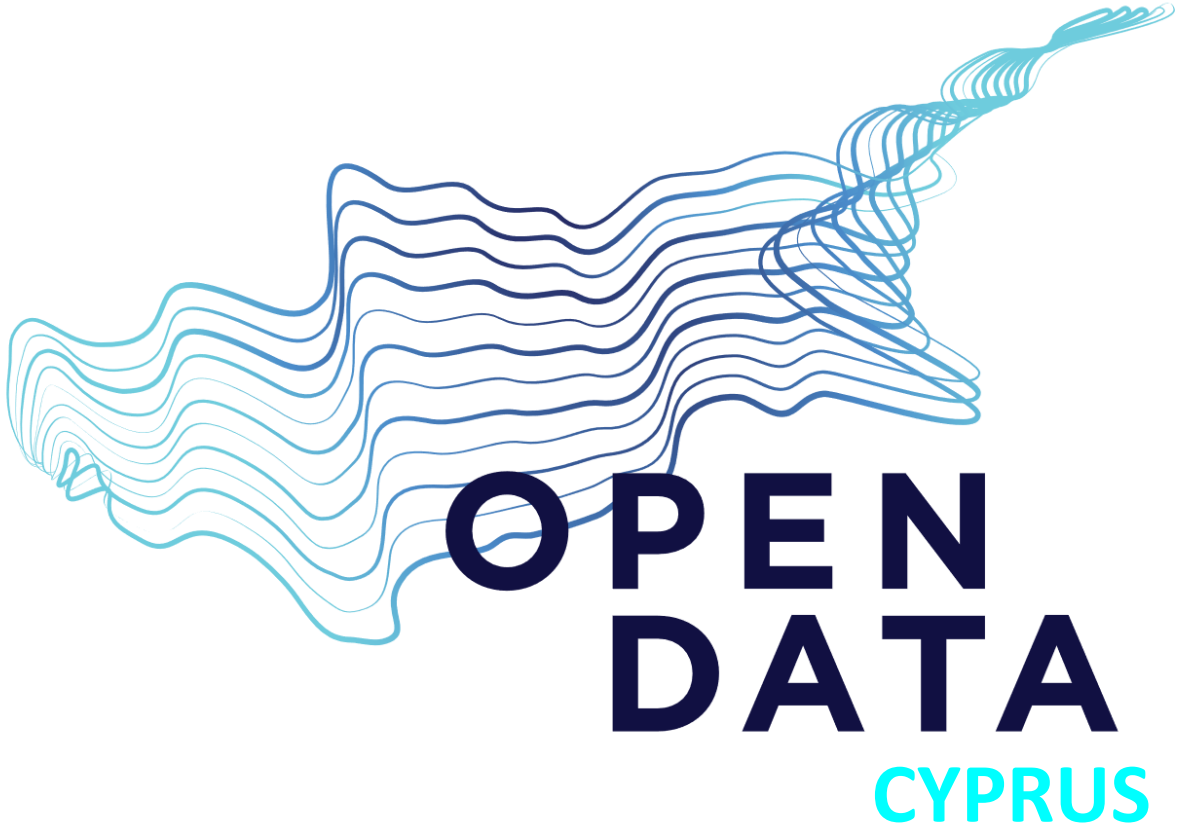
Open Data in Cyprus

The National Open Data Portal

Dimitris Michail (PAPD)
Christos Rodosthenous (OUC)

Lisbon, 27th September 2018



data.gov.cy

The Republic of Cyprus

- Population: 840,000
- Independent since 1960
- EU member since 2004
- Open Data Awareness: Medium
- First PSI re-use Law: 2006
- Current law: voted in Dec. 2015
- National Open Data Portal re-launched in 2018 (dkan)

The Cyprus PSI Team

Dimitris Michail
(PAPD)

Mantalena Tsoukka
(PAPD)

Christos Rodosthenous
(OUC)

Michalis Epiphaniou
(OUC)

Main Challenges and Advantages of a Small Country

Main Challenges / Barriers

- Limited Resources
  - human
  - financial
- Low Demand
  - small population
  - small local market
  - few opportunities for commercial use
- Very small or no ecosystem around open data
- Absence of Local Initiatives / Portals
- Absence of comprehensive FOI Law (Cyprus) → coming into effect in 2020

Main Advantages

- Centralized Government System
  - ease of communication across government
  - relatively easy to form networks
- *Small Population*
  → easier to reach / inform
- *Large number of universities (8) compared to population*
- *Mainly Services oriented economy → open to initiatives that enhance business environment*

Open Data in Cyprus

2006

PSI Directive (2003/98/EC)

transposed to the "Re-use of public sector information Law N. 132(I)/2006"

2011

Socioeconomic Study

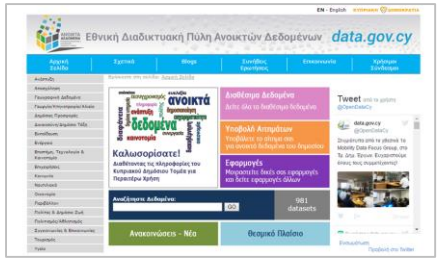
PAPD commissions Deloitte Cyprus to study the potential impact of PSI re-use in Cyprus and develop a road map for the practical implementation of the PSI Directive. The results of the study formed the basis for the 2012-2016 National Action Plan launched the following year.

2012

National Action Plan 2012-2016

2014

Launch the 1st edition of National OD Portal



2015

New National PSI Law

Revision of the National PSI Law in line with the revised PSI Directive

CY PSI Project

The project funded by the European Commission's Structural Reform Support Service (SRSS) to assist the PSBs in implementing the revised directive 2013/37/EU and promote public sector information reuse to the public and private/ business sector in Cyprus.

2016

June 2016

Open Data Forum

July 2016

Workshops for the public sector

September 2016

1st Open Data Hackathon in Cyprus

2017

National Action Plan 2017-2021

- Legislation
- **Infrastructure (portal)**
- Provision of Training to PSBs
- Promotion of re-use

May 2018 Revamped National OD portal launch

2018

September 2018

2nd Open Data Hackathon in Cyprus

Developing the New Open Data Portal

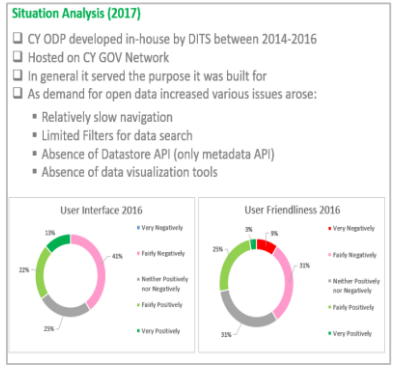
March 2017 — **Situation Analysis**

June 2017 — **Identification of Users' Requirements**

September 2017 — **Partnership with OUC formed**

October 2017 — **Design based on OS Software Finalised**

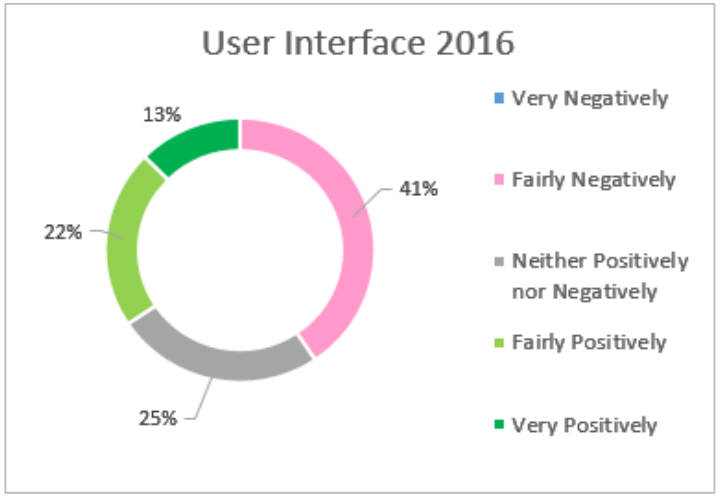
January 2018 — **Implementation**

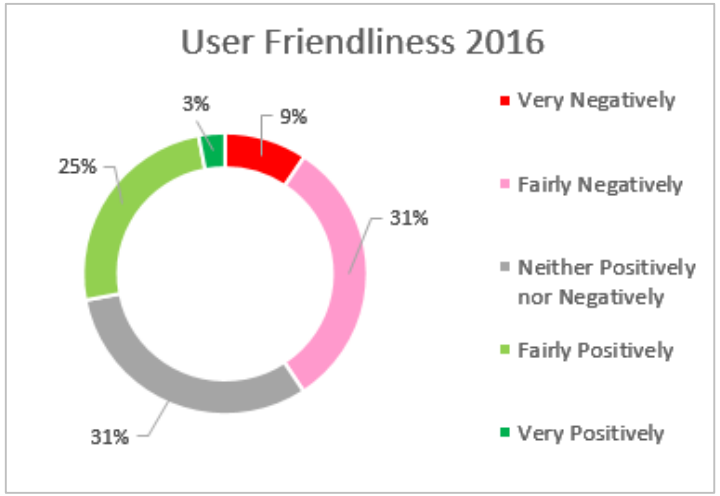


Situation Analysis
www.data.gov.cy

Situation Analysis (2017)

- ❑ CY NODP developed in-house by DITS between 2014-2016
- ❑ Hosted on CY GOV Network
- ❑ In general it served the purpose it was built for
- ❑ As demand for open data increased various issues arose:
  - Relatively slow navigation
  - Limited Filters for data search
  - Absence of Datastore API (only metadata API)
  - Absence of data visualization tools





Identification of User Requirements

Improvements Infrastructure

- ❑ Network speed
- ❑ Access from everywhere
- ❑ Flexibility Infrastructure
- ❑ Extendibility
- ❑ Scaling

Improvements Functionality

- ❑ Accessibility
- ❑ Visualizations
- ❑ Publish Workflow Process
- ❑ APIs
- ❑ Supported metadata schema

Improvements Training/Monitoring

- ❑ Workshops
- ❑ Webinars
- ❑ Surveys

Partnership with the OUC

The Open University of Cyprus

- ❑ Public University
- ❑ Distance Learning
- ❑ State-of-the-art eLearning Platform

- ❑ Support FOSS
- ❑ Open Technologies
- ❑ Access to Academic Network
- ❑ Advanced IT Infrastructure

- ❑ September 2017
- ❑ Memorandum of Understanding

OPEN UNIVERSITY OF CYPRUS
www.ouc.ac.cy

Searching for a suitable solution

Selection criteria:

- ❑ Meet the requirements
- ❑ License-free
- ❑ Promote openness
- ❑ Successful deployments
- ❑ Technologies that can be supported by the team

Why DKAN

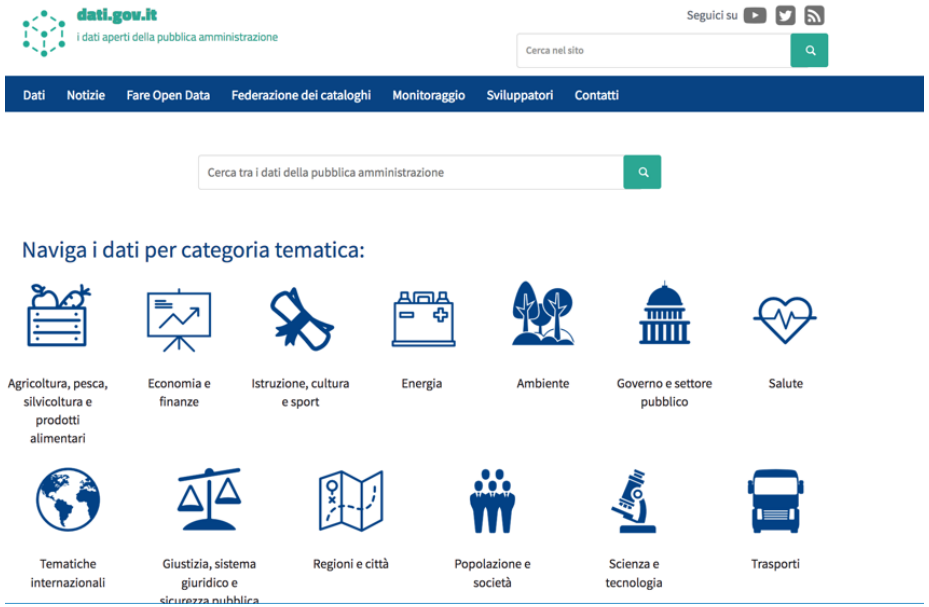
- Feature-rich
- Opensource - GNU General Public License v2.0

- Based on a popular CMS (Drupal)
- Deployed in many Countries and Large Organizations
- Technologies that can be supported by the team
  - Support team expertise
- Readymade API infrastructure
- Visualizations
- Modular architecture

