN	Exchange of information and experience in order to provide support for the implementation of the INSPIRE Directive.
INSPIRE Core FPN	Identification of SDSs and services on the themes of the Annexes to the Directive. Creation, editing and publication of metadata for the SDSs and services covered by the Directive Creation, publication and maintenance of spatial data services Description of their SDSs and services. Participation in monitoring of the implementation of the INSPIRE Directive Report on issues for the INSPIRE report.
Metadata manager network	Creation, editing and publication in the SNIG of metadata for the SDSs and services that the bodies represent.
M&R WG and CO-SNIG bodies	Support the NCP in the task of monitoring and reporting on the Directive.
Thematic working groups	They aim to clarify the formal responsibilities of the institutions involved and support the preparation of the IPs for the data specifications for each theme, studying their application to SDSs and services under their responsibility.
Cross-cutting working group	Aims to provide coordinated support to the authorities producing and publishing metadata and developing Geo Web Services, in accordance with the dates set in the IPs.

# 0.1 INSPIRE Organizational aspects: Thematic Working Groups (GTI-TE)

## IGP, 2010 - 2011

GT	TEMA DO ANEXO	INSTITUIÇÕES FORMALMENTE RESPONSÁVEIS
GT01	I.1 Sistemas de referência	IGP, IGEOE, IH
	I.2 Sistemas de quadriculas geográficas	IGP, IGEOE
	I.3 Toponímia	IGP, IGEOE, IH, INE, INAG
GT02	II.1 Altitude	IGP, IGEOE, IH, INAG, LNEG
	I.4 Unidades administrativas	IGP, IGEOE, INAG
	I.5 Endereços	INE, CIM, CTT
GT03	III.1 Unidades estatísticas	IGP, INE, CTT
	III.10 Distribuição da população e Demografia	INE
GT04	I.6 Prédios	IGP, DGCI
	III.2 Edifícios	IGP, IGEOE, INE, IHRU, DGCI
GT05	I.8 Hidrografia	IGP, IGEOE, IH, INAG, IPTM
	II.4 Geologia	IH, INAG, ICNB, LNEG, IPTM
GT06	I.9 Sítios protegidos	INAG, ICNB, AFN, IGESPAR, IHRU
	III.16 Regiões marinhas	INAG, ICNB, INRB
	III.17 Regiões biogeográficas	ICNB, AFN
	III.18 Habitats e biótopos	ICNB, AFN
GT07	III.19 Distribuição das espécies	ICNB, AFN
	II.2 Ocupação do solo	IGP, IVV, AFN, IFAP
	II.3 Ortoimagens	IGP, IFAP, DGADR
	III.3 Solo	AFN, DGADR, INRB
GT08	III.4 Uso do Solo	AFN, DGOTDU, DGADR
	III.9 Instalações agrícolas e aquícolas	AFN, DGPA, IFAP
	III.8 Instalações industriais e de produção	DGEG
GT09	III.20 Recursos energéticos	INAG, AFN, LNEG, DGEG
	III.21 Recursos minerais	LNEG, DGEG
	III.5 Saúde humana e segurança	INEM, DGS, INSA
	III.6 Serviços de utilidade pública e do Estado	IGP, INAG, DGOTDU, IPTM, GEP, CIM
	III.7 Instalações de monitorização do ambiente	IH, INAG, APA, ICNB, INRB, AFN
GT10	III.11 Zonas de gestão / restrição / regulamentação e unidades de referência	INAG, ICNB, APA, IVV, AFN, DGOTDU, DGEG, DGADR, ANPC
	III.12 Zonas de risco natural	IGP, INAG, AFN, ANPC, IM
	III.13 Condições atmosféricas	IM
GT10	III.14 Características geometeorológicas	INAG, AFN, IM
	III.15 Características oceanográficas	IH, IM, INRB
GT10	I.7 Redes de transporte	IGP, IGEOE, IPTM, EP, INAC, REFER, INIR, IMTT

## DGT, 2012 - 2014

Thematic working groups were practically inactive.

## DGT, 2015 - ...

According to the EU INSPIRE clusters

GTI-TE	Temas dos Anexos	Instituições
GT1 ~ Altitude, Ortoimagens, Sistemas de Referência e Quadriculas Geográficas	I.1 Sistemas de referência I.2 Sistemas de quadriculas geográficas II.1 Altitude II.3 Ortoimagens	ANMP, CIGeoE, DGT, IFAP, IH, INE, IVV, RAA, RAM
GT2 ~ Biodiversidade e Ordenamento	I.9 Sítios protegidos III.11 Zonas de gestão/restricção/regulamentação e unidades de referência III.17 Regiões biogeográficas III.19 Distribuição das espécies III.18 Habitats e biótopos	ANPC, APA, DGADR, DGEG, DGPC, DGRM, DGT, ICNF, IHRU, IVV, RAA, RAM
GT3 ~ Ciências da Terra	II.4 Geologia III.3 Solo III.12 Zonas de risco natural III.20 Recursos energéticos III.21 Recursos minerais	ANPC, APA, DGADR, DGEG, DGRM, DGT, ICNF, IH, INIAV, IPMA, LNEG, RAA, RAM
GT4 ~ Estatística	III.1 Unidades estatísticas III.5 Saúde humana e segurança III.10 Distribuição da população / Demografia	ACSS, CTT, DGS, DGT, INE, INEM, RAA, RAM
GT5 ~ Mar e Atmosfera	III.13 Condições atmosféricas III.14 Características geometeorológicas III.15 Características oceanográficas III.16 Regiões marinhas	DGRM, DGPC, ICNF, IH, INIAV, IPMA, RAA, RAM
GT6 ~ Monitorização e Observação Ambiental	III.7 Instalações de monitorização do ambiente	APA, CTT, ICNF, IH, INIAV, IPMA, RAA, RAM
GT7 ~ Ocupação e Uso do Solo	II.2 Ocupação do solo III.4 Uso do Solo	ANM, APA, DGT, ICNF, IFAP, INE, IVV, RAA, RAM
GT8 ~ Serviços de Utilidade Pública e Instalações industriais e agrícolas	III.6 Serviços de utilidade pública e do Estado III.8 Instalações industriais e de produção III.9 Instalações agrícolas e aquícolas	ACSS, ANMP, APA, CTT, DGEEC, DGEG, DGRM, DGT, GEP, ICNF, IFAP, IH, INE, RAA, RAM
GT9 ~ Topografia e Cadastro	I.3 Toponímia I.4 Unidades administrativas I.5 Endereços I.6 Prédios I.7 Redes de transporte I.8 Hidrografia III.2 Edifícios	APA, ANMP, ANAC, AT, CIGeoE, CTT, DGRM, DGT, IH, IHRU, IMT, INE, IP, IPMA, RAA, RAM

