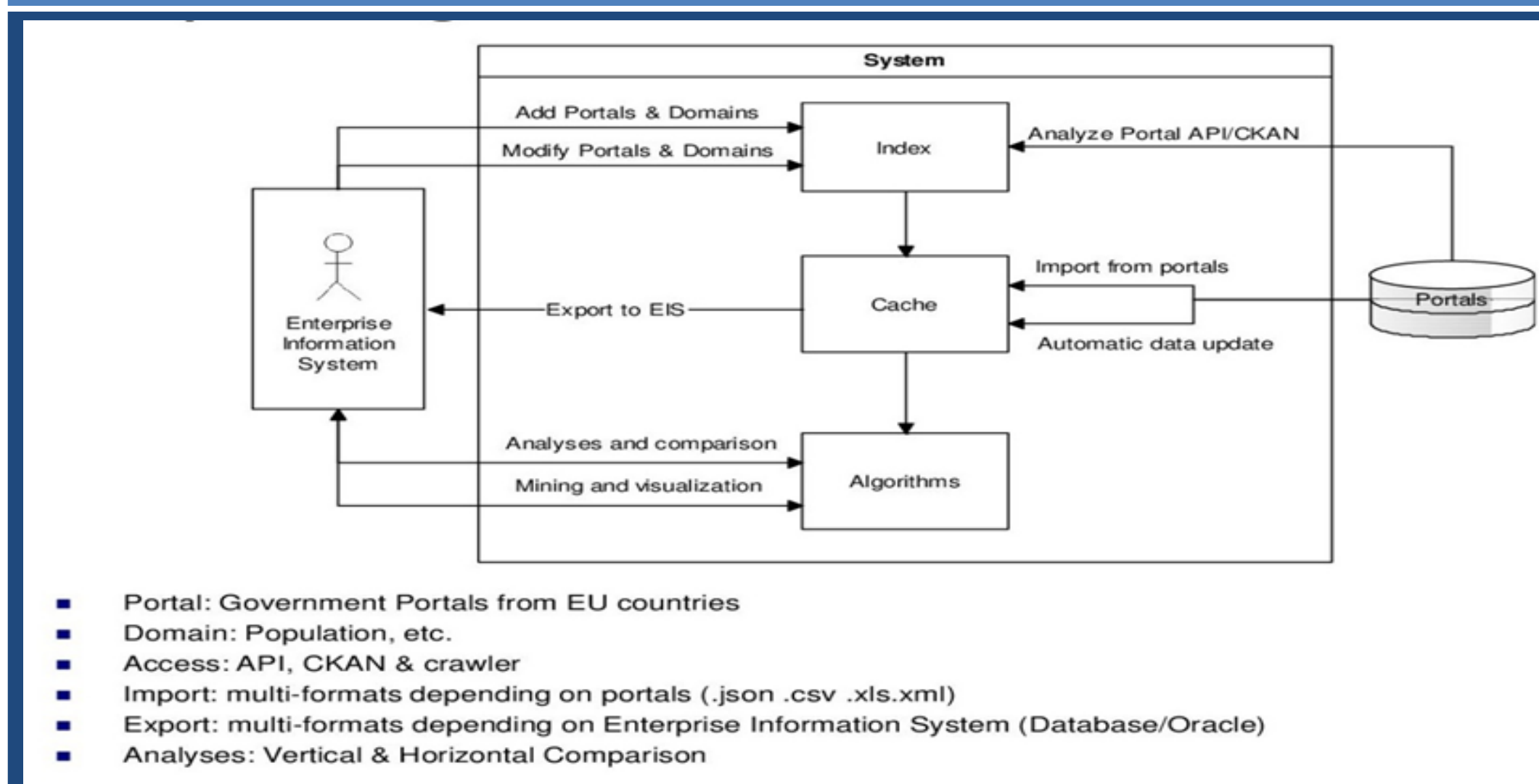# Exploiting Data From Govt. Data Portals

### Compare Portals, Download & Export Data to EIS, Analysis and Visualise Data

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**DATA** Exploiting Data from Government Data Portals

## Introduction

The aim of this lab was to identify and compare a number of EU Government data portals. This included exporting data from these portals and importing it into an Enterprise System. A comparative analysis was then led on this data.

## System Architecture



- Portal: Government Portals from EU countries
- Domain: Population, etc.
- Access: API, CKAN & crawler
- Import: multi-formats depending on portals (.json .csv .xls.xml)
- Export: multi-formats depending on Enterprise Information System (Database/Oracle)
- Analyses: Vertical & Horizontal Comparison

**Govt. Data Portals** The Government is releasing public data to make its processes more transparent and to help people to understand how government works and how policies are made and to make easier for people to make decisions and suggestions about government policies based on detailed information and hear more about the Government's Transparency agenda from the Government. **UK, Germany** and **France** data portals was our pilot data portals from EU and **Population** as pilot data set domain.

| | UK | Germany | France |
|---|---|---|---|
| **Website** | www.data.gov.uk | www.govdata.de | www.data.gouv.fr |
| **Data Access** | Data Set , Map Search, Data Request | API, Combining Search Terms, Specific Fields Search, Fuzzy Search | Manual Download |
| **API** | CKAN | SCKAN, Liferay | EtaLab |
| **Data Provision** | CKAN | Manual: Web Forms, Automated: SKAN API, JSON Dump, CSW | EtaLab |
| **Licensing** | Open Gov. License | Open GL | Open GL |
| **Data Usage** | Free and Commercial under Open GL | Free and Non Commercial | Free and Non Commercial |
| **Data Formats** | XLS, CSV, HTML | XLS, CSV, HTML | XLS, CSV, HTML |

## Issues in Data Portals to Access Data

- ❖ **No. Multi Lingual Data Portals**
- ❖ **No Single and Easy Data Access Point**
- ❖ **Non Availability of Open Machine Readable Data Set Formats**
- ❖ **Heterogeneity of Available API for Each Portal**

## Data Analysis and Visualization

This tool helps the user not only to analyze and visualize data per Portal but also compare data between the portals both in Graphical as well as in tabular forms.