New

DKAN Installations

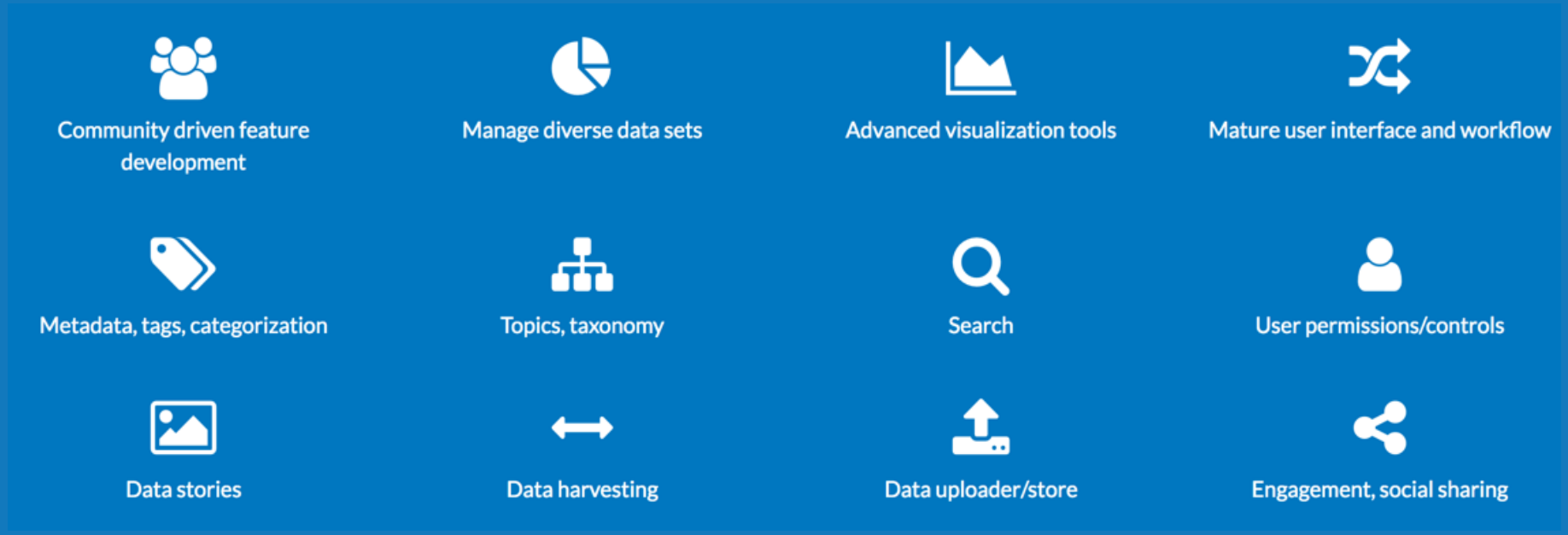
>92 documented worldwide installations



Source: http://docs.getdkan.com/en/latest/introduction/dkan-sites.html

DKAN Open Data Platform-Features

DKAN is a community-driven, free and open source open data platform that gives organizations and individuals ultimate freedom to publish and consume structured information.



DKAN Open Data Platform-Support

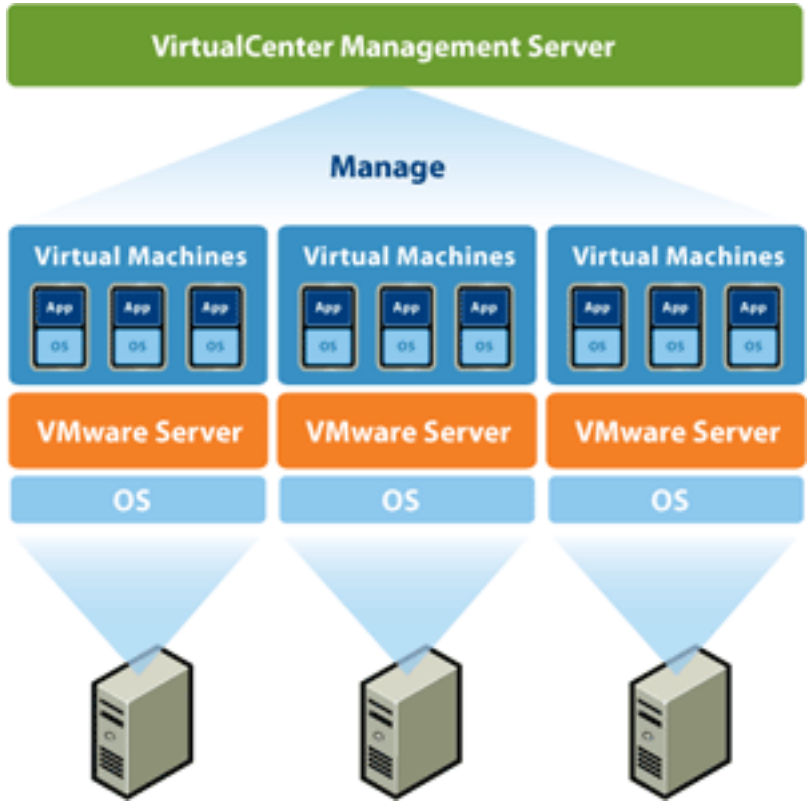
Community

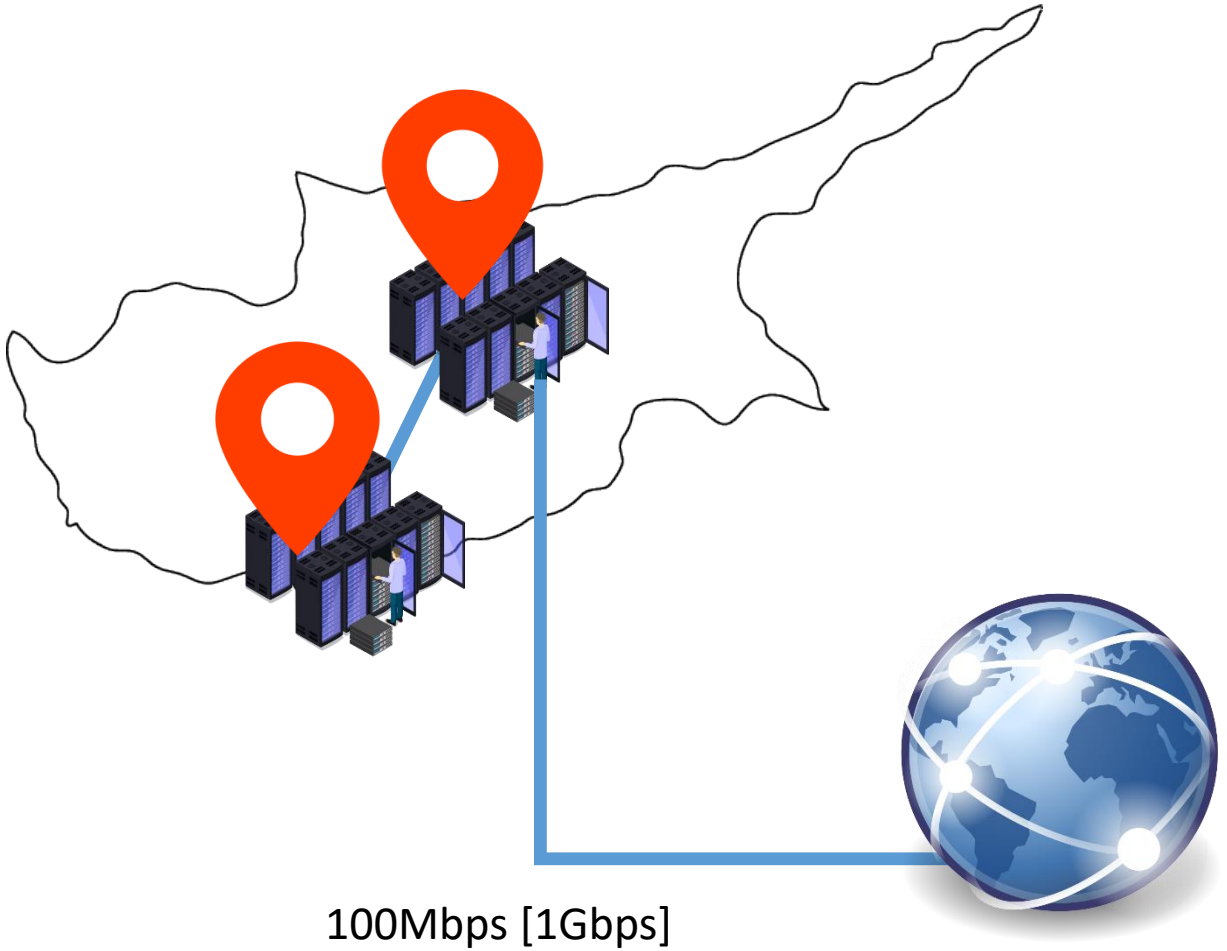
slack

CivicActions

GitHub

The OUC Infrastructure



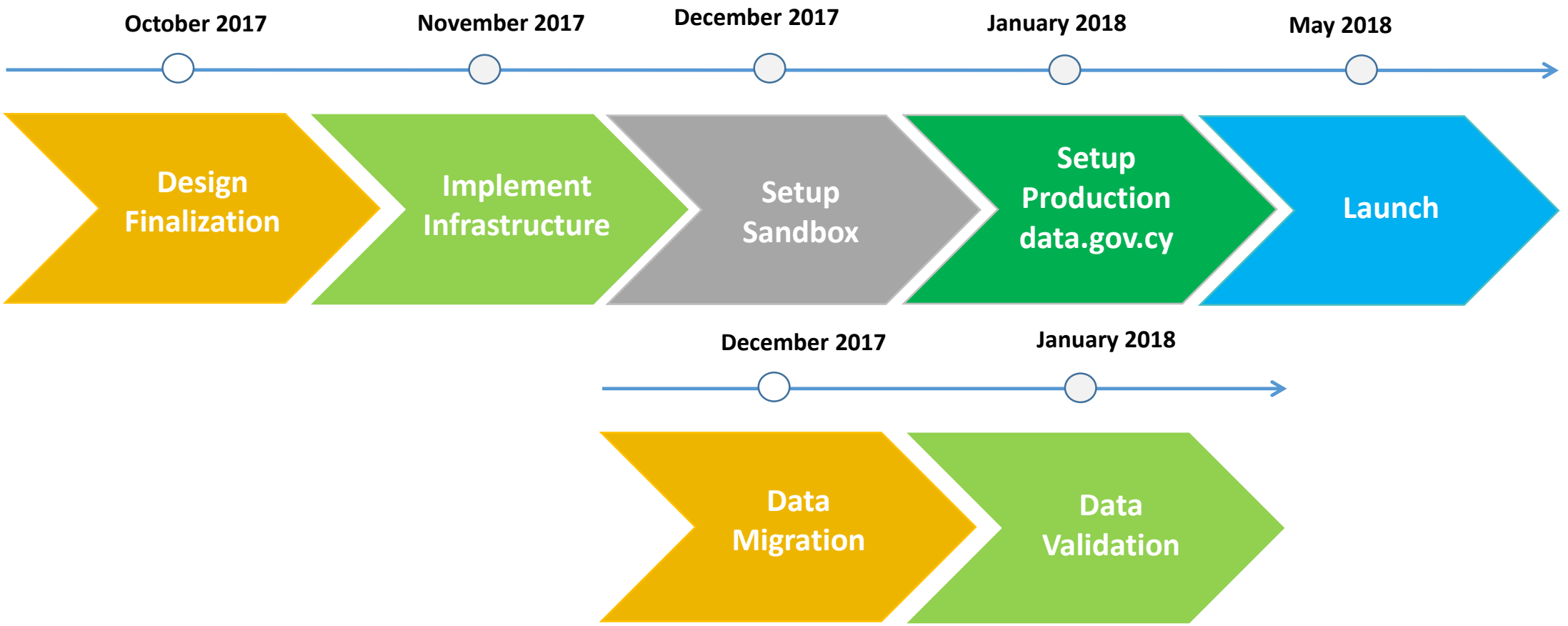


100Mbps [1Gbps]
CYNET Academic Network / GEANT

Current deployment state:

- ❑ DKAN 1.15.3
- ❑ Drupal 7.59
- ❑ Ubuntu 16.04 LTS
- ❑ Apache 2.4
- ❑ MariaDB
- ❑ PHP 7

The Cyprus Portal Development Process



Data

Migration of Data and Open Formats

Carried out by the PSI Team (not an automated process)

- Assessment of all published datasets
  - Approve / Discard
  - Organize (Merged to one or Split to many)
  - Checks for Metadata Completeness

1350 → 700 datasets

- Format Transformation - Compatibility with *Technical Framework*
  - Machine Readable
  - Open Formats

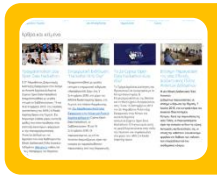
CSV instead of **XLS**, **PDF**, **DOC**

480 datasets

- Identification / Preparation & Publication of New Datasets

+300 datasets

The Cyprus National Open Data Portal



Frontpage

- Dataset Topics
- Information

Dataset

- Visualization
- Search

APIs

- Datastore
- Other

Backend

- Administrative
- Publish Workflow

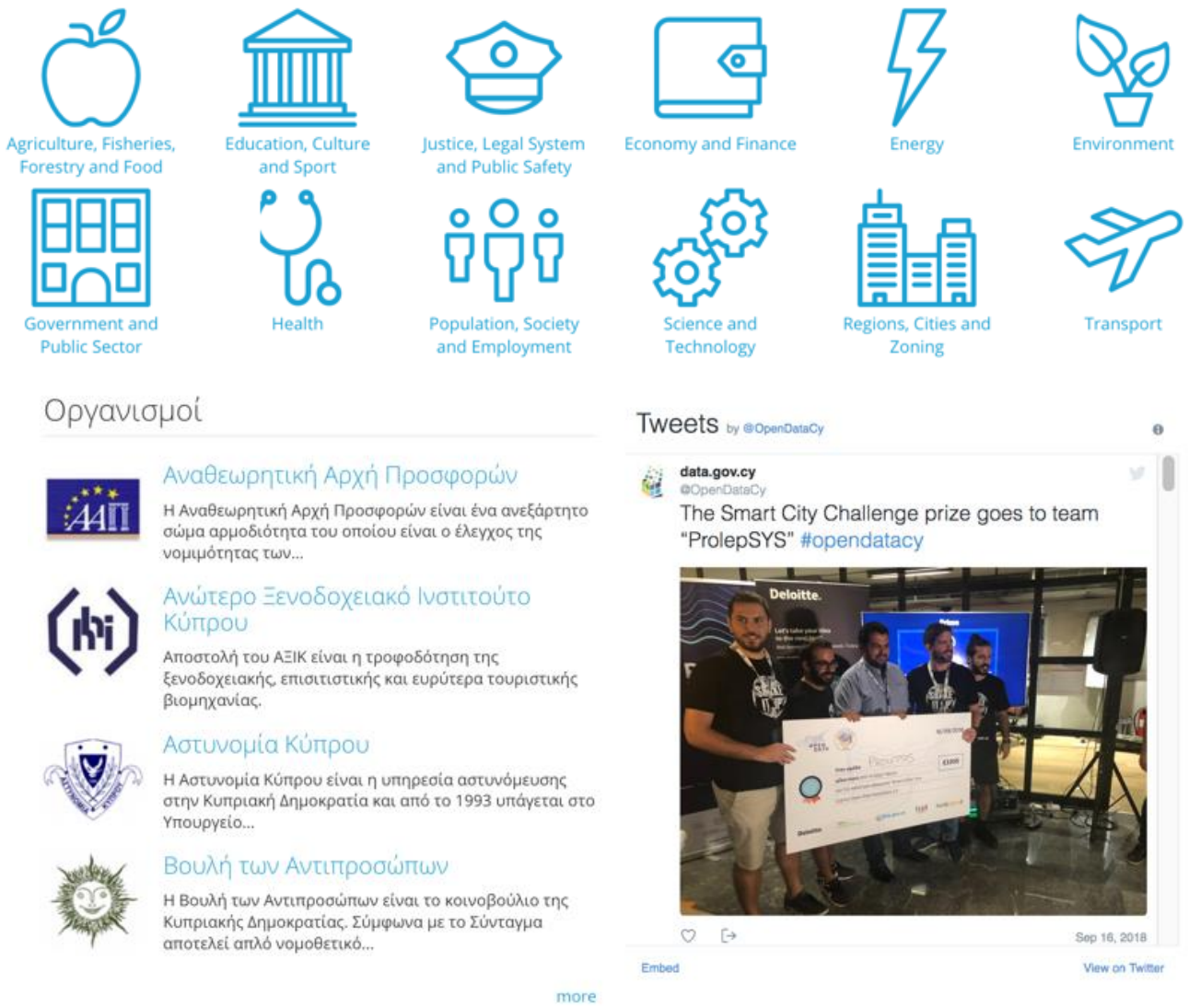
Support

- Documentation
- Training material

The Cyprus National Open Data Portal - FrontPage

- List of Topics (12)
- Datastories
- News Feed and social media

- Language Selection
- Direct links training and support



The Cyprus National Open Data Portal - Datasets

- ❑ Datasets [1041]
- ❑ From 87 Public Sector Organizations
- ❑ Resources [2691]
  - ❑ Majority CSV

- ❑ Machine-readable
  - JSON
  - XML

Δίκτυο Αποχετεύσεων Λεμεσού-Αμαθούντας (INSPIRE)

Συμβούλιο Αποχετεύσεων Λεμεσού – Αμαθούντας

Κυβέρνηση και Δημόσιος Τομέας

Υπηρεσίες διαθεσης δεδομένων που προέρχονται από το Συμβούλιο Αποχετεύσεων Λεμεσού Αμαθούντας τα οποία αφορούν: 1. Connection pipe 2. Node 3. Pipe 4. Pump station Η διαδικασία λήψης δεδομένων υλοποιείται μέσω πακέτων αρχείων "GML". Τα αρχεία...

html xml gml esri rest wms json SOAP pdf

Άδειες Διαμονής (σε Ισχύ κατά τις 31/12 του έτους) σε Υπηκόους Τρίτων Χωρών ανά Λόγο Παραχώρησης, Φύλο, Ηλικία και Ιθαγένεια

Τμήμα Αρχείου Πληθυσμού και Μετανάστευσης

Πληθυσμός, Κοινωνία και Απασχόληση

Αδειες Διαμονής Υπηκόων Τρίτων Χωρών που βρίσκονταν σε ισχύ κατά την 31 Δεκεμβρίου κάθε έτους ανά λόγο παραχώρησης, φύλο, ηλικία και ιθαγένεια. Τα δεδομένα συλλέγονται από το Τμήμα Αρχείου Πληθυσμού και Μετανάστευσης στη βάση του άρθρου 6 του...

3x csv

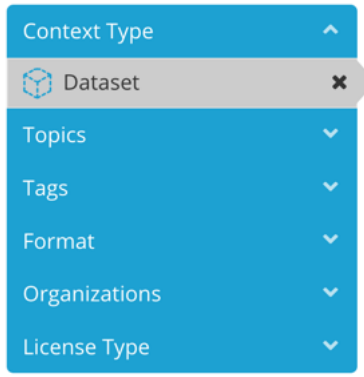
Datasets

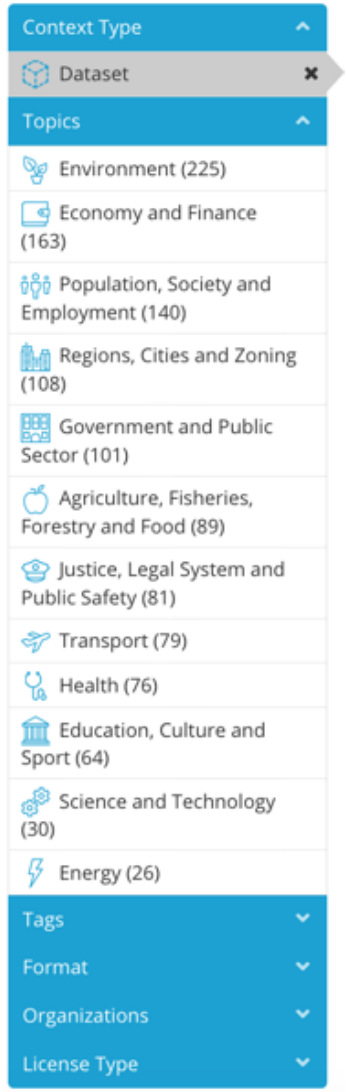
Organizing and searching datasets

search

Filter data per:

- Topic
- Organization
- Format
- Tag
- License Type





data.gov.cy

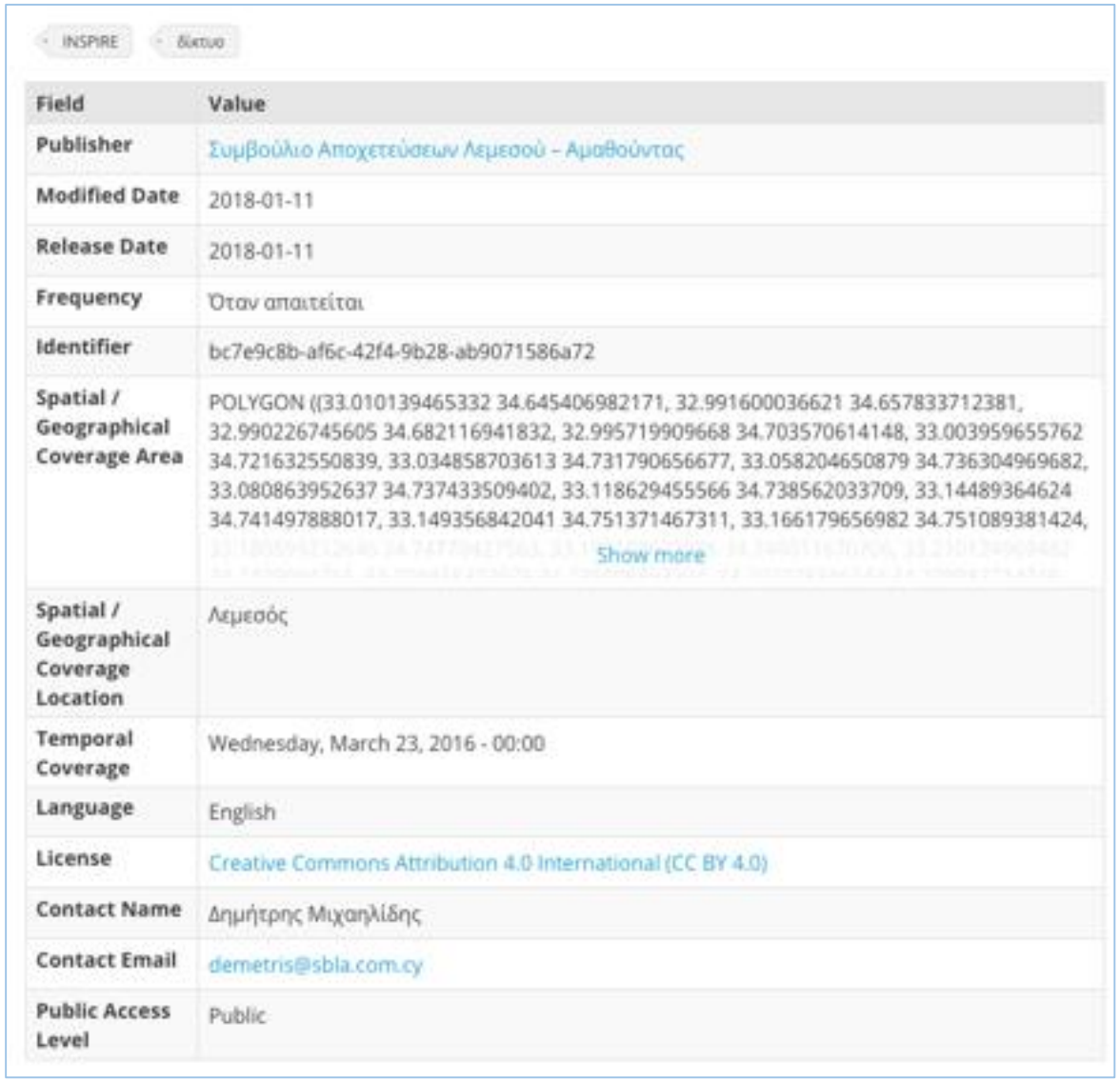
Datasets

Dataset Metadata

DCAT-AP

Machine-readable

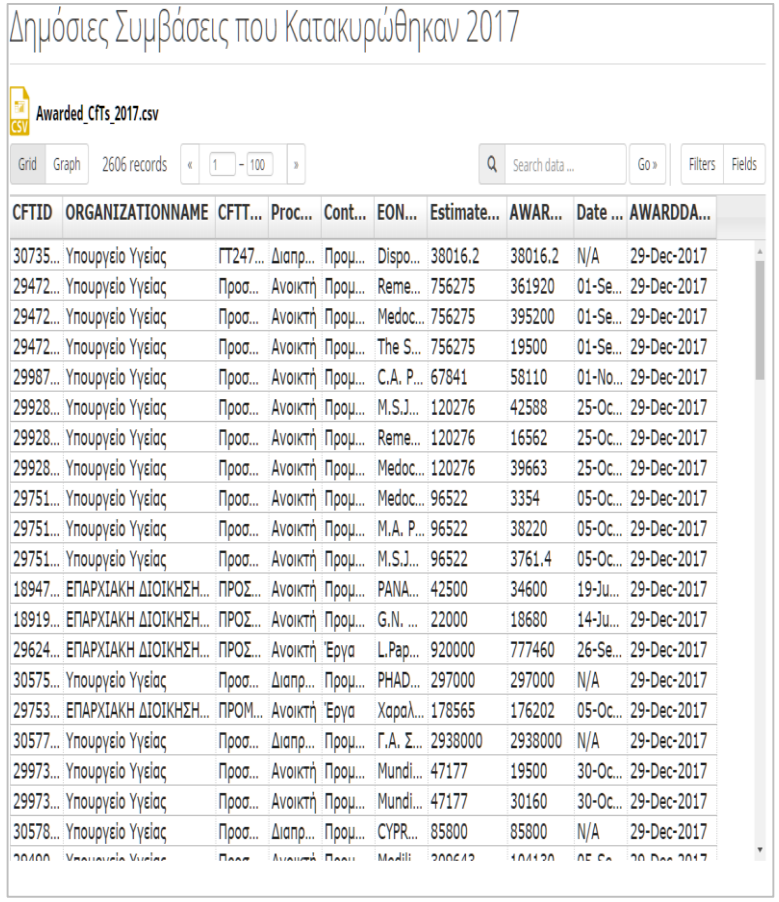
- JSON
- RDF



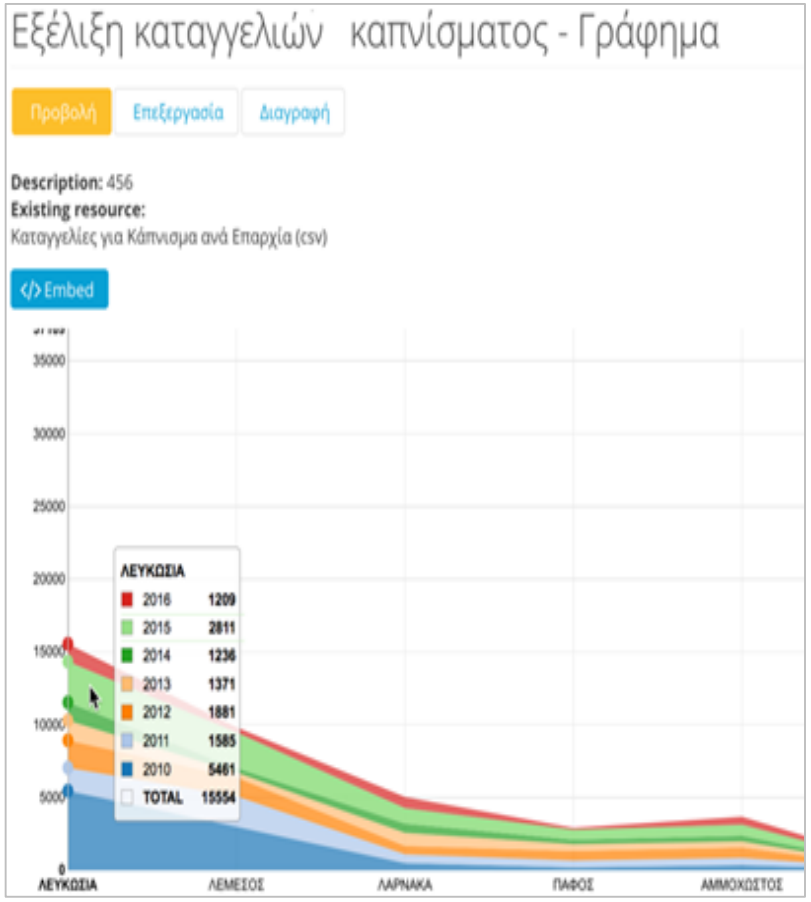
Datasets

Visualizing Data Using the Portal Interface

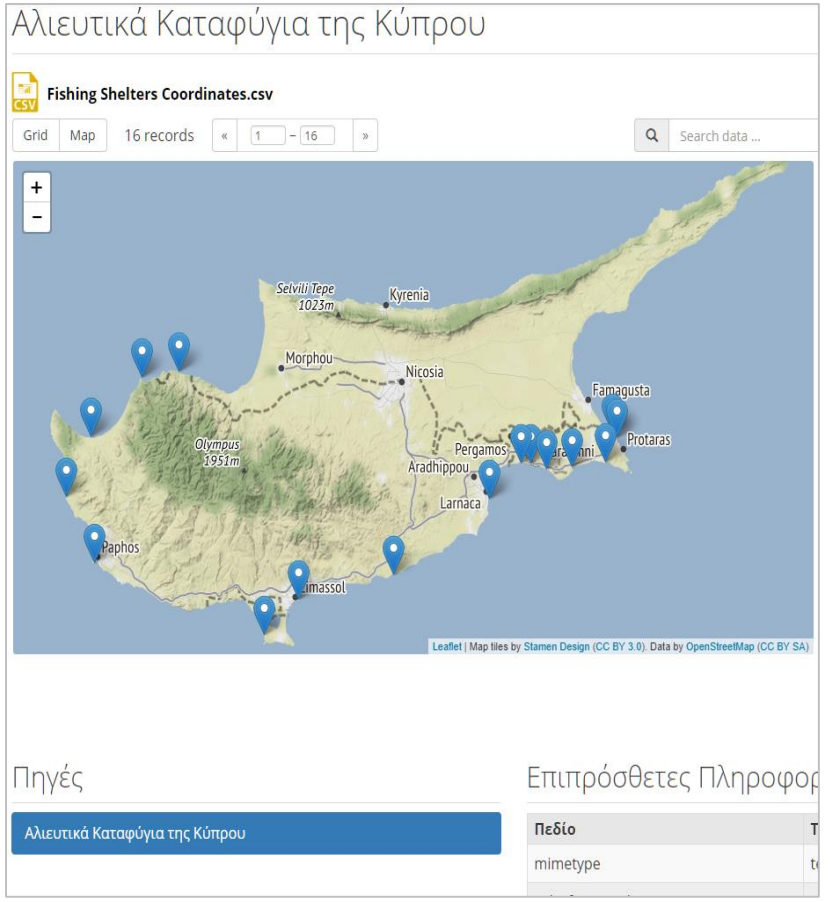
Grid format



Graph format



Map format



Datasets

Share datasets and visualizations in Datastories

Social Networks

- Twitter
- LinkedIn
- Reddit
- Google+
- Facebook

Δήμος Λευκωσίας, ο πρώτος δήμος που θέτει τα δεδομένα του στη διάθεση των πολιτών

Προβολή | Επεξεργασία | Ανίχνευση | Customize display

Ο Δήμος Λευκωσίας σε συνεργασία με την Ομάδα Προώθησης της Περαιτέρω Χρήσης των Πληροφοριών του Δημόσιου Τομέα, του Τμήματος Δημόσιας Διοίκησης και Προσωπικού, διαθέτει από σήμερα πέραν των 30 συνόλων δεδομένων για περαιτέρω χρήση, μέσω της Εθνικής Διαδικτυακής Πύλης Ανοικτών Δεδομένων. Με την κίνηση αυτή ο Δήμος Λευκωσίας καθίσταται ο πρώτος Δήμος παγκύπρια, ο οποίος ανοίγει τα δεδομένα του για περαιτέρω χρήση, και κάνει ένα αποφασιστικό βήμα για να καταστήσει την Λευκωσία "smart city". Αξίζει να σημειωθεί ότι η διάθεση των δεδομένων αυτών αποτελεί την Α΄Φάση του σχεδιασμού, ενώ αναμένεται στους αμέσως επόμενους μήνες να αποδεσμεύονται σταδιακά περισσότερα σύνολα δεδομένων από τον Δήμο, τα οποία θα διατίθενται τόσο μέσω του www.data.gov.cy, όσο και μέσω της ιστοσελίδας του Δήμου. Όλα τα σύνολα δεδομένων που αποδεσμεύτηκαν από τον Δήμο, διατίθενται μέσω υπηρεσιών διάθεσης δεδομένων (rss), σε μορφή XML και δεν υπόκεινται σε οποιεσδήποτε χρεώσεις. Τα δεδομένα τα οποία είναι προσβάσιμα την υποσελίδα του Δήμου Λευκωσίας στην διαδικτυακή Πύλη περιλαμβάνουν μεταξύ άλλων σημεία ενδιαφέροντς (POI) όπως αξιοθέατα, μουσεία, θέατρα, πινακοθήκες, κλπ, πλατείες, πάρκα, καθώς και δεδομένα που αφορούν στην τρέχουσα διαθεσιμότητα σε χώρους στάθμευσης στον δήμο αλλά και στις επερχόμενες εκδηλώσεις.

APIs

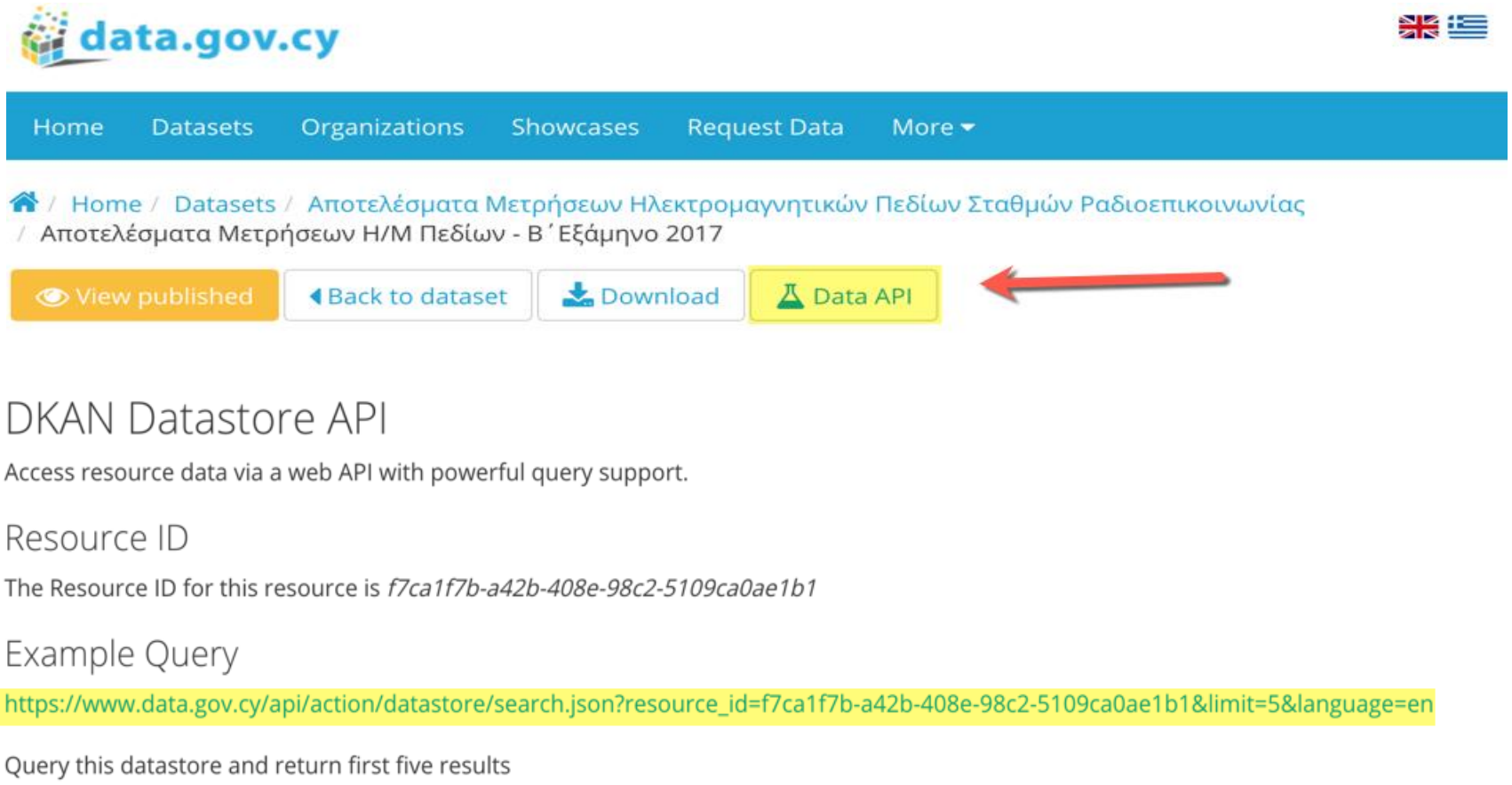
Access to Data and Metadata using APIs

The data.gov.cy provides access to the portal data and metadata using four (4) APIs:

- ✓ **Datastore API:** The DKAN Datastore houses any CSV files that have been uploaded and then imported into the Datastore and provides an endpoint to access them
- ✓ **CKAN API:** Harvest and index the Portal from other CKAN-based portals (CKAN harvester)
- ✓ **Open Data APIs:** Two Open Data Standards APIs: *DCAT-AP* and *Project Open Data*
- ✓ **Dataset REST API:** Access all Portal content nodes

APIs

Datastore API - Endpoint



APIs

Datastore API - Parameters

Parameters

•**resource_id** (*mixed*) – id (string) or ids (array) of the resource(s) to be searched against.
•**filters** (*mixed*) – array or string of matching conditions to select
•**q** (*string*) – fulltext search
•**offset** (*int*) – offset this number of rows
•**limit** (*int*) – maximum number of rows to return
•**fields** (*array or comma separated string*) – fields to return (default: all fields in original order)
•**sort** (*string*) – comma separated field names with ordering
•**join** (*array*) – array of fields to join from multiple tables
•**group_by** (*array*) – array of fields to group by

Aggregation functions

•**sum** (*string*) – field to compute the sum
•**avg** (*string*) – field to compute the average
•**min** (*string*) – field to compute the maximum
•**max** (*string*) – field to compute the minimum
•**std** (*string*) – field to compute the standard deviation
•**variance** (*string*) – field to compute the variance

Source: https://docs.getdkan.com/en/latest/apis/datastore-api.html

APIs

Datastore API - Example

https://www.data.gov.cy/api/action/datastore/search.json?resource_id=b0de1b05-88e7-4350-96d0-ad1266bf2b35&limit=5&language=en


```
result:
  fields:
    0:
      id:   "ORGANISATION_NAME"
      type: "text"
    1:
      id:   "REGISTRATION_NO"
      type: "int"
    2:
      id:   "ORGANISATION_TYPE"
      type: "text"
    3:
      id:   "ORGANISATION_SUB_TYPE"
      type: "varchar"
    4:
      id:   "NAME_STATUS"
      type: "text"
    5:
      id:   "REGISTRATION_DATE"
      type: "text"
    6:
      id:   "ORGANISATION_STATUS"
      type: "text"
    7:
      id:   "ORGANISATION_STATUS_DATE"
      type: "text"
    8:
      id:   "ADDRESS_SEQ_NO"
      type: "int"
```

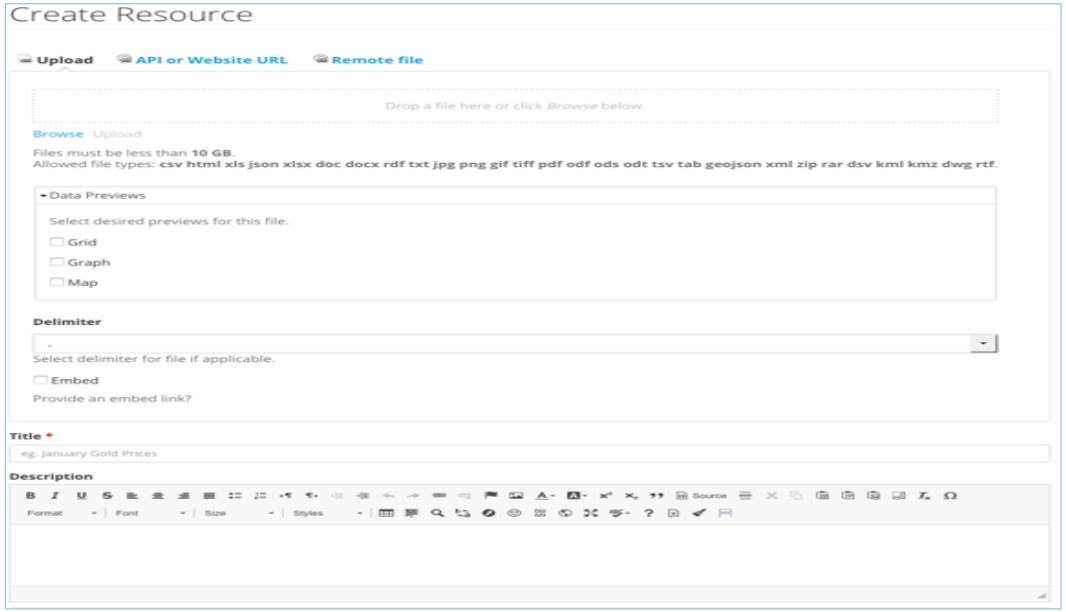
```
records:
  0:
    ORGANISATION_NAME:        "CYPRUS MINES CORPORATION"
    REGISTRATION_NO:          "1"
    ORGANISATION_TYPE:        "Αλλοδαπή Εταιρεία"
    ORGANISATION_SUB_TYPE:    null
    NAME_STATUS:              "Τελευταίο Όνομα"
    REGISTRATION_DATE:        "6/20/1923"
    ORGANISATION_STATUS:      "Διαγραμμένη"
    ORGANISATION_STATUS_DATE: "8/16/1974"
    ADDRESS_SEQ_NO:           null
  1:
    ORGANISATION_NAME:        "OTTOMAN BANK"
    REGISTRATION_NO:          "6"
    ORGANISATION_TYPE:        "Αλλοδαπή Εταιρεία"
    ORGANISATION_SUB_TYPE:    null
    NAME_STATUS:              "Τελευταίο Όνομα"
    REGISTRATION_DATE:        "7/27/1923"
    ORGANISATION_STATUS:      "Διαγραμμένη"
    ORGANISATION_STATUS_DATE: "8/21/1985"
    ADDRESS_SEQ_NO:           null
```

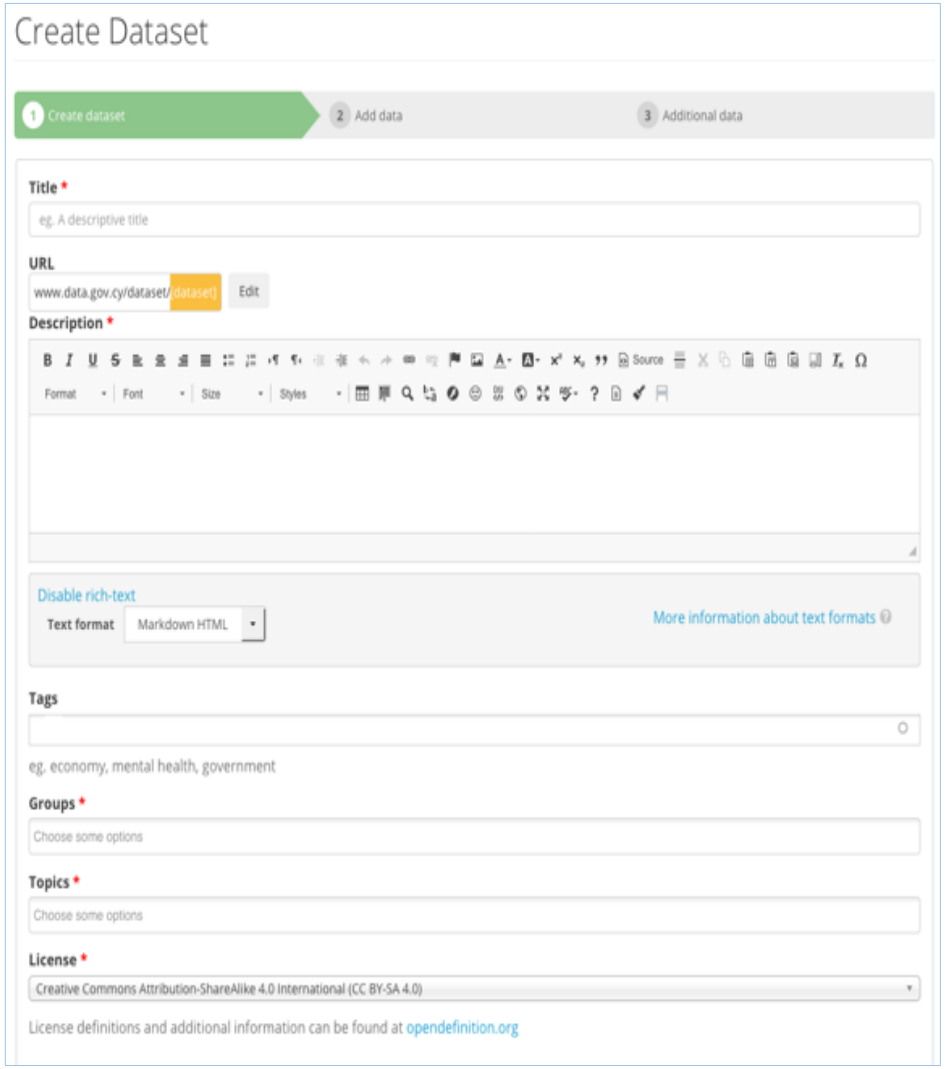
Backend

Administration and Backend

- User Permission Controls
  - Administrators (OUC & PAPD)
  - Public sector users (publishers and moderators)
  - Public (Registered users)

  - Simple forms to add/update Datasets and Resources





Backend

Publish Workflow

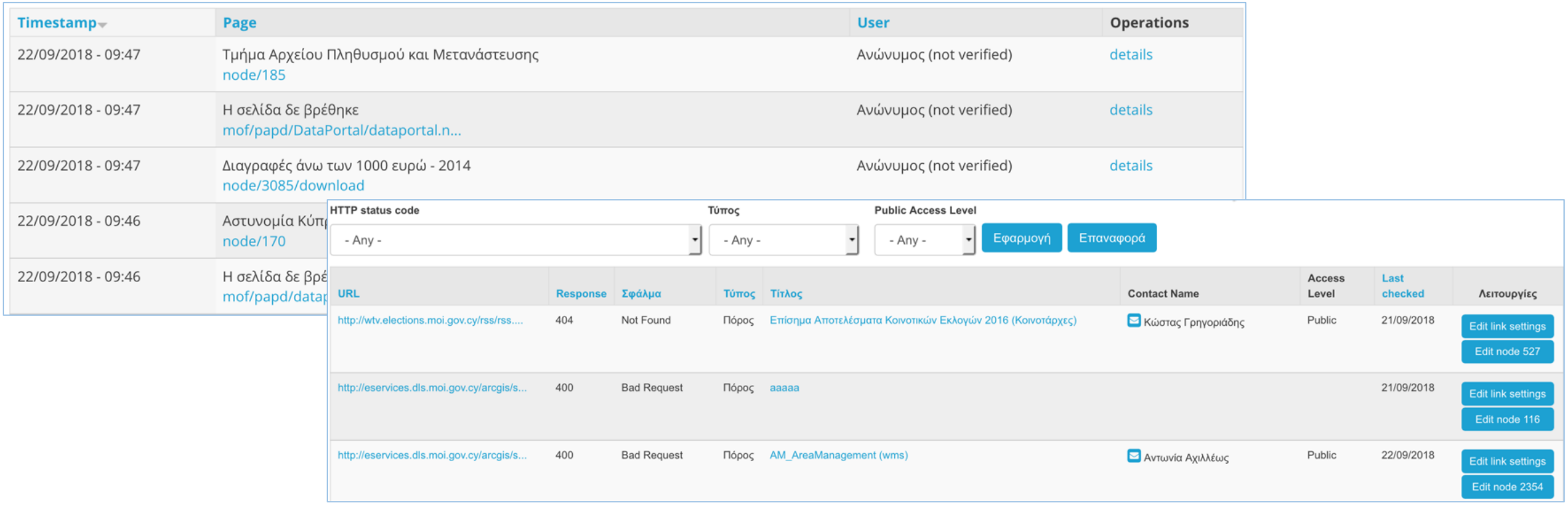
Roles

- Contributors (each organization)
- Moderators (currently very few)
- Super Moderator (PAPD)

Backend

Monitoring and Logging

- Notification system (email)
- Error reporting
- Broken link reporting
- Custom reports (e.g., non-updated datasets)



Timestamp	Page	User	Operations
22/09/2018 - 09:47	Τμήμα Αρχείου Πληθυσμού και Μετανάστευσης node/185	Ανώνυμος (not verified)	details
22/09/2018 - 09:47	Η σελίδα δε βρέθηκε mof/papd/DataPortal/dataportal.n...	Ανώνυμος (not verified)	details
22/09/2018 - 09:47	Διαγραφές άνω των 1000 ευρώ - 2014 node/3085/download	Ανώνυμος (not verified)	details
22/09/2018 - 09:46	Αστυνομία Κύπ node/170		
22/09/2018 - 09:46	Η σελίδα δε βρέ mof/papd/datap		

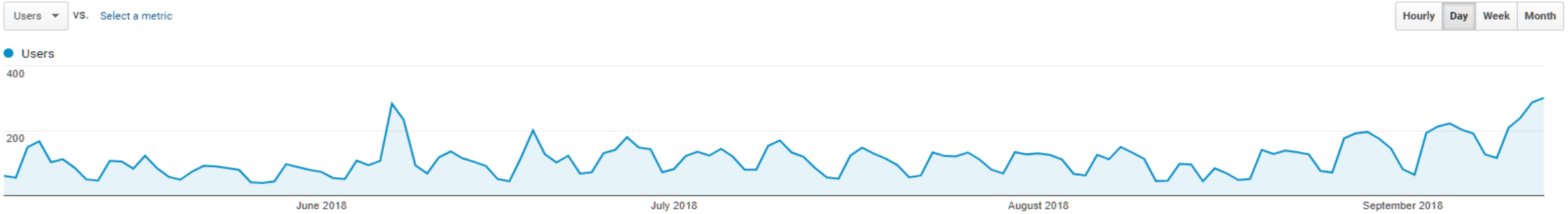
HTTP status code: - Any - | Τύπος: - Any - | Public Access Level: - Any - | Εφαρμογή | Επαναφορά

URL	Response	Σφάλμα	Τύπος	Τίτλος	Contact Name	Access Level	Last checked	Λειτουργίες
http://wtv.elections.moi.gov.cy/rss/rss....	404	Not Found	Πόρος	Επίσημα Αποτελέσματα Κοινοτικών Εκλογών 2016 (Κοινοτάρχες)	Κώστας Γρηγοριάδης	Public	21/09/2018	Edit link settings Edit node 527
http://eservices.dls.moi.gov.cy/arcgis/s...	400	Bad Request	Πόρος	aaaaa			21/09/2018	Edit link settings Edit node 116
http://eservices.dls.moi.gov.cy/arcgis/s...	400	Bad Request	Πόρος	AM_AreaManagement (wms)	Αντωνία Αχιλλέως	Public	22/09/2018	Edit link settings Edit node 2354

Stats

Portal Statistics

(Period: 5 May 2018 – 21 September 2018)



Visitors: 14,600 (4,171/month)