### **IGP, 2010 – 2011**

#### **Composition**

- Portuguese Environmental Agency (APA)
- the Directorate-General for Spatial Planning and Urban Development (DGOTDU);
- the Regional Directorate of Spatial Information and Regional Planning - Madeira (DRIGOT- RAM);
- the Institute for Water (INAG);
- the Geographic Institute of the Army (IGeoE);
- the Portuguese Geographic Institute (IGP), as coordinator;
- the Hydrographic Institute (IH);
- the National Institute of Statistics (INE);
- the National Energy and Geology Laboratory (LNEG);
- the Regional Department of Science, Technology and Equipment of the Azores (SRCTE - RAA);
- Other - Municipal Council of Cascais.

#### **11 meetings between May 2011 and November 2012.**

##### **Results:**

- sharing experiences, presentation and discussion of technical solutions;
- Selection of the collaborative platform for the INSPIRE WG;
- Production of the document “Guia de apoio para a configuração e publicação de Serviços de Visualização INSPIRE-PT”;
- Implementation of the catalogue service INSPIRE-PT, based on Deegree;
- Updating of the National Metadata Profile, MIG, based on the evaluation of the existing regulamentation and profiles;
- Evaluation of GeMA, the metadata editor from Açores SDI;
- Propose DGT to keep the domain igeo.pt, to allow its use for the normalization of the identifiers at the national level.

### **DGT, 2012 - 2014**

Cross-cutting working group was inactive.

### **DGT, 2015 - ...**

This group is being re-dinamized aiming to: (

- Disseminate and assess the MIG-T (INSPIRE Maintenance and Implementation Technological Group) developments;
- Analyse and update the technical specifications at the national level (metadata, SDS, identifiers) ;
- Implement the National INSPIRE-PT register, based on the free software Re3gistry, to support INSPIRE implementation;
- Study the DCAT norm application to the national geoportals, namely through the GeoDCAT extension;
- Simplify the monitoring process, namely by calculating the M&R indicators though the metadata;
- Support the thematic Working groups with technical solutions.



## 0.2 From Diagnóstico 2015 to SNIG2020

**2015**

Decreto-Lei n.º 53/90  
de 13 de Fevereiro

Creation of the National SDI

**6** years

Decreto-Lei n.º 180/2009  
de 7 de Agosto

INSPIRE transposition to PT law

**25** years



## Diagnóstico 2015



6 years of  
indicators



505 replies



18 public  
entities



+



+

**CO-SNIG**



*LIMA VISÃO PARA 2020  
DA INFRAESTRUTURA NACIONAL  
DE INFORMAÇÃO GEOGRÁFICA*

**50 participants and 10 hosts**

**44 entities from the Central, Regional and Local Public Administration, Universities, Research Centers and Private companies**

- Advantis Solutions
- Agriciência
- Ana Preto Unipessoal
- APA- Agência Portuguesa do Ambiente
- CCDR Algarve
- CCDR Centro
- CCDR LVT
- CIMAC
- CM Amadora
- CM Cascais
- CM de Águeda
- CM de Albufeira
- CM de Coimbra
- CM de Oliveira de Azeméis
- CM Vila Real
- CML
- DGEG
- DGPM
- DGRM
- DGT
- EDIA
- EMEPC
- ESRI Portugal
- Faculdade de Ciência da Univ. Lisboa

**50 participants and 10 hosts**

**44 entities from the Central, Regional and Local Public Administration, Universities, Research Centers and Private companies**

- Faculdade de Ciência da Univ. Lisboa
- Focus – bc
- Hexagon Geospatial
- IFAP
- Infraestruturas de Portugal, SA
- Instituto Hidrográfico
- Instituto Nacional de Estatística
- IPT – Instituto Politécnico de Tomar
- LNEC
- LNEG
- Município
- NOVA IMS
- OSGeo
- UC- Universidade de Coimbra – Departamento de Matemática
- UE – Universidade de Évora
- UM – Universidade do Minho
- Universidade do Porto – Faculdade de Ciências









