



# Erfahrungen und Ergebnisse aus der Einbindung von Web Feature Services im GS Soil Portal

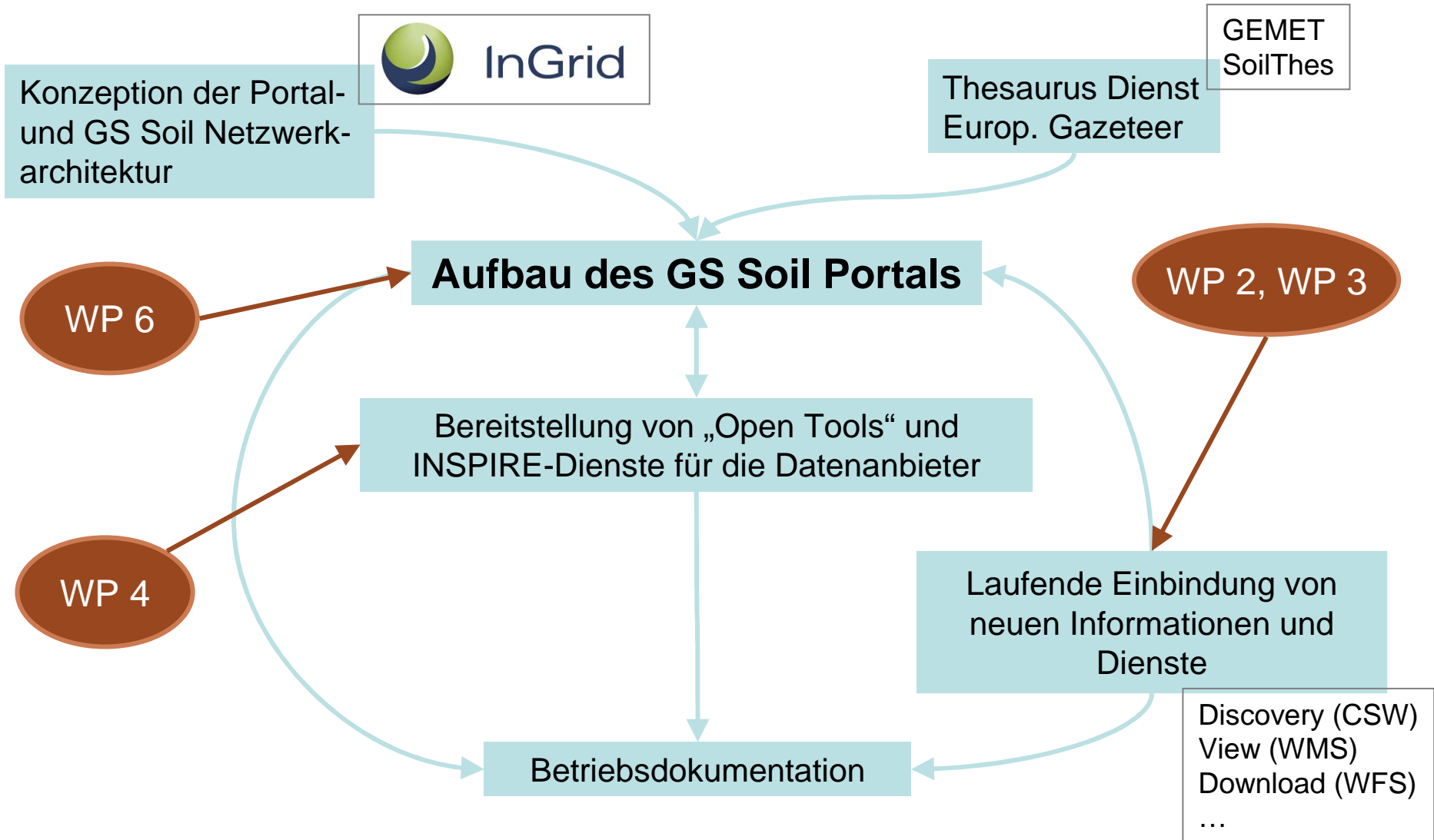
Vera Kirchenbauer



GEOSUM Workshop 2011, Hannover, 23.11.2011

## GS Soil: Beurteilung und strategische Entwicklung von INSPIRE konformen Geodaten-Diensten für europäische Bodendaten

- EU-Programm: *eContentplus*\*
- Dauer: 06/2009 – 05/2012 (3 Jahre)
- Konsortium: 34 Partner  
18 EU Mitgliedstaaten  
24 Bodendatenlieferanten
- Arbeitspakete: 1 - Projektkoordination  
2 - Anforderungsanalyse / Dateninventar  
3 - Datenmanagement und Metadaten  
4 - Harmonisierung und semantische Interoperabilität  
5 - Eingebundenes Netzwerk und Bodenportal  
6 - Evaluierung und Nachhaltigkeit  
7 - Veröffentlichung und Verbreitung





## Search


[» Advanced Search](#) | [» History](#) | [» Options](#) | [» Tips](#)

## Welcome to GS Soil Portal



The eContentplus project "Assessment and strategic development of INSPIRE compliant Geodata-Services for European Soil Data (GS Soil)" started on June 1, 2009 and will last until the end of May 2012 (36 month). The project leader is the German Environmental Information Portal (PortalU)

with additional 34 partners from 18 countries participating in the project.

