

2nd Open Data Hackathon Info Day

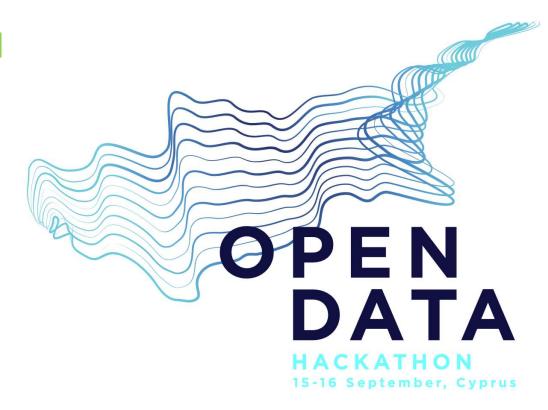
The National Open Data Portal

and other Data Sources

Dimitris Michail (PAPD)
Christos Rodosthenous (OUC)

3rd September 2018





Willo

Open Data

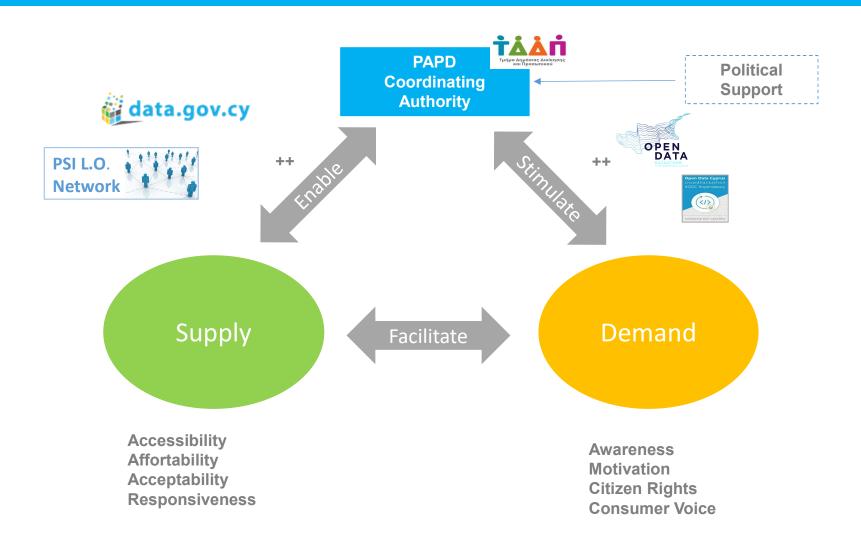


Open Data is data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike. (Open Data Handbook)

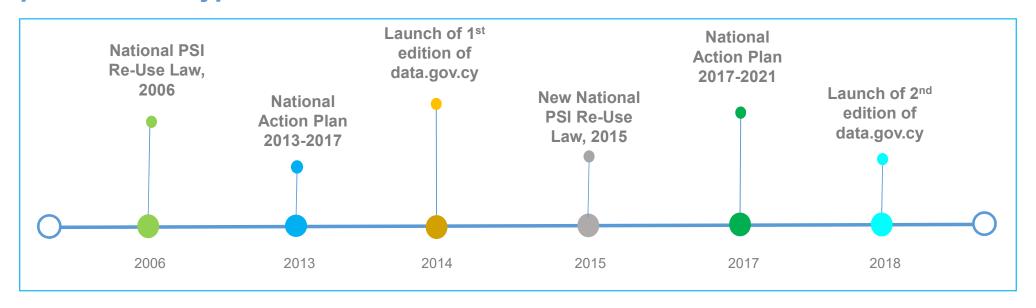
Open Government Data is data collected by Public Service Bodies within the scope of their public tasks, which is released as Open Data.