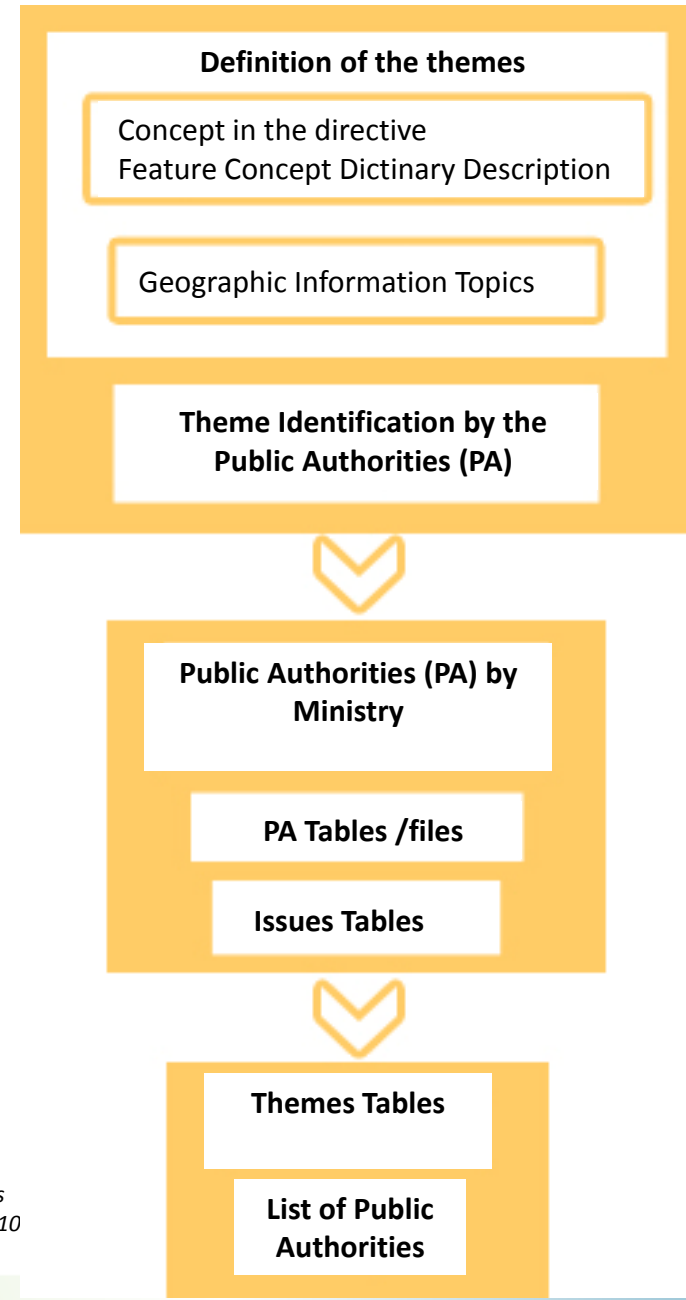


## 2. Identification of spatial data sets and priority settings – current situation

Analysis of **INSPIRE Directive Annex Themes** - themes directive definition and Feature Concept Dictionary (FCD)

Compilation and analysis of **Public Authorities legislation**, defining their mission and responsibilities on the production of spatial datasets

Production of the **List of the Public Authorities responsible for the Spatial Datasets and Services** from the INSPIRE Directive Annex Themes





## 2. Identification of spatial data sets and priority settings – current situation

### Public Authorities Table

- Information on the PA (Name, acronym, site, Ministry, Contacts);
- Legislation on mission and other issues related to data production;
- Synthesis of responsibilities;

- Identification of the Annex Themes related to those responsibilities
- Comments from the PA on the assigned responsibilities