The establishment of the European Soil Strategy has enforced the link between soil information and geo-information. This has generated the need for interoperable, accessible and harmonised soil datasets for the EU. The link is also addressed by the INSPIRE Directive (2007/2/EC) which pursues an EU Spatial Data Infrastructure to support environmental policies. GS Soil aims, through state-of-the-art methodologies and best practice examples, to improve harmonisation of national datasets and make them more accessible and exploitable. Therefore, it contributes to the INSPIRE implementation with specific reference to a cluster of data themes on nature conservation.

The main objective of the GS Soil is to:

- involve stakeholders and soil data providers;
- share datasets and best practices;
- improve and stimulate exploitation and
- the re-use of information on soils.

## News

<http://gssoil-portal.eu/ingrid-portal/portal/default-page.psm> RE testing 21.10.2011 13:45

## About GS Soil

### Dear visitor,

thank you for your interest in our GS SOIL portal.

Currently (June 2011), the preliminary portal version is available. We kindly ask for your understanding, that the work on the portal features is still ongoing. Please also note that we are ongoing anxious to integrate the available data of our project partners and to make our soil information available for you. Please check the progress regularly.

The final portal version and the comprehensive soil information of our GS SOIL network will be available in May 2012.

Kind regards

The **GS SOIL team**

Contact [gssoil@portal.de](mailto:gssoil@portal.de) if you need help publishing data