Open Data: Demand and Supply *Roles of Coordinating Authority*

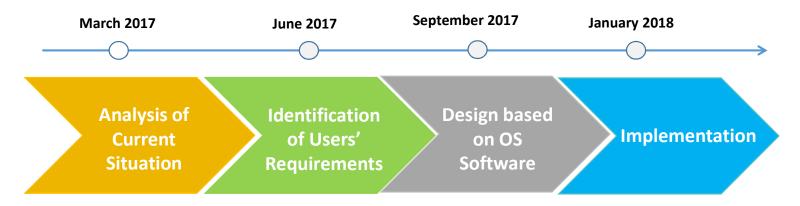




Open Data in Cyprus

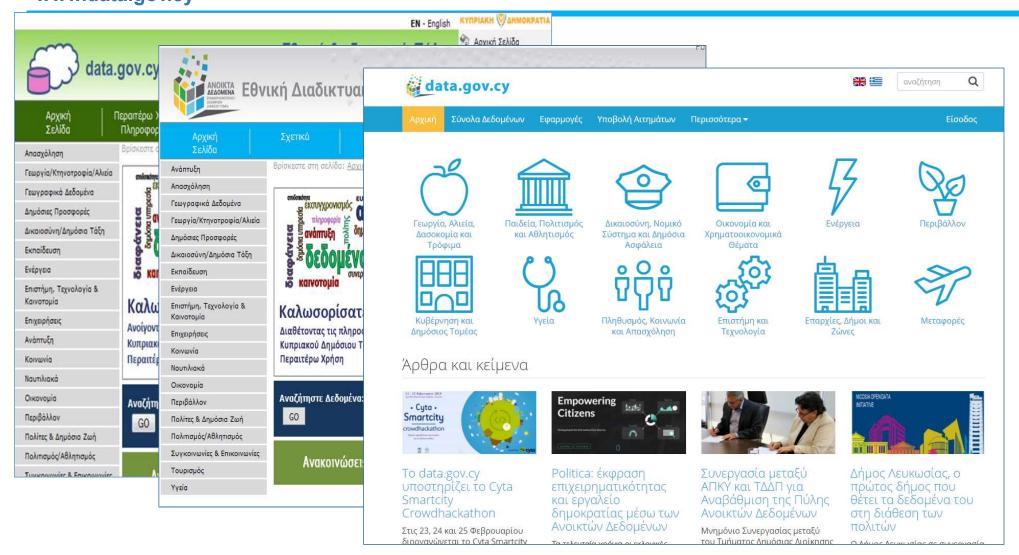


Data.gov.cy Development



Evolution of the National Open Data Portal www.data.gov.cy





2018

Jen

Main Functions of CY Open Data Portal

Main Functions

- Source of Information
- Dataset Search
- Host Support Material
- Data Requests
- Showcase Applications

Data Suppliers

- 80+ Central Government PSBs
- 1 Municipality (pilot)
- 1 Semi Governmental Organization (Pilot)

Examples of Datasets

- Real Time Met Stations Data
- Real Time Air Quality Data
- Real Time Parking Availability (Nicosia)
- POI (theatres, museums, stadiums, parks, government buildings etc)
- Catalogues: Forest Fires, Public Procurements, Earthquakes, etc
- Geospatial: e.g. forests, planning zones, municipality boundaries, etc
- Registries: e.g. companies registry, nurseries registry,
- Statistics: GDP, trade, tourism, immigration, etc



Jen

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

CSV instead of XLS, PDF, DOC

Identification / Preparation & Publication of New Datasets

480 datasets

 $1350 \rightarrow 700$

datasets

+300 datasets

Jer

The Cyprus Open Data Portal



Deployed using DKAN opensource platform [https://getdkan.org/]





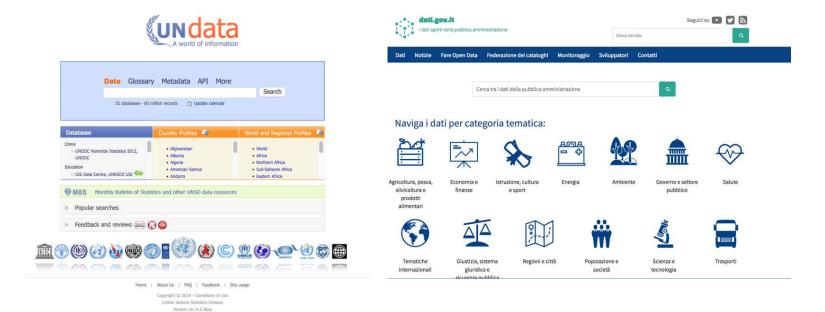


Jen

DKAN Installations

>92 documented worldwide installations





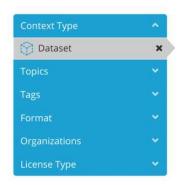
Source: http://docs.getdkan.com/en/latest/introduction/dkan-sites.html

Organizing and searching data



Filter data per:

- > Topic
- Organization
- > Format
- > Tag
- ➤ License Type





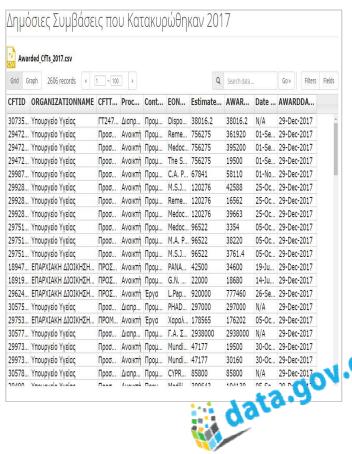
Θέματα ^		
№ Па	ριβάλλον (224)	
Comme Parties	κονομία και τοοικονομικά Θέματα	
U	ηθυσμός, Κοινωνία και όληση (138)	
Eπ (105)	αρχίες, Δήμοι και Ζώνες	
Κυ Τομέα	βέρνηση και Δημόσιος ς (95)	
	ωργία, Αλιεία, ομία και Τρόφιμα (86)	
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ு Eπ (30)	ιστήμη και Τεχνολογία	
43 FV	έονεια (26)	

Μορφότυποι	^
csv (486)	
html (385)	
xlsx (203)	
esri rest (167)	
json (166)	
SOAP (166)	
wms (166)	
xml (101)	
pdf (75)	
xls (53)	
shp (43)	
gml (34)	
zip (31)	
txt (27)	
wfs (12)	
kml (9)	
dwg (6)	
kmz (6)	
raster (5)	
api (2)	

20400 Vegueveje Vyejes

Visualizing Data using the Portal Interface

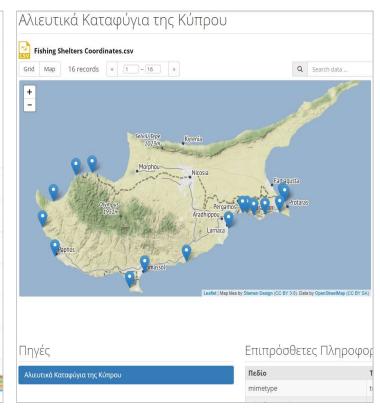
Grid format



Graph format



Map format



Access to Data and Metadata using APIs

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

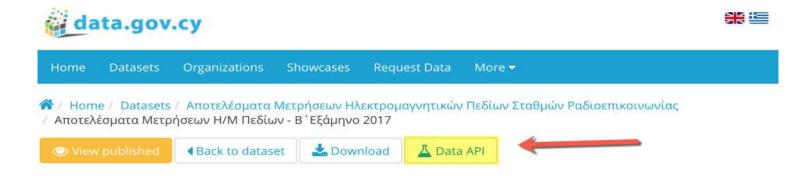
- ✓ Datastore API: The DKAN Datastore houses any CSV files that have been uploaded and then imported into the Datastore and provides an endpoint to access them
- ✓ CKAN API: Harvest and index the Portal from other CKAN-based portals (CKAN harvester)
- ✓ Open Data APIs: Two Open Data Standards APIs: DCAT-AP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







Datastore API - Endpoint



DKAN Datastore API

Access resource data via a web API with powerful query support.

Resource ID

The Resource ID for this resource is f7ca1f7b-a42b-408e-98c2-5109ca0ae1b1

Example Query

 $https://www.data.gov.cy/api/action/datastore/search.json?resource_id=f7ca1f7b-a42b-408e-98c2-5109ca0ae1b1\&limit=5\&language=endersoned.$