LABORATÓRIO NACIONAL DE ENERGIA E GEOLOGIA, I. P.														
Designação	Laboratório Nacional de Energia e Geologia, I. P.													
Acrónimo	LNEG													
Site	www.ineti.pt													
Ministério	Ministério da Economia e da Inovação													
Contacto	Gabriel Luis gabriel.luis@ineti.pt +351 21 796 739479													
Legislação	Decreto-Lei n.º 208/2006, de 27 de Outubro – orgânica do Ministério da Economia e Inovação Decreto-Lei n.º 354/2007, de 29 de Outubro – orgânica do LNEG													
Síntese	<p>Decreto-Lei n.º 208/2006, de 27 de Outubro</p> <p>Artigo 20.º - Laboratório Nacional de Energia, Geologia, I. P.</p> <p>1 - O Laboratório Nacional de Energia e Geologia, abreviadamente designado por LNEG, I. P., é o laboratório do Estado que tem por missão impulsionar e realizar ações de investigação, de demonstração e transferência de conhecimento, de assistência técnica e tecnológica e de apoio laboratorial dirigidas às empresas, nos domínios da energia e geologia.</p> <p>2 - São atribuições do LNEG, I. P.:</p> <p>a) Promover a realização de estudos, de investigação, de demonstração e transferência de tecnologia, de assistência técnica e tecnológica no domínio da energia, com particular incidência nas energias renováveis e na eficiência energética, com vista à criação de novos processos e produtos e seu aperfeiçoamento;</p> <p>b) Promover, realizar e gerir estudos, cartografia sistemática e projectos nos domínios da geologia, hidrogeologia, geologia marinha e costeira, bem como promover a realização de inventariação, revelação, aproveitamento, valorização, monitorização e conservação dos recursos minerais, rochas ornamentais e águas naturais; [...]</p> <p>3 - O LNEG, I. P. integra dois departamentos dotados de autonomia científica e técnica, o Laboratório de Energia (LNE) e o Laboratório de Geologia e Minas (LGM).</p> <p>Decreto-Lei n.º 354/2007, de 29 de Outubro</p> <p>Artigo 1.º</p> <p>Natureza[...]</p> <p>4 – O LNEG, I. P., integra dois laboratórios dotados de autonomia científica e técnica, o Laboratório de Energia (LNE) e o Laboratório de Geologia e Minas (LGM). [...]</p> <p>Artigo 3.º</p> <p>Missão e atribuições</p> <p>1 – O LNEG, I. P., tem por missão impulsionar e realizar ações de investigação, de demonstração e transferência de conhecimento, de assistência técnica e tecnológica e de apoio laboratorial dirigidas às empresas, nos domínios da energia e geologia.</p> <p>2 – São atribuições do LNEG, I. P.:</p> <p>a) Assistir o Governo na concepção e implementação das políticas energética e geológica;</p> <p>b) Promover a realização de estudos, de investigação, de demonstração e transferência de tecnologia, de assistência técnica e tecnológica no domínio da energia, com particular incidência nas energias renováveis e na eficiência energética, com vista à criação de novos processos e produtos e seu aperfeiçoamento;</p> <p>c) Promover, realizar e gerir estudos, cartografia sistemática e projectos nos domínios da geologia, hidrogeologia, geologia marinha e costeira, bem como promover a realização de inventariação, revelação, aproveitamento, valorização, monitorização e conservação dos recursos minerais, rochas ornamentais e águas naturais;</p> <p>d) Assurar as funções permanentes do Estado relativamente ao conhecimento contínuo da infra-estrutura geológica do terreno nacional, com vista ao desenvolvimento sustentável do País;</p> <p>Site:</p> <ul style="list-style-type: none"> <li>- Sistema Nacional de Informação Geocientífica: <a href="http://e-geo.ineti.pt/maps.aspx">http://e-geo.ineti.pt/maps.aspx</a></li> <li>- Geo-sítios, Inventário de Sítios com Interesse Geológico: <a href="http://e-geo.ineti.pt/bds/geositos/Intro.htm">http://e-geo.ineti.pt/bds/geositos/Intro.htm</a></li> <li>- Base de Dados de Pedreiras: <a href="http://e-geo.ineti.pt/bds/pedreiras/default.aspx">http://e-geo.ineti.pt/bds/pedreiras/default.aspx</a></li> <li>- Sondagens: <a href="http://e-geo.ineti.pt/bds/sondabase/default.aspx">http://e-geo.ineti.pt/bds/sondabase/default.aspx</a></li> <li>- SIORMINP - Sistema de Informação de Ocorrências e Recursos Minerais Portugueses: <a href="http://e-geo.ineti.pt/bds/ocorrencias/default.aspx">http://e-geo.ineti.pt/bds/ocorrencias/default.aspx</a></li> <li>- Base de Dados de Pontos de Água: <a href="http://e-geo.ineti.pt/bds/hidro/pontos_agua.aspx">http://e-geo.ineti.pt/bds/hidro/pontos_agua.aspx</a></li> <li>- Cartografia digital: <a href="http://e-geo.ineti.pt/geociencias/cartografia/digitais/cartas_digitais.htm">http://e-geo.ineti.pt/geociencias/cartografia/digitais/cartas_digitais.htm</a></li> </ul>													
Anexo I	Nenhum tema identificado													
Anexo II	II.4. Geology													
Anexo III	<p>II.8. Production and industrial facilities</p> <p>II.11. Area management/restriction/ regulation zones and reporting units</p> <p>II.12. Natural risk zones</p> <p>II.15. Oceanographic geographical features ?</p> <p>II.16. Sea regions ?</p> <p>II.20. Energy resources</p> <p>II.21. Mineral resources</p>													
Comentários	<p>O LNEG integra competências desenvolvidas por departamentos e unidades orgânicas do INETI – Instituto Nacional de Engenharia, Tecnologia e Inovação, organismo extinto. Os conteúdos do site reflectem a estrutura do INETI, e nem todas as áreas funcionais apresentadas são parte integrante do LNEG.</p> <p>Temas identificados pela instituição:</p> <table border="1"> <thead> <tr> <th>Anexo</th> <th>Tema</th> <th>Função</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8. Hidrografia</td> <td>Utilizador</td> </tr> <tr> <td>1</td> <td>9. Sítios protegidos</td> <td>Produtor</td> </tr> <tr> <td>2</td> <td>4. Geologia</td> <td>Produtor</td> </tr> </tbody> </table>		Anexo	Tema	Função	1	8. Hidrografia	Utilizador	1	9. Sítios protegidos	Produtor	2	4. Geologia	Produtor
Anexo	Tema	Função												
1	8. Hidrografia	Utilizador												
1	9. Sítios protegidos	Produtor												
2	4. Geologia	Produtor												

Report “Análise dos temas dos Anexo. responsáveis pelos Conjuntos de Dado”

## 2. Identification of spatial data sets and priority settings – current situation

- Annex Theme description
- Feature Concept Dictionary
- Identification of the Geographic Information (GI) topics involved

- PA involved in the production of the thematic datasets and associated legislation
- Datasets in each PA for the theme