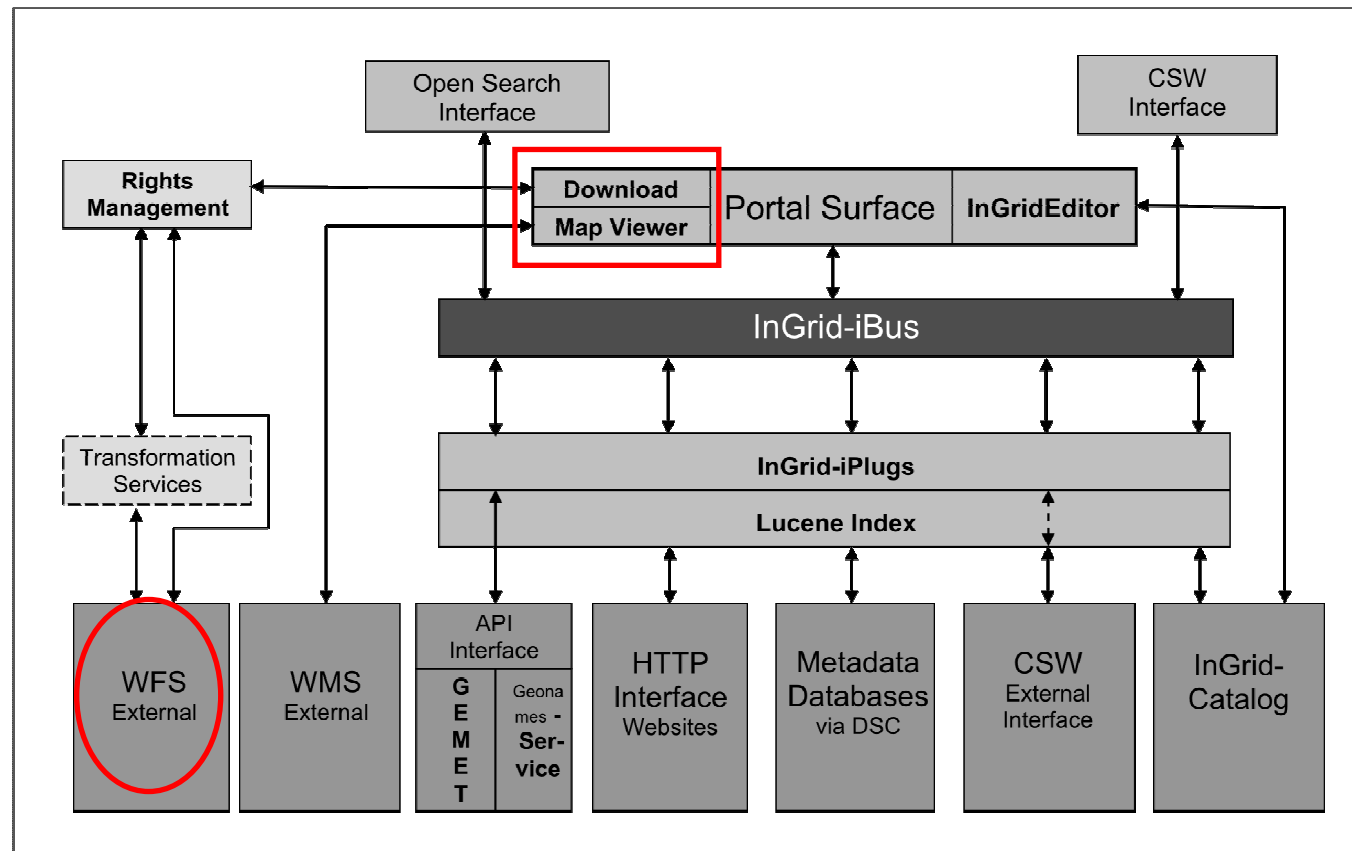
Visit the GS Soil Website  
<http://www.gssoil.eu>

## GS SOIL NETWORK

GS Soil is an eContentplus project. The different data provider out of the GS Soil Network offer soil information in GS Soil Portal.

[» GS Soil Network](#)

## Architektur des GS Soil Portals:



- 1. Version des WFS Download Moduls (Erweiterung des Moduls GazetteerWFS):

Maps

Save map

Legend

Active Services

Topics

Partner

Metadatasearch

WFS Search

Soil Usage Capacity (Pt)

Spatial filter is set.

Soil usage capacity (Pt):


Codus

Ok new

Search results

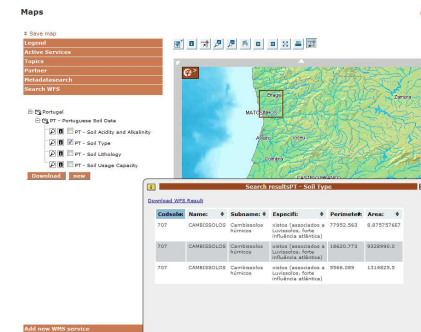
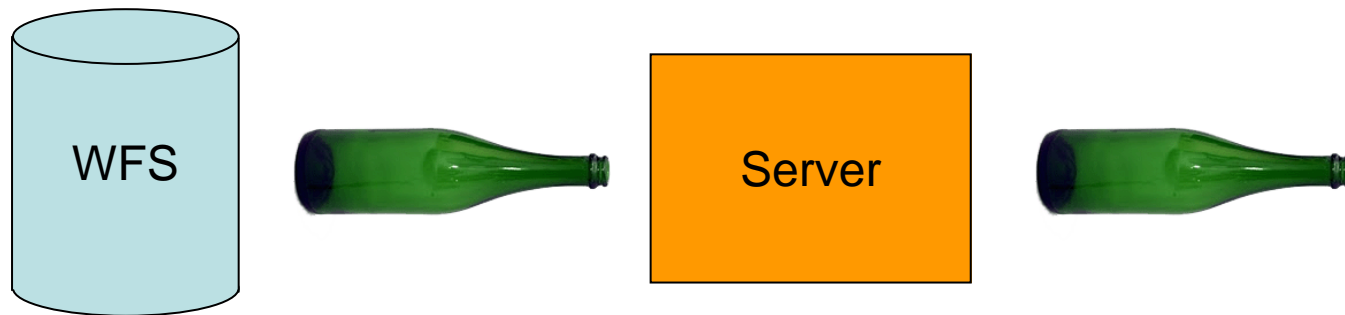
Download WFS Result