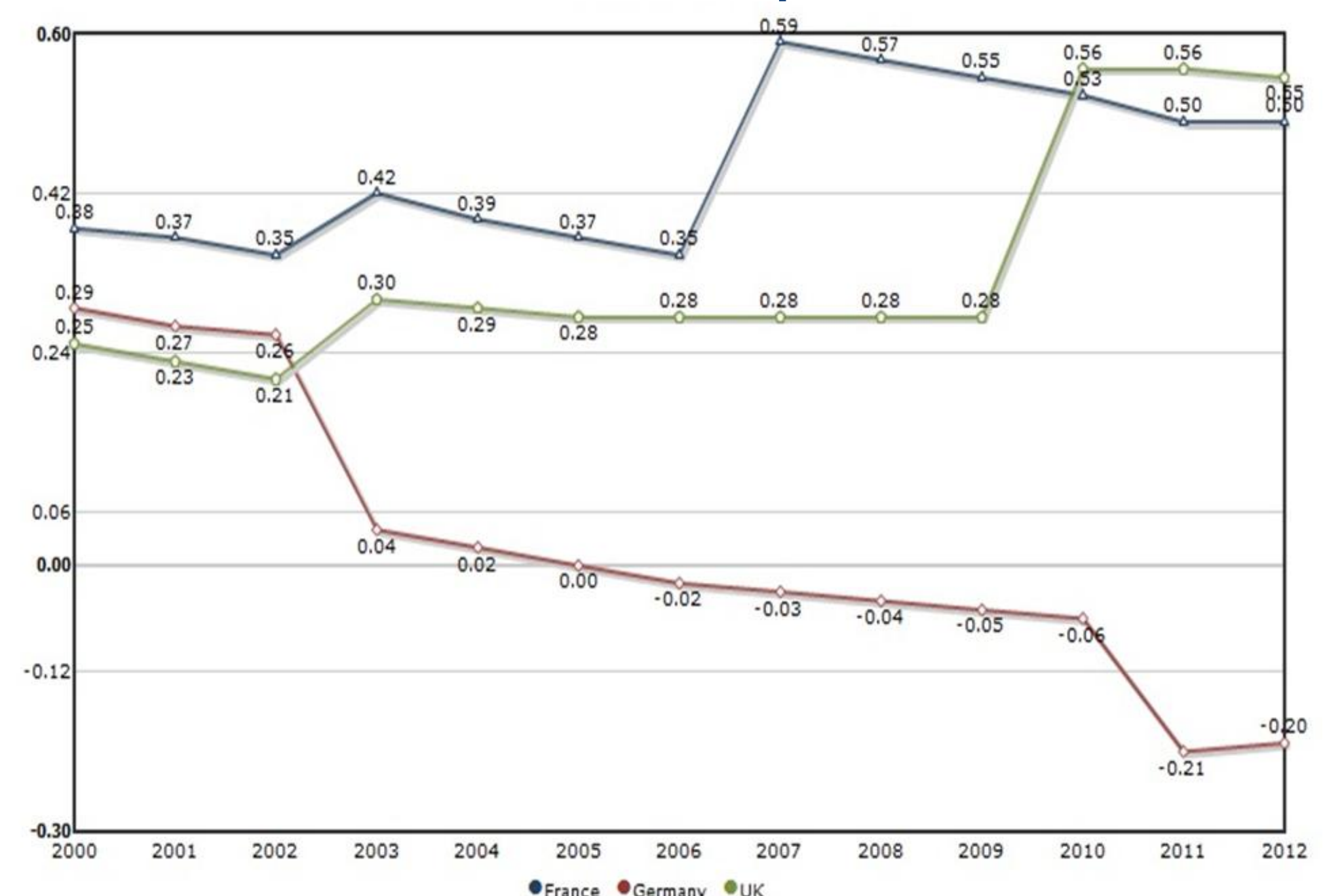**Population:** The total number of persons inhabiting a country
**Population Density:** # of people /kilometer Sqr. (Unit Area)
**Growth Rate:** The average annual % change in Population
**Birth Rate:** Birth/1000 Population
**Death Rate:** Death/1000 Population

### Growth Rate Comparison



## Future Work and Recommendations

- ❖ **Multilingual Data download and Comparison Support**
- ❖ **Single and Easy Data Access Point**
- ❖ **Availability of Open Machine Readable Data set formats like RDF , JSON Etc.**
- ❖ **Homogeneous API for Data Access**
- ❖ **Multi Format ,Multi Lingual and Platform Independent Data Export to EIS and Data Visualization Tool**

### \<Virtual Machine Description\>

**Hostname: Windows-ExpGovDataGroupF**

**Software Installed on EIS3**
Visual Studio.net 2010: MSSQL 2008,ASP.Net, .Net Framework 4.5, IIS, EXDataExcel2EIS, Data Analysis and Visualization 1.0
**Code Access:** https://github.com/EIS-Bonn/MA-INF3232
Lab/tree/master/SomSem2014/Group%20F%20(GovData_Attard)

**Local Access:**
OS User: EIS-User
Password: GovData

**Remote Access:**
Partner ID: 892802647
Password: s24cd1

**EIS** Enterprise Information Systems

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