### Annex Themes Table

#### II.4 GEOLOGY (GEOLOGIA)

Directiva	Geology characterised according to composition and structure. Includes bedrock, aquifers and geomorphology. Geologia caracterizada de acordo com a composição e a estrutura. Inclui a base rochosa, os aquíferos e a geomorfologia.
FCD	<a href="https://inspire-registry.jrc.ec.europa.eu/registers/FCD/items/13">https://inspire-registry.jrc.ec.europa.eu/registers/FCD/items/13</a> Geological information provides basic knowledge about the physical and chemical of underground, in particular on the properties of the rocks and sediments (age, petro) and their structure. NOTE: Experts from EuroGeosurveys will provide an improved version of the Descriç
Tópicos/IG	A informação geológica fornece conhecimentos sobre a composição física e química propriedades das rochas e sedimentos e respectiva estrutura Inclui a base rochosa, os aquíferos e a geomorfologia
Instituições	DGEG ← Decreto-Lei nº 139/2007, de 27 de Abril que estabelece a orgânica da DGE IH ← Decreto-Lei n.º 134/91, de 4 de Abril que estabelece a orgânica do IH LNEG ← Decreto-Lei nº 208/2006, de 27 de Outubro que estabelece a orgânica do M Lei n.º 354/2007, de 29 de Outubro que estabelece a orgânica do LNEG INAG ← Decreto-Lei nº 135/2007, de 27 de Abril que estabelece a orgânica do INAG aprova os Estatutos do INAG
CDG	<b>DGEG</b> <ul style="list-style-type: none"> <li>- Catálogo de Recursos Geotérmicos em Portugal Continental - link para o <a href="http://geo.ineti.pt/bds/recursos_geotermicos/">geo.ineti.pt/bds/recursos_geotermicos/</a></li> <li>- Cadastro das Minas: Contratos de Prospecção e Pesquisa ; Contratos de ( <a href="http://www.dgge.pt/pagina.aspx?js=0&amp;codigono=6363640664086437A">http://www.dgge.pt/pagina.aspx?js=0&amp;codigono=6363640664086437A</a></li> </ul> <b>IH</b> <ul style="list-style-type: none"> <li>- Serviços de Geologia Marinha direccionados para a análise sedimentar di Económica Exclusiva portuguesa, compreendendo levantamentos geológico e dinâmica sedimentar.</li> <li>- Serviços de Análises laboratoriais de química e poluição</li> </ul> <b>LNEG</b> <ul style="list-style-type: none"> <li>- Geo-sítios, Inventário de Sítios com Interesse Geológico <a href="http://e-geo.ineti">http://e-geo.ineti</a></li> <li>- Base de Dados de Pedreiras <a href="http://e-geo.ineti.pt/bds/pedreiras/default.aspx">http://e-geo.ineti.pt/bds/pedreiras/default.aspx</a></li> <li>- Sondagens <a href="http://e-geo.ineti.pt/bds/sondabase/default.aspx">http://e-geo.ineti.pt/bds/sondabase/default.aspx</a></li> <li>- Sistema de Informação de Ocorrências e Recursos Minerais Portugueses <a href="http://geo.ineti.pt/bds/ocorrencias/default.aspx">geo.ineti.pt/bds/ocorrencias/default.aspx</a></li> <li>- Base de Dados de Pontos de Água <a href="http://e-geo.ineti.pt/bds/hidro/ponto">http://e-geo.ineti.pt/bds/hidro/ponto</a></li> </ul> <b>INAG</b> <ul style="list-style-type: none"> <li>- Inventário dos Sistemas Aquíferos de Portugal Continental</li> </ul>
Observações	O DGEG não se identificou como produtor deste tema O IPTM considera-se produtor deste tema

Apêndice 4.2– Fichas de Temas do Anexo II

ISSUE: National Cartographic Production

Legislation on the Issue

### Horizontal Issues Table

Apêndice 3 – Fichas de Assuntos

Assunto	<b>Produção cartográfica nacional</b>
Legislação	Decreto-Lei n.º 193/95, de 28 de Julho e alterações (incluindo a do SNIG) - estabelece os princípios e as normas a que deve obedecer a produção cartográfica no território nacional. Despacho nº 23915 (2ª série) – aprova as listagens da cartografia oficial produzida pelo Instituto Geográfico Português (IGP), Instituto Geográfico do Exército (IGoE) e Instituto Hidrográfico (IH) Decreto-Lei n.º 193/95, de 28 de Julho
Síntese	Decreto-Lei n.º 193/95, de 28 de Julho Artigo 1.º Objecto e âmbito 1—O presente diploma estabelece os princípios e as normas a que deve obedecer a produção cartográfica no território nacional. 2—O disposto no presente diploma aplica-se a toda a cartografia topográfica, temática de base topográfica e hidrográfica, com excepção da cartografia classificada das Forças Armadas [...] Artigo 2.º Produção cartográfica 1—Incumbe ao Estado: a) Assegurar, através dos organismos e serviços públicos competentes, a cobertura do território com cartografia topográfica nas escalas de 1:10 000 e inferiores e com cartografia hidrográfica nas escalas de 1:5000 e inferiores, assim como as respectivas actualizações; b) Assegurar a produção e manutenção da cartografia temática para utilização das entidades e serviços públicos legalmente competentes. 2—Compete ao Instituto Geográfico Português, adiante abreviadamente designado por IGP, e ao Instituto Hidrográfico, adiante abreviadamente designado por IH, a definição das normas e especificações técnicas de produção e reprodução cartográfica, nas respectivas áreas de competência. 3—A definição de normas e especificações técnicas de produção e reprodução cartográfica por parte do IGP é precedida obrigatoriamente de parecer a emitir pelo Instituto Geográfico do Exército no prazo máximo de 20 dias, findo o qual, sem que seja emitido, se considera favorável. 4—Para efeitos do disposto na alínea a) do n.º 1, são competentes o IGP e o Instituto Geográfico do Exército, para a cartografia topográfica, e o IH, para a cartografia hidrográfica. 5—A cartografia temática a que se refere a alínea b) do n.º 1 é obrigatoriamente produzida com base na cartografia produzida pelo IGP ou pelo Instituto Geográfico do Exército, prevista na alínea a) do mesmo preceito, ou com base em cartografia homologada nos termos definidos no artigo 15.º do presente diploma [...] Artigo 3.º Cartografia oficial 1—Entende-se por cartografia oficial, para efeitos do presente diploma, toda a cartografia produzida no âmbito do n.º 1 do artigo anterior. 2—A cartografia oficial consta de listagens aprovadas por despacho do Ministro do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional. 3—Das listagens referidas no número anterior apenas deve constar cartografia com grau de actualização adequado e respectivas áreas e escalas abrangidas. 4—Compete ao IGP assegurar a publicação das listagens referidas no presente artigo no Sistema Nacional de Informação Geográfica 5—As entidades e os serviços públicos e as entidades concessionárias apenas podem utilizar cartografia oficial inscrita no Registo Nacional de Dados Geográficos ou, na ausência desta, a cartografia homologada, igualmente inscrita no Registo Nacional de Dados Geográficos.
Anexo I	I.1. Coordinate reference systems I.2. Geographical grid systems I.3. Geographical names I.7. Transport networks I.8. Hydrography
Anexo II	II.2. Elevation
Anexo III	III.3. Buildings III.6. Utility and governmental services
Observações	