Classification:	Utiliz:	Class:	Codus	Area:	Perimete#:
I e II-SUL E NORTE	Salinas e Sapais	undefined	15	1.94101488E8	317041.25
I e II-SUL E NORTE	Áreas Sociais	undefined	16	7.7848968E7	187501.063
II-NORTE DO RIO TEJO	Agrícola	Classe A	9	1.1795595E7	43901.816
II-NORTE DO RIO TEJO	Complexos	Classes A+F	13	1680282.25	5792.958
II-NORTE DO RIO TEJO	Complexos	Classes A+F	13	1803472.375	7193.166



- Erkenntnisse:
  - Beschränkung auf Dienste der OGC WFS Version 1.0.0
  - Probleme beim Herunterladen von großen Dateien

- Download von großen GML-Dateien?
  - An welcher Stelle liegt der „Flaschenhals“ und welche Schlüsse wurden daraus gezogen.

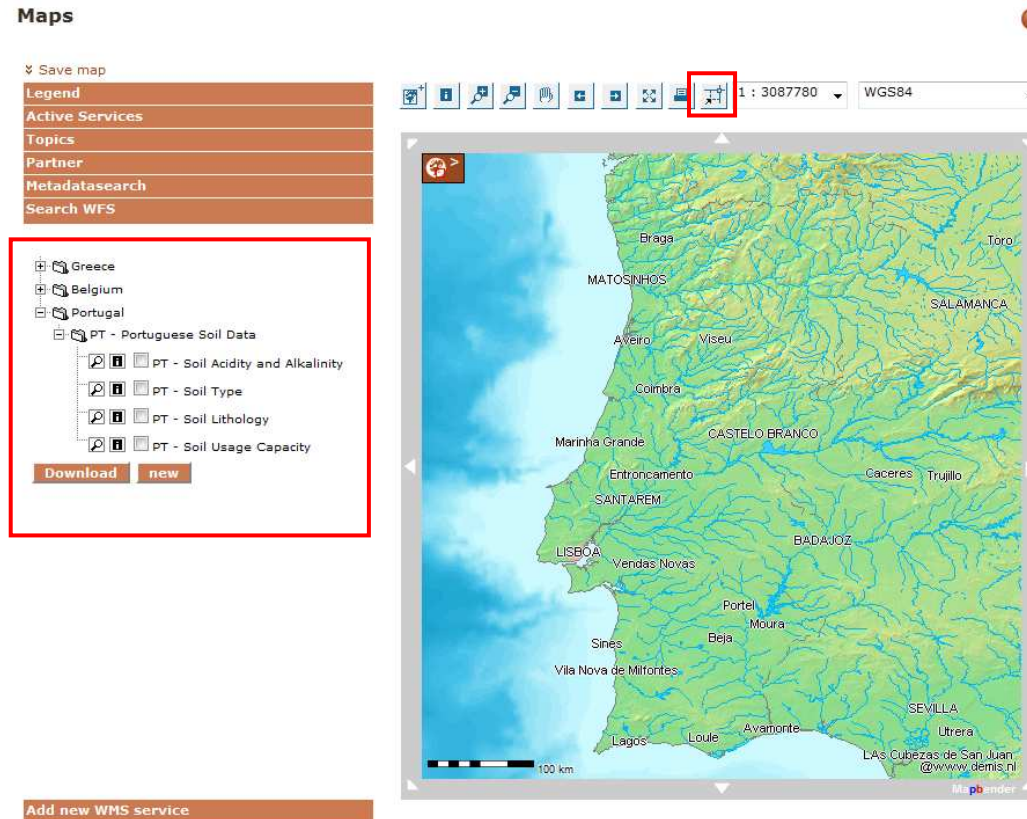


- Umsetzung der gewonnen Erkenntnisse in einer neuen Version des Moduls „WFS-Suche“
  - Beschränkung der maximal ladbaren Datenmenge
  - Mehrstufige Ergebnisdarstellung