Query this datastore and return first five results

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

Datastore API - Example

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

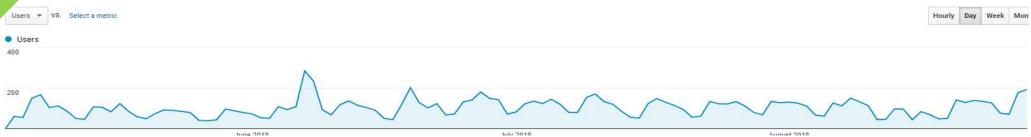
```
* result:
  ₹ fields:
    ~ Ø:
                                      "ORGANISATION_NAME"
         id:
                                      "text"
         type:
    ¥1:
                                      "REGISTRATION_NO"
         id:
                                      "int"
         type:
    ¥2:
                                      "ORGANISATION_TYPE"
         id:
                                      "text"
    ₹3:
         id:
                                      "ORGANISATION_SUB_TYPE"
                                      "varchar"
         type:
    ¥ 4:
         id:
                                      "NAME_STATUS"
                                      "text"
         type:
    T5:
                                      "REGISTRATION_DATE"
         id:
                                      "text"
         type:
    ₹6:
                                      "ORGANISATION_STATUS"
         id:
         type:
    -7:
                                      "ORGANISATION STATUS DATE"
         id:
                                      "text"
         type:
                                      "ADDRESS SEQ NO"
         id:
                                      "int"
         type:
```

```
* records:
  - Ø:
                                   "CYPRUS MINES CORPORATION"
      ORGANISATION NAME:
      REGISTRATION NO:
                                   "Αλλοδαπή Εταιρεία"
      ORGANISATION TYPE:
      ORGANISATION_SUB_TYPE:
                                   null
      NAME_STATUS:
                                   "Τελευταίο Όνομα"
      REGISTRATION_DATE:
                                   "6/20/1923"
      ORGANISATION_STATUS:
                                   "Διαγραμμένη"
                                   "8/16/1974"
      ORGANISATION_STATUS_DATE:
      ADDRESS_SEQ_NO:
                                   null
      ORGANISATION_NAME:
                                   "OTTOMAN BANK"
                                   "6"
      REGISTRATION_NO:
                                   "Αλλοδαπή Εταιρεία"
      ORGANISATION_TYPE:
                                   null
      ORGANISATION_SUB_TYPE:
      NAME_STATUS:
                                   "Τελευταίο Ονομα"
      REGISTRATION_DATE:
                                   "7/27/1923"
      ORGANISATION_STATUS:
                                   "Διαγραμμένη"
      ORGANISATION_STATUS_DATE:
                                   "8/21/1985"
                                   null
      ADDRESS_SEQ_NO:
```

Users VS. Select a metric

Portal Statistics

(Period: 5 May 2018 – 28 August 2018)



Visitors: 10,600

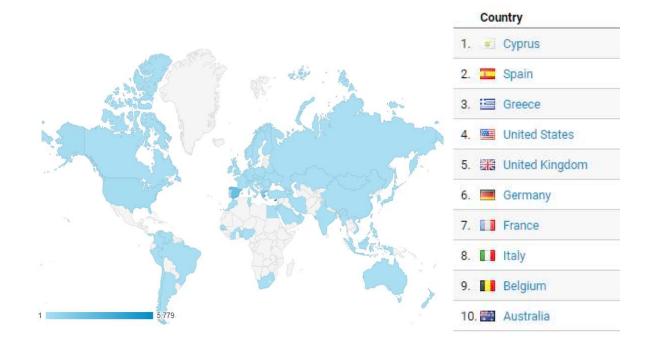
Visitors' Countries: 83

% Visitors from Abroad: 35%

Page Views = 74,000

Page Views per Day = 630

% Access via API = 22%



Examples of Datasets

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

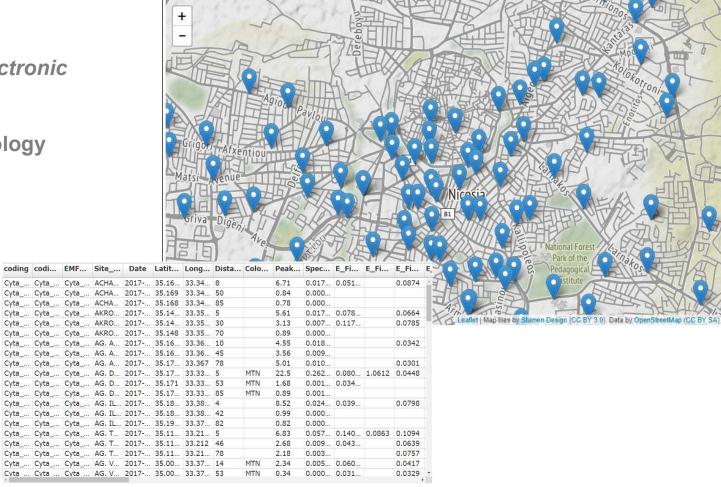
Publisher: Department of Electronic Communications

Themes: Science and Technology

Formats: CSV, API (json)

Frequency: bi-annual

Tags: EM radiation



Real-Time Recordings of Meteorological Stations

Publisher: Department of Meteorology

Themes: Science and Technology