Report “Análise dos temas dos Anexos da Directiva INSPIRE e das Autoridades responsáveis pelos Conjuntos de Dados Geográficos de cada Tema”, IGP, February 2010

Annex Themes involved

## 2. Identification of spatial data sets and priority settings : obstacles/problems

The initial study on INSPIRE Directive Annex Themes and the Public Authorities that have responsibilities on the production of the spatial data sets and services within those themes **needs to be updated**.

Some Public Authorities **never reported** within the M&R annual procedure.

Some Public Authorities **do not have identified** a Focal Point for INSPIRE.

**Some other entities** might have to be involved even if they are still very apart from INSPIRE issues.

## 2. Identification of spatial data sets and priority settings – plans to improve the situation

What are your plans to identify the 'missing' data sets and to bring them online?

**1** - The GTI-TEs will compare: (1) the entities that were identified in the beginning of the implementation as having responsibilities in each annex theme, to (2) the entities that are actually reporting spatial data sets in each annex theme

This exercise will allow the identification of entities with responsibilities in each annex theme that are not reporting datasets for that theme

TEMAS	Entity A		Entity B		Entity C	
	Identified	Reported	Identified	Reported	Identified	Reported
<b>ANEXO I</b>						
Sistemas de referencia			X	X	X	X
Sistemas de Quadricula Geografica			X	X	X	X
Toponimia	X		X	X		X
Unidades Administrativas	X		X	X		
Endereços					X	X
Parcelas Cadastrais (prédios)	X		X	X	X	X
Redes de Transporte			X	X	X	X
Hidrografia	X	X	X	X	X	X
Sítios Protegidos	X				X	X
<b>ANEXO II</b>						
Altitude	X		X	X	X	X
Ocupação do Solo			X	X	X	X
Ortoimagem			X	X	X	X
Geologia	X	X			X	X
<b>ANEXO III</b>						
Unidades Estatísticas			X			X
Edifícios			X	X		X
Solo						X
Uso do Solo	X	X	X	X		X
Saúde Humana e Segurança						
Serviços de Utilidade Pública e do Estado	X	X	X	X	X	X
Instalações de monitorização do Ambiente	X	X				X
Instalações Industriais e de Produção	X	X				X
Instalações Agrícolas e Aquícolas						
Distribuição da população -demografia						
Zonas de gestão/restricção/regulamentação e						
Unidades de Referência	X	X	X			X
Zonas de Risco Natural	X	X	X	X		X
Condições Atmosféricas						
Características Geometeorológicas						X
Características Oceanográficas						X
Regiões Marinhas	X					
Regiões Biogeográficas						
Habitats e Biotopos						X
Distribuição das Espécies						X
Recursos Energéticos	X					X
Recursos Minerais						X

## 2. Identification of spatial data sets and priority settings – plans to improve the situation

What are your plans to identify the 'missing' data sets and to bring them online?

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**2** - DGT is now working on a synoptic table that will allow an inspection of the dataset that exists for each annex theme (data format, scale/pixel size, geographical area covered, restrictions on use....)

This allow the identification of some missing data sets....

## 2. Identification of spatial data sets and priority settings – plans to improve the situation

What are your plans to identify the 'missing' data sets and to bring them online?

### 3 - Datasets required for reporting

When is CION going to make the list of the priority datasets available to Member States?

The identification of the datasets for other layers of the pyramid depend on the priority list



GTI-TE – Thematic INSPIRE  
Working Groups



## 2. Identification of spatial data sets and priority settings – plans to improve the situation

What are your plans to identify the 'missing' data sets and to bring them online?

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**4** - DGT is planning to carry out a questionnaire to entities that work with geographic information to identify the datasets they need (not only to directive reporting but to everything)

*(this idea is under development)*

DGT will then identify the datasets that are not in SNIG catalog and/or being reported within INSPIRE implementation

The DGT will then interact with data producers....