- Grundlage der Analyse: WFS aus Portugal mit 4 Datenlayern, deren Größe von 1 MB bis 37 MB variiert
- Anpassung der Parameter `memory_limit` und `max_execution_time` in der PHP Konfiguration:
  - Erfolgreicher Download der kleineren Layer mit dem Browser
  - Alle Daten wurden vollständig auf dem Portalserver gespeichert
  - Abbruch des Downloads bei 24 MB mittels Absturz des Browsers
- Ergebnis: Beschränkung der maximal herunterladbaren Datenmenge

## Einbindung und Anpassung des Moduls „WFS-Suche“ zum Download von XML-Daten mittels WFS im Kartenviewer:

- Nutzung derselben Struktur wie bei WMS
- Datenauswahl über einen räumlichen Filter (Button „Datenauswahl“ in der Werkzeugleiste)



The screenshot displays a web-based map viewer interface. On the left, a sidebar titled "Maps" contains a menu with options: "Save map", "Legend", "Active Services", "Topics", "Partner", "Metadatasearch", and "Search WFS". Below this menu, a tree view shows a hierarchical structure of data layers, with "PT - Portuguese Soil Data" expanded to show sub-layers: "PT - Soil Acidity and Alkalinity", "PT - Soil Type", "PT - Soil Lithology", and "PT - Soil Usage Capacity". A red box highlights this tree view, and below it are "Download" and "new" buttons.

At the top right of the map area, a toolbar contains various navigation icons, with a red box highlighting a specific icon (likely the "Data Selection" button mentioned in the text). To the right of the toolbar, the scale is set to "1 : 3087780" and the coordinate system is "WGS84".

The main map area shows a topographic map of Portugal and surrounding regions, with various cities and regions labeled, including Braga, Aveiro, Coimbra, Lisboa, and Sevilla. A scale bar at the bottom left indicates 100 km.

At the bottom of the interface, there is a button labeled "Add new WMS service".

## Ergebnisdarstellung:

- Darstellung der Ergebnisse als Tabelle in einem Popup mit Link zum Herunterladen: bis 8 MB
- Das Herunterladen von Daten wurde auf 16 MB begrenzt
- Über 16 MB: kein Download

Maps

Save map

Legend

Active Services

Topics

Partner

Metadatasearch

Search WFS

Portugal

PT - Portuguese Soil Data


PT - Soil Acidity and Alkalinity

PT - Soil Type

PT - Soil Lithology

PT - Soil Usage Capacity

Download new



**Search resultsPT - Soil Type**

Download WFS Result

Codsolo#	Name:	Subname:	Especifi:	Perimete#:	Area:
707	CAMBISSOLOS	Cambissolos húmicos	xistos (associados a Luvisolos, forte influência atlântica)	77952.563	8.8757576E7
707	CAMBISSOLOS	Cambissolos húmicos	xistos (associados a Luvisolos, forte influência atlântica)	18620.773	9328990.0
707	CAMBISSOLOS	Cambissolos húmicos	xistos (associados a Luvisolos, forte influência atlântica)	5566.089	1314825.5

Add new WMS service

Maps

Save map

Legend

Active Services

Topics

Partner

Metadatasearch

Search WFS

Greece

Belgium

Portugal

PT - Portuguese Soil Data


PT - Soil Acidity and Alkalinity

PT - Soil Type

PT - Soil Lithology

PT - Soil Usage Capacity

Download new



**Search resultsPT - Soil Usage Capacity**

Result of the WFS is too large, please constrict your search.  
No results.

Add new WMS service

- Der Browser ist der „Flaschenhals“ auf dessen Seite kein Eingriff getätigt werden kann
- Einschränkung der maximal ladbaren Datenmenge
- Bei großen Datenmengen (>16 MB) werden die Wartezeiten für den Download sehr lang. Daher ist der Weg über das Portal für große Datenmengen nicht geeignet.



Danke für Ihre Aufmerksamkeit  
Bitte besuchen Sie uns:

Web: <http://gssoil-portal.eu/>  
[www.gssoil.eu](http://www.gssoil.eu)

e-mail: [gssoil@portalu.de](mailto:gssoil@portalu.de)