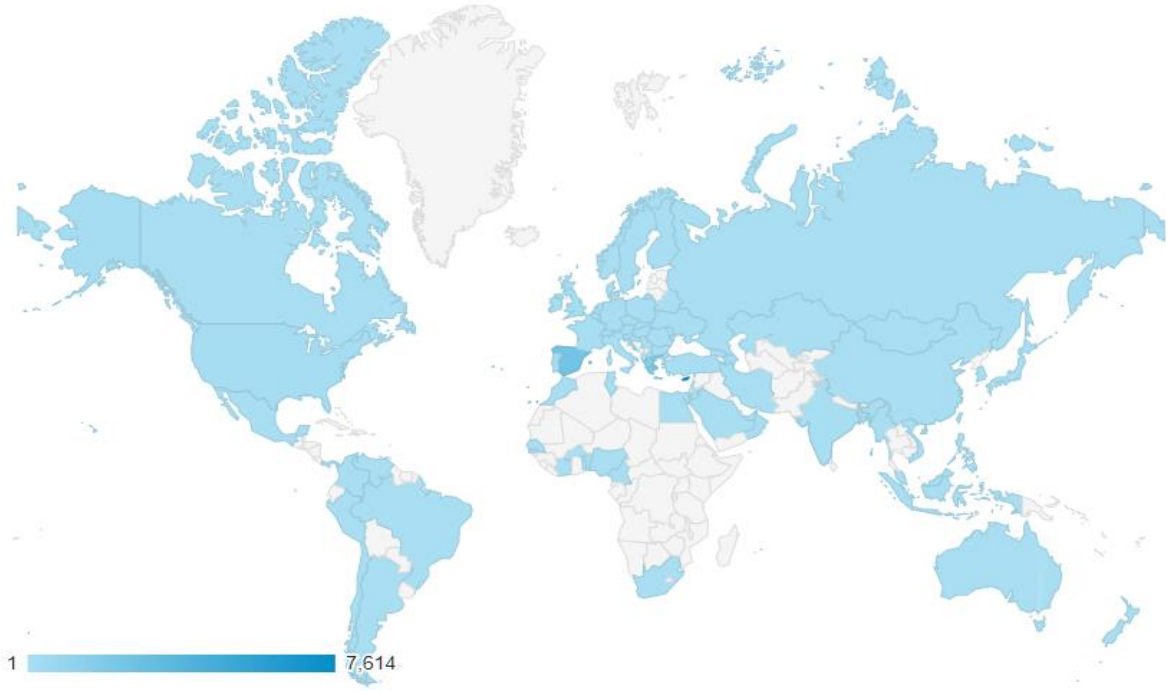
Visitors' Countries : 90

% Visitors from Abroad : 32%

Page Views = 103,000

Page Views per Day = 755

% Access via API = 20%



	Country
1.	Cyprus
2.	Spain
3.	Greece
4.	United States
5.	United Kingdom
6.	Germany
7.	France
8.	Italy
9.	India
10.	Netherlands

Stats

Portal Statistics

(Period: 5 May 2018 – 21 September 2018)

	Browser	Users	Users
		14,349 % of Total: 100.00% (14,349)	14,349 % of Total: 100.00% (14,349)
1.	Chrome	7,874	54.99%
2.	Safari	3,651	25.50%
3.	Firefox	1,094	7.64%
4.	Internet Explorer	521	3.64%
5.	Samsung Internet	374	2.61%
6.	Edge	343	2.40%
7.	Android Webview	196	1.37%
8.	Safari (in-app)	99	0.69%
9.	Opera	81	0.57%

	Operating System	Users	Users
		14,349 % of Total: 100.00% (14,349)	14,349 % of Total: 100.00% (14,349)
1.	Windows	7,114	49.55%
2.	Android	2,939	20.47%
3.	Linux	2,834	19.74%
4.	iOS	999	6.96%
5.	Macintosh	415	2.89%
6.	(not set)	42	0.29%
7.	Chrome OS	8	0.06%

Support

Support, Documentation and Training

Guides for PSBs

- Data Selection
- Data Preparation
- Publishing Datasets
- Utilizing the DS APIs
- Roles and Levels of Authorization
- Creating CSVs

Developers Corner

- Data Cleaning Tools
- Programming Languages
- Base Maps
- Visualization Tools
- DKAN Guide
- DKAN API Guides

Technical Guidelines

- Data Selection
- Licensing
- Charges
- Formats
- Metadata
- Standards

Other Material

- Guides
- Information on DCAT-AP
- Presentations from Events/ Conferences
- Videos

Support

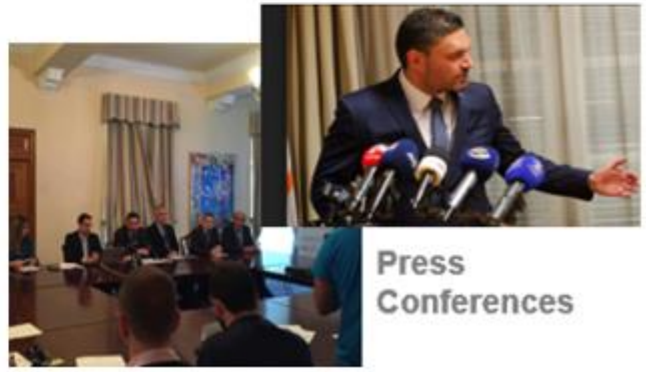
Support, Training and Promotion

Open Days and Conferences

Open Data Hackathons

Structured Training

Workshops



Press Conferences

DKAN

Working with DKAN

- Powerful Tool
- Easy to set up/support/upgrade
- Try to stay close to the core
- Good Documentation
- Easily Extendable
- Bugs (found <10 in 1 year)
- Very good community support
- Issues Resolved Quickly (sometimes within days)
- Users engaged in prioritizing further dkan development
- CY Team among contributors

Outlook

What's Next

- Dataset statistics dashboard
- Extend search capabilities for datastores
- Translations (metadata, etc.)

- Create webinars for the public
- Create video guides for PSBs

- Increase engagement using datastories
- Challenges with prizes (substitute hackathons)

Examples of Datasets

Examples

Location and Measurements of E/M Radiation of Radio-communication Stations

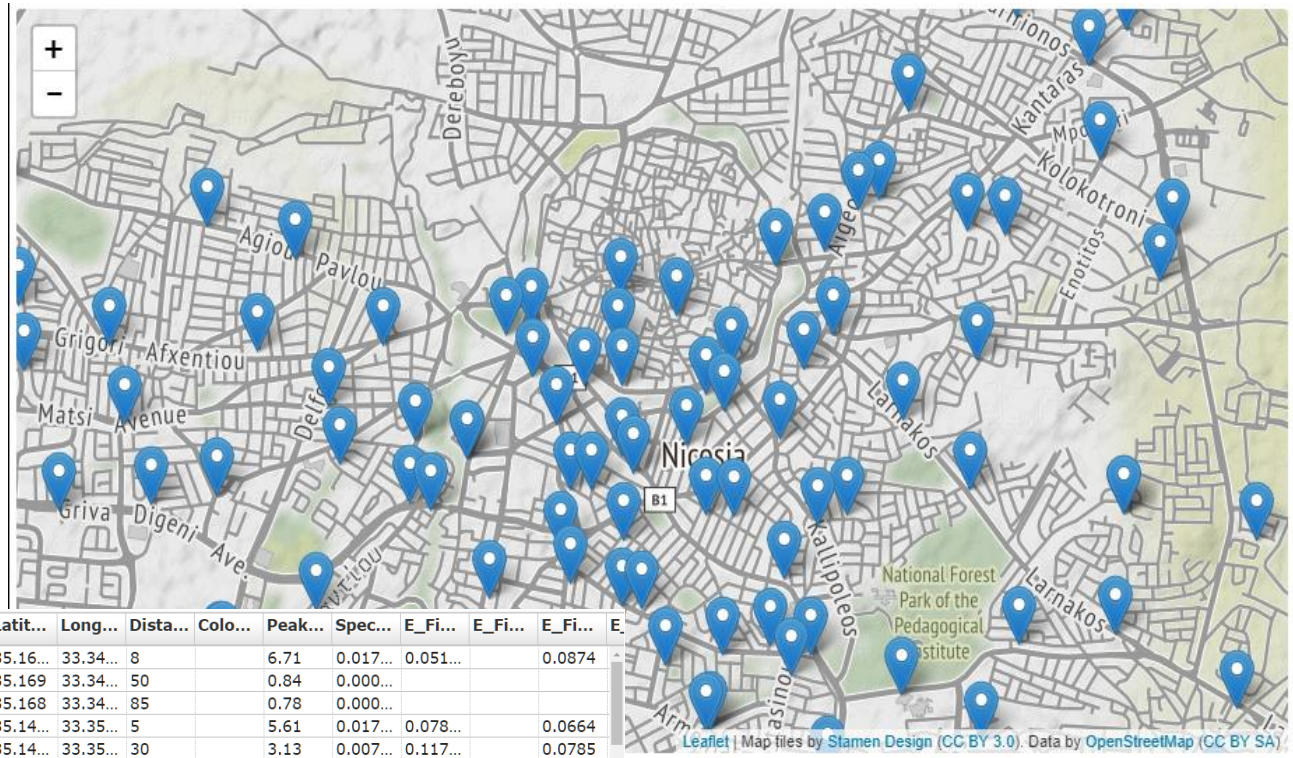
Publisher: *Department of Electronic Communications*

Themes: Science and Technology

Formats: CSV, API (json)

Frequency: bi-annual

Tags: EM radiation



coding	codi...	EMF...	Site_...	Date	Latit...	Long...	Dista...	Colo...	Peak...	Spec...	E_Fi...	E_Fi...	E_Fi...	E
Cyta_...	Cyta_...	Cyta_...	ACHA...	2017-...	35.16...	33.34...	8		6.71	0.017...	0.051...		0.0874	
Cyta_...	Cyta_...	Cyta_...	ACHA...	2017-...	35.169	33.34...	50		0.84	0.000...				
Cyta_...	Cyta_...	Cyta_...	ACHA...	2017-...	35.168	33.34...	85		0.78	0.000...				
Cyta_...	Cyta_...	Cyta_...	AKRO...	2017-...	35.14...	33.35...	5		5.61	0.017...	0.078...		0.0664	
Cyta_...	Cyta_...	Cyta_...	AKRO...	2017-...	35.14...	33.35...	30		3.13	0.007...	0.117...		0.0785	
Cyta_...	Cyta_...	Cyta_...	AKRO...	2017-...	35.148	33.35...	70		0.89	0.000...				
Cyta_...	Cyta_...	Cyta_...	AG. A...	2017-...	35.16...	33.36...	10		4.55	0.018...			0.0342	
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Cyta_...	Cyta_...	Cyta_...	AG. A...	2017-...	35.17...	33.367	78		5.01	0.010...			0.0301	
Cyta_...	Cyta_...	Cyta_...	AG. D...	2017-...	35.17...	33.33...	5	MTN	22.5	0.262...	0.080...	1.0612	0.0448	
Cyta_...	Cyta_...	Cyta_...	AG. D...	2017-...	35.171	33.33...	53	MTN	1.68	0.001...	0.034...			
Cyta_...	Cyta_...	Cyta_...	AG. D...	2017-...	35.17...	33.33...	85	MTN	0.89	0.001...				
Cyta_...	Cyta_...	Cyta_...	AG. IL...	2017-...	35.18...	33.38...	4		8.52	0.024...	0.039...		0.0798	
Cyta_...	Cyta_...	Cyta_...	AG. IL...	2017-...	35.18...	33.38...	42		0.99	0.000...				
Cyta_...	Cyta_...	Cyta_...	AG. IL...	2017-...	35.19...	33.37...	82		0.82	0.000...				
Cyta_...	Cyta_...	Cyta_...	AG. T...	2017-...	35.11...	33.21...	5		6.83	0.057...	0.140...	0.0863	0.1094	
Cyta_...	Cyta_...	Cyta_...	AG. T...	2017-...	35.11...	33.212	46		2.68	0.009...	0.043...		0.0639	
Cyta_...	Cyta_...	Cyta_...	AG. T...	2017-...	35.11...	33.21...	78		2.18	0.003...			0.0757	
Cyta_...	Cyta_...	Cyta_...	AG. V...	2017-...	35.00...	33.37...	14	MTN	2.34	0.005...	0.060...		0.0417	
Cyta_...	Cyta_...	Cyta_...	AG. V...	2017-...	35.00...	33.37...	53	MTN	0.34	0.000...	0.031...		0.0329	