#### Monitoring results: Indicators

Indicator	2009	2010	2011	2012	2013	2014	2015
<b>Metadata</b>							
MDi1: Existence of metadata	68%	94%	95%	95%	86%	89%	100%
MDi2: Conformity of metadata	54%	92%	94%	93%	57%	88%	100%
<b>Spatial Data Sets</b>							
DSi1: Geographical coverage	96%	98%	97%	97%	97%	99%	99%
DSi2: Conformity of spatial data sets	0%	0%	0%	0%	0%	1%	3%
<b>Services</b>							
NSi1: Metadata through discovery services	51%	79%	80%	80%	50%	88%	100%
NSi2: Spatial data sets through view and download services	19%	11%	11%	11%	6%	3%	9%
NSi3: Annual number of service requests	0	0	0	0	0	4472	705414
NSi4: Conformity of services	0%	0%	0%	0%	0%	0%	8%



### 3. Interoperability of spatial data sets and services – current situation

Tabela 8 – Indicadores INSPIRE distribuídos pela RPF INSPIRE Core: 2014 (maio)

Instituição (Sigla)	Nº de CDG	Existência de Metadados (MDi1)	Conformidade dos Metadados (MDi2)	Metadados em Serviços de Pesquisa (NSi1)	CDG em Serviços de Visualização e Descarregamento (NSi2)
APA	206	100%	100%	100%	37%
CTT	4	100%	100%	100%	0%
DGADR	16	63%	56%	56%	0%
DGEEC	1	100%	100%	50%	0%
DGEG	9	100%	100%	100%	0%
DGPC	62	100%	100%	100%	0%
DGS	8	0%	0%	0%	0%
DGT	80	100%	100%	100%	6%
DROTA/RAM	28	100%	100%	83%	0%
EP	2	100%	100%	100%	0%
ICNF	44	87%	63%	57%	0%
IFAP	19	100%	100%	100%	0%
IGEOE	75	100%	100%	100%	0%
IH	25	42%	42%	42%	0%
IHRU	3	100%	100%	67%	0%
INAC	3	100%	100%	100%	0%
INE	10	100%	100%	100%	0%
INIR	1	100%	100%	100%	0%
IPMA	107	100%	100%	0%	0%
IVV	4	80%	80%	80%	0%
LNEG	50	100%	100%	100%	0%
SRCTE/RAA	657	72%	6%	6%	0%

### 3. Interoperability of spatial data sets and services – current situation

#### Metadata: Geoportal INSPIRE harvesting

There is a difference between “Reported data on annual monitoring” and INSPIRE Geoportal (9/9/2015). We could not check INSPIRE geoportal data at that date. Maybe the difference is related to a problem in the harvesting process.

We are now producing a table that compares PT reported indicators and EU INSPIRE Geoportal

The INSPIRE-PT metadata harvesting is done using the SNIG catalog service available at <http://snig.dgterritorio.pt/geoportal/csw/discovery>

- At the moment, the SNIG metadata is filtered by metadata ID of the monitored datasets and services.
- We will simplify the harvesting process through the insertion of the keyword "INSPIRECORE" in the metadata of the reported spatial datasets and services.
- So, we expect no differences between monitoring data and INSPIRE Geoportal in the future.

### 3. Interoperability of spatial data sets and services – obstacles/problems

- Most critical task in terms of INSPIRE implementation.
- IR are very complex are very complex and difficult to implement.
- Insufficient human and financial resources to invest in the data harmonization tasks.
- Lack of qualified human resources – training actions required.
- There is a need of more involvement at the higher level of public administration.
- Collaboration between Public Authorities needs to be improved and better links with academia need to be established.



18 public entities

Portuguese budgetary and financial restrictions are compromising the possibility to successfully meet the deadlines to comply with data harmonization implementation rules and data specifications.

### 3. Interoperability of spatial data sets and services – plans to improve the situation



18 public entities

- Questionnaire on data harmonization – deadline: Feb 29<sup>th</sup>
- A strategic approach needs to be debated among the Public Authorities responsible for the production of datasets for each theme.
- GTI-TR and GTI-TE – study of implementing rules and technical guidelines
- Promote articulation between GTI-TE and Thematic Clusters
- DGT will organize, together with GTIs, two workshops on harmonization (June 22<sup>nd</sup> and Nov 8<sup>th</sup>)
- DGT, together with CO-SNIG, will organize an high level event on INSPRE implementation
- Creation of a Strategy for data and services harmonization (April 15<sup>th</sup>)

### Monitoring results: Indicators

Indicator	2009	2010	2011	2012	2013	2014	2015
<b>Metadata</b>							
MDi1: Existence of metadata	68%	94%	95%	95%	86%	89%	100%
MDi2: Conformity of metadata	54%	92%	94%	93%	57%	88%	100%*
<b>Spatial Data Sets</b>							
DSi1: Geographical coverage	96%	98%	97%	97%	97%	99%	99%
DSi2: Conformity of spatial data sets	0%	0%	0%	0%	0%	1%	3%
<b>Services</b>							
NSi1: Metadata through discovery services	51%	79%	80%	80%	50%	88%	100%
NSi2: Spatial data sets through view and download services	19%	11%	11%	11%	6%	3%	9%
NSi3: Annual number of service requests	0	0	0	0	0	4472	705414
NSi4: Conformity of services	0%	0%	0%	0%	0%	0%	8%

\* Using our own metadata validators

## 4. Metadata – problems/obstacles



18 public entities

- Metadata is not yet fully INSPIRE conformant - in spite the very good job that is being done by the metadata managers, there are some minor aspects that have to be integrated. Some of those aspects are new recommendations from INSPIRE (e.g. URI CRS).
- Some of the technical issues need to be studied and implemented, following MIG-T achievements – e.g. Unique Identifier.
- The foreseen new version of technical specifications will have to be transposed to metadata editors.
- SNIG harvesting into INSPIRE Geoportal needs to be improved.
- Public Authorities may not have enough human resources to work on what is needed to improve the quality of their metadata.