Examples

Real-Time Recordings of Meteorological Stations

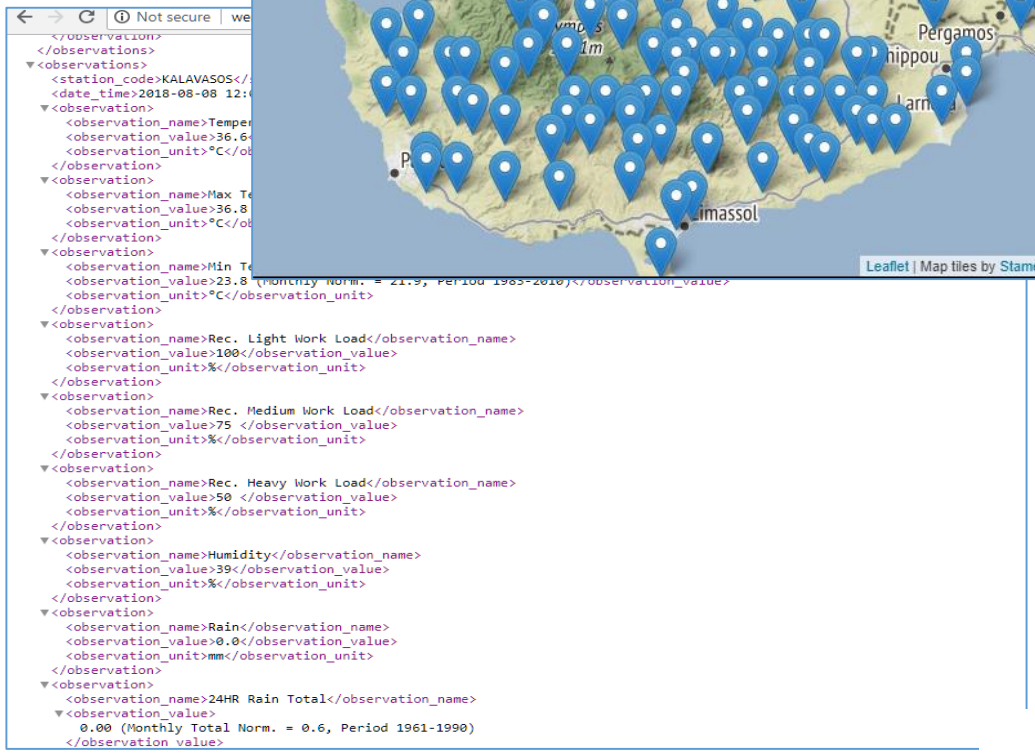
Publisher: *Department of Meteorology*

Themes: Science and Technology

Formats: API (XML)

Frequency: Hourly

Related datasets: Weather Forecasts by Area



Examples

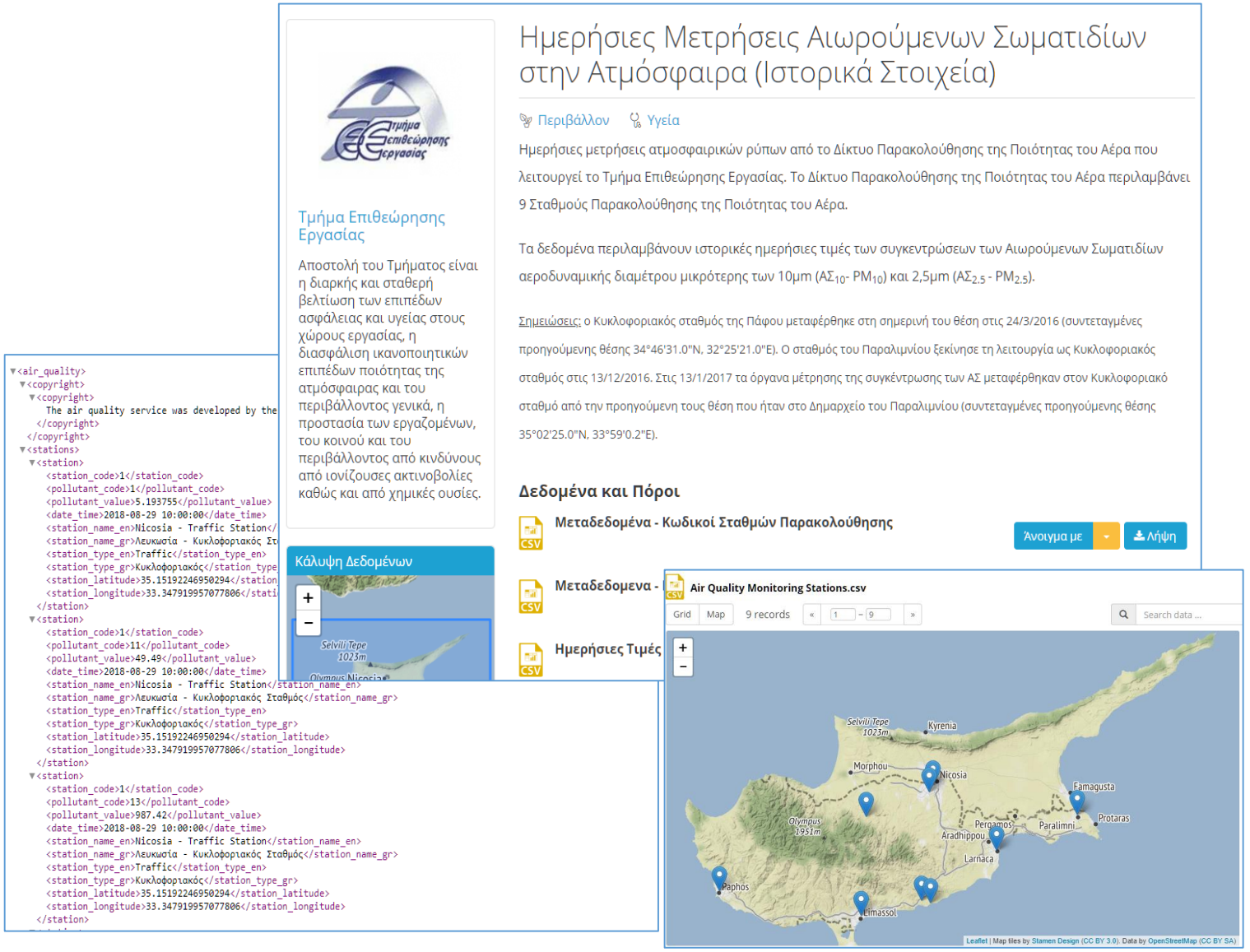
Real-Time and Historical Recordings of Air-Quality Stations (3 datasets)

Publisher: *Department of Labour Inspection*

Themes: Environment

Formats: API (xml) – real time data
CSV, API (json) – historical

Frequency: Hourly, Daily

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   The air quality service was developed by the
  </copyright>
 </copyright>
 <stations>
  <station>
   <station_code>1</station_code>
   <pollutant_code>1</pollutant_code>
   <pollutant_value>5.193755</pollutant_value>
   <date_time>2018-08-29 10:00:00</date_time>
   <station_name_en>Nicosia - Traffic Station</
   <station_name_gr>Λευκωσία - Κυκλοφοριακός Στ
   <station_type_en>Traffic</station_type_en>
   <station_type_gr>Κυκλοφοριακός</station_type
   <station_latitude>35.151922469502 94</station
   <station_longitude>33.347919957077806</stati
  </station>
  <station>
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   <pollutant_value>49.49</pollutant_value>
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   <station_type_gr>Κυκλοφοριακός</station_type_gr>
   <station_latitude>35.151922469502 94</station_latitude>
   <station_longitude>33.347919957077806</station_longitude>
  </station>
```

Examples

Companies, Partnerships and Business Names Registry

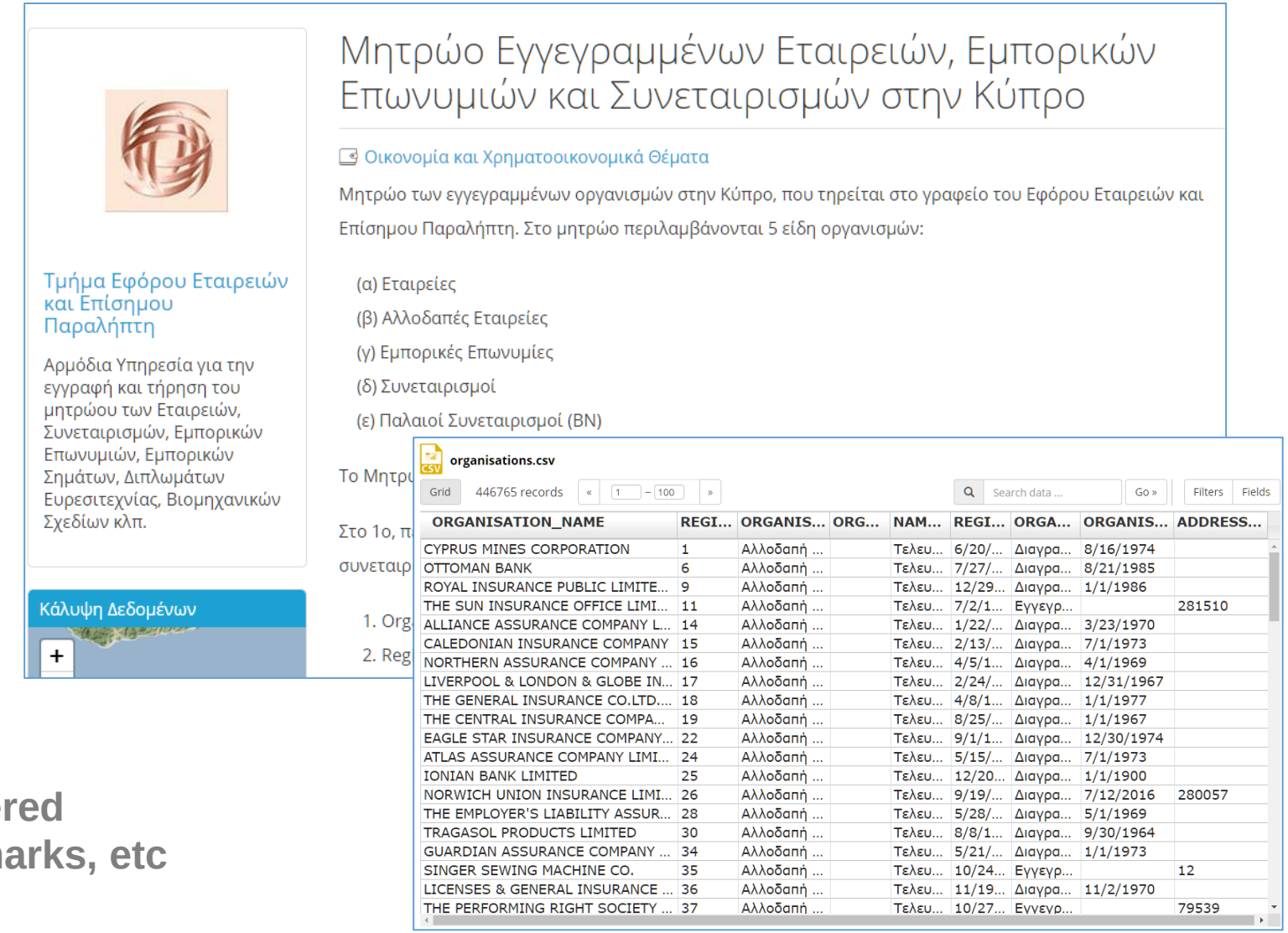
Publisher: ***Department of Registrar of Companies and Official Receiver***

Themes: **Economy and Finance**

Formats: **CSV, API (json)**

Frequency: **Monthly**

Related Datasets: **statistics on registered companies, trade marks, etc**



Examples

Public Transport Datasets

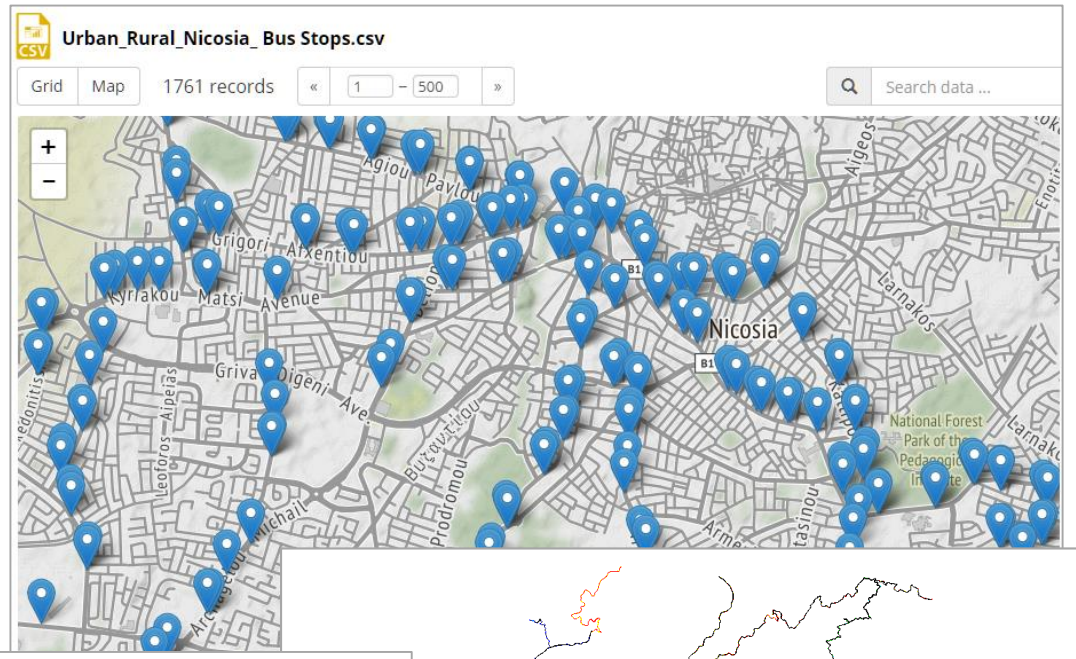
Collection of 7 datasets (one per Bus Service Operator) that include:

- *OSEL*
- *EMEL*
- *OSYPA*
- *OSEA*
- *ZINON*
- *Nicosia Small Buses*
- *INTERCITY*

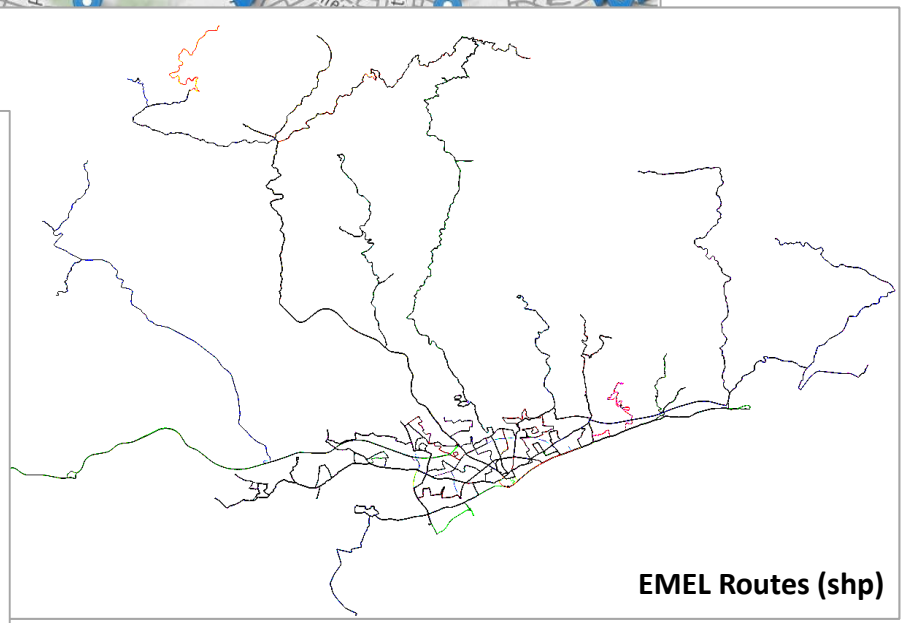
Publisher: Departments of Public Works

Themes: Transport

Formats: csv, shp, kml, json




```
0:
  Stop_Code:                "1"
  Stop_Short_Name:          "DioSolSqu"
  Stop_Short_Name_2ndLang:  "ΠλαΔιοΣολ"
  Stop_Long_Name:           "Dionysios Solomos Square"
  Stop_Long_Name_2ndLang:   "Πλατεία Διονυσίου Σολωμού"
  Latitude:                 "35.1711"
  Longitude:                "33.3588"
  District:                 "Lefkosia"
  District_2ndLang:         "Λευκωσία"
  Municipality:             "Lefkosia"
  Municipality_2ndLang:     "Λευκωσία"
  Tariff Zone:              null
  Vocal Announcement:       "Πλατεία Διονυσίου Σολωμού"
1:
  Stop_Code:                "59"
  Stop_Short_Name:          "Kin-Kor"
  Stop_Short_Name_2ndLang:  "Κιν-Κορ"
  Stop_Long_Name:           "Kinyra - Koroivou"
  Stop_Long_Name_2ndLang:   "Κινύρα - Κοροίβου"
  Latitude:                 "35.1737"
  Longitude:                "33.3532"
  District:                 "Lefkosia"
  District_2ndLang:         "Λευκωσία"
  Municipality:             "Lefkosia"
  Municipality_2ndLang:     "Λευκωσία"
  Tariff Zone:              null
  Vocal Announcement:       "Κινύρα και Κοροίβου"
2:
  Stop_Code:                "77"
```

Examples

Collection of Geospatial Data

Collection of 200+ Layers from the:

- *CY Cadastral Map*
- *CY Topographic Map*
- *CY Hydrographic Map*
- *CY Administrative Map*

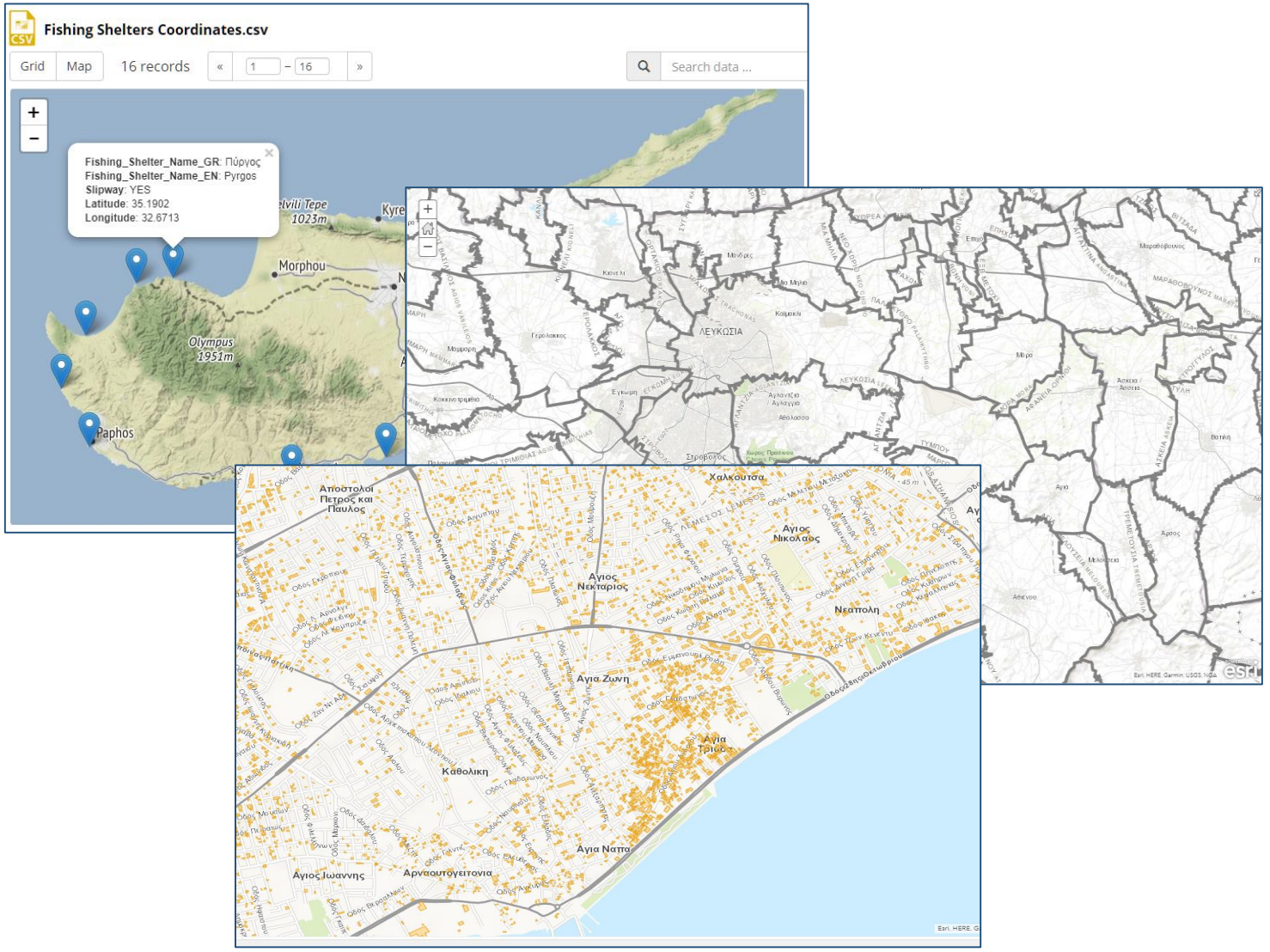
+

CSS, hospitals, fishing shelters, natural trails, picnic sites, etc….

Publisher: mainly Department of Lands and Surveys

Themes: Regions, Cities and Zoning, Environment

Formats: wms, wfs, gml, shp, kml

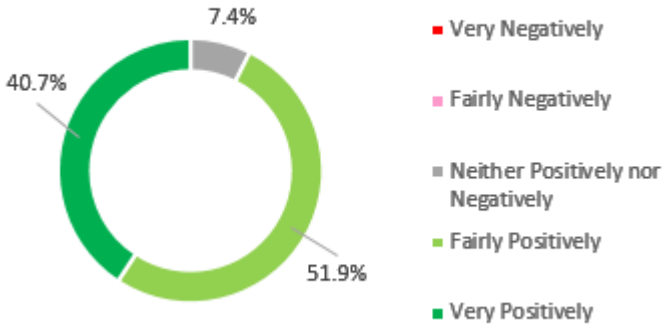


Survey

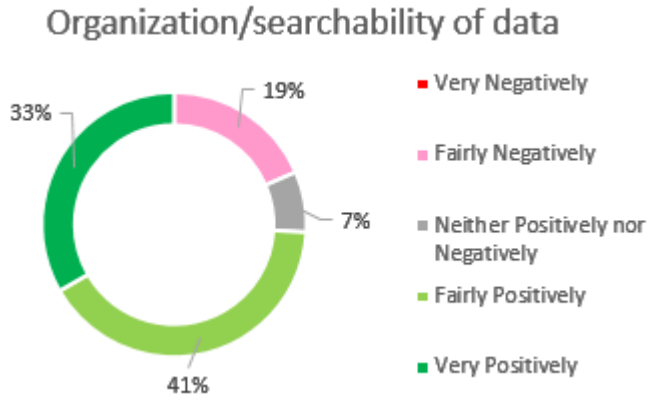
CY NODP Satisfaction Survey

(conducted between 15-24 September)

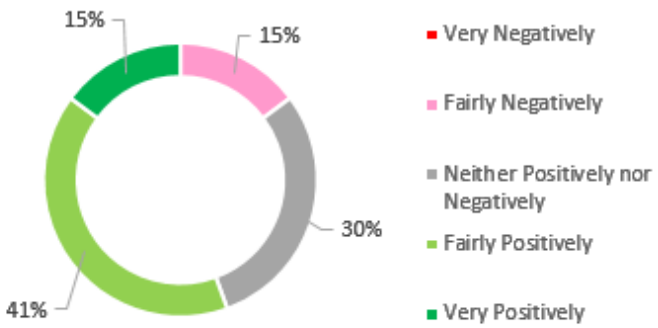
Website Design



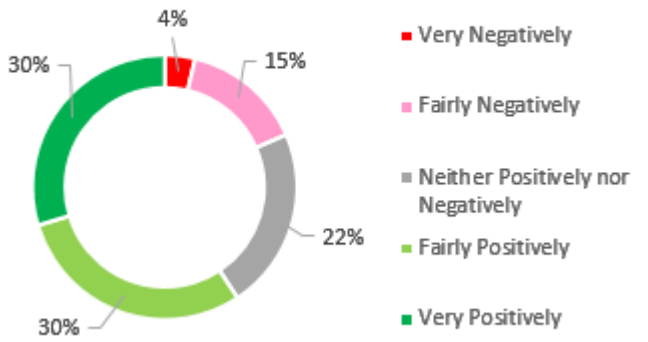
Organization/searchability of data



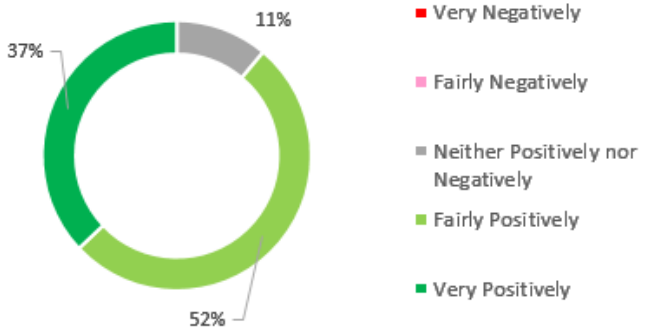
Formats of Datasets



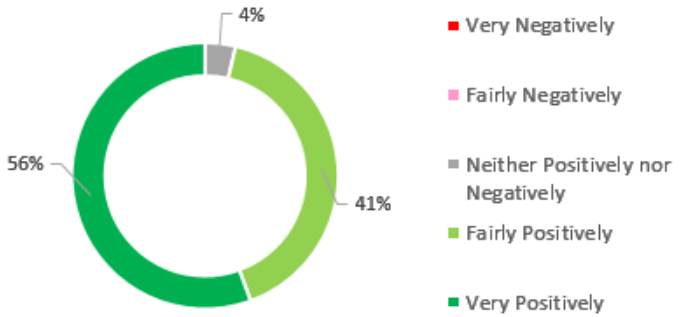
Portal's APIs



How would you rate overall the new National Open Data Portal?



How would you rate overall the Government Open Data Initiative / Policy?



System Usability Scale (SUS)=Good (72)

Thank you…

Dimitris Michael
Open Data Team
Department of Public Administration and Personnel
Ministry of Finance
Tel: +357 22 60 1523 / 1515 | Fax: +357 22 602763
Web: www.data.gov.cy | Twitter: @OpenDataCY

Christos Rodosthenous
Open Data Team
Information, Technology and Library Unit
Open University of Cyprus
Tel: +357 22 411783
Web: www.data.gov.cy | Twitter: @OpenDataCY