## 4. Metadata – plans to improve the situation



18 public entities

- GTI-TE and GTI-TR will be involved on solutions design and implementation
- Unique Identifier implementation is foreseen for 2016
- DGT will organize, together with GTIs, two workshops on metadata compliance (April 13<sup>th</sup> and Nov 8<sup>th</sup>)
- DGT, together with CO-SNIG, will organize an high level event on INSPIRE implementation
- Creation of a Document on metadata validators (April 15<sup>th</sup>)
- Simplification of the harvesting process through the insertion of the keyword "INSPIRECORE"

### Monitoring results: Indicators

Indicator	2009	2010	2011	2012	2013	2014	2015
<b>Metadata</b>							
MDi1: Existence of metadata	68%	94%	95%	95%	86%	89%	100%
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NSi3: Annual number of service requests	0	0	0	0	0	4472	705414
NSi4: Conformity of services	0%	0%	0%	0%	0%	0%	8%

\* Using our own metadata validators



## 5. Spatial data services (discovery, view and download services) – obstacles/problems



18 public entities

- Insufficient human resources.
- Lack of qualified human resources.
- There is a need of more involvement at the higher level of public administration.
- The advantage of spatial data services is not yet widely recognized by producers.
- Users still do not demand an access to data through spatial data services

## 5. Spatial data services (discovery, view and download services) – plans to improve the situation



18 public entities

- GTI-TE and GTI-TR will be involved on solutions design and implementation
- DGT will organize, together with GTIs, two workshops on spatial data services (April 13<sup>th</sup> and Nov 8<sup>th</sup>)
- DGT, together with CO-SNIG, will organize an high level event on INSPRE implementation
- Creation of a Network of Contact Points for Network Services (similar to the one we have on metadata which proved to be very important on creation of metadata)
- Creation of a Strategy for increasing spatial data services (April 15<sup>th</sup>)

## 6. Data sharing between authorities – current situation and problems/obstacles



18 public entities

- Lack of data policies in some public authorities.
- The use of individual arrangements instead of overall sharing arrangements.
- Legal barriers – e.g. protection of personal information, copyright
- Restrictions: charges and conditions for access and use
- Data transparency - e.g. lack of metadata on restrictions for access and use
- Many institutions refer that they depend on revenues from selling the data

## 6. Data sharing between authorities – plans to improve the situation

- DGT just launched a survey on data policies of public authorities – deadline: March 2<sup>nd</sup>, 2016
- DGT is finalizing a report on legislation and best practices on data sharing
- Increase the number of datasets in the open spatial data portal (iGEO)
  
- DGT, together with CO-SNIG, will define and simplified models for data-sharing agreements
- DGT, together with CO-SNIG, will produce a report on the revenues of spatial data selling by public authorities
- DGT, together with CO-SNIG, will produce guidelines for spatial data sharing within public authorities (SNIG data policy)

## 7. Discussion on funding opportunities

## 8. Transposition of INSPIRE– presentation of planning by PT based on open EU pilot

## 8. Transposition of INSPIRE– presentation of planning by PT based on open EU pilot

**EU PILOT 4703/13 / ENVI**

Transposition into the Portuguese law of the Directive 2007/2/EC of the European Parliament and the Council, of 14 March 2007, establishing an Infrastructure for Spatial Information in the European Community ("Inspire")

**Portuguese Law – Decree-Law n.º 180/2009, of 7 August**

#### Articles not transposed

- Article 5, paragraph 2, sub-paragraph e

*(e) limitations on public access and the reasons for such limitations, in accordance with Article 13.*

- Article 10, paragraph 2

*2. In order to ensure that spatial data relating to a geographical feature, the location of which spans the frontier between two or more Member States, are coherent, Member States shall, where appropriate, decide by mutual consent on the depiction and position of such common features.*

- Annexes

#### Articles transposed incorrectly

- Article 5, paragraph 2, sub-paragraphs a to d

*(a) the conformity of spatial data sets with the implementing rules provided for in Article 7(1);*

*(b) conditions applying to access to, and use of, spatial data sets and services and, where applicable, corresponding fees;*

*(c) the quality and validity of spatial data sets;*

*(d) the public authorities responsible for the establishment, management, maintenance and distribution of spatial data sets and services;*

- Article 11, paragraph 1, second part

*... Those services shall take into account relevant user requirements and shall be easy to use, available to the public and accessible via the Internet or any other appropriate means of telecommunication.*



## 8. Transposition of INSPIRE– presentation of planning by PT based on open EU pilot

**EU PILOT 4703/13 / ENVI**

In 2015 it was not possible to perform the changes indicated in the EU pilot because there were changes in DGT organic law that required a full involvement of the juridical department

DGT in 2016 will create a DL to change the DL 180/2009 in order to address these issues

We also want to increase the number of members of CO-SNIG

## 9. Conclusion and next steps



### Meeting between Commission and Member States experts on the implementation of the INSPIRE Directive

Feb 11<sup>th</sup> 2016

Following the meetings, DG ENV and the respective Member State will be asked to draw up an action plan for improving the situation.

### PT Action Plan (AP) for improving INSPIRE implementation

May 15<sup>th</sup> 2016

This AP should be defined by CO-SNIG and approved at high level by all entities belonging to INSPIRE Core Focal Point Network

### PT Action Plan for improving INSPIRE implementation



**CO-SNIG**

**INSPIRE Core  
Focal Points Network**

### Strategy still to be discussed within CO-SNIG

The Action Plan will be produced by DGT in collaboration with CO-SNIG.

The Action Plan should be approved by CO-SNIG and by all institutions with responsibilities on INSPIRE spatial data sets production (i.e. INSPIRE Core Focal Points Network)



Guiding principles  
for the  
Action Plan SNIG2020

PT Action Plan for  
improving INSPIRE  
implementation



Action Plan  
SNIG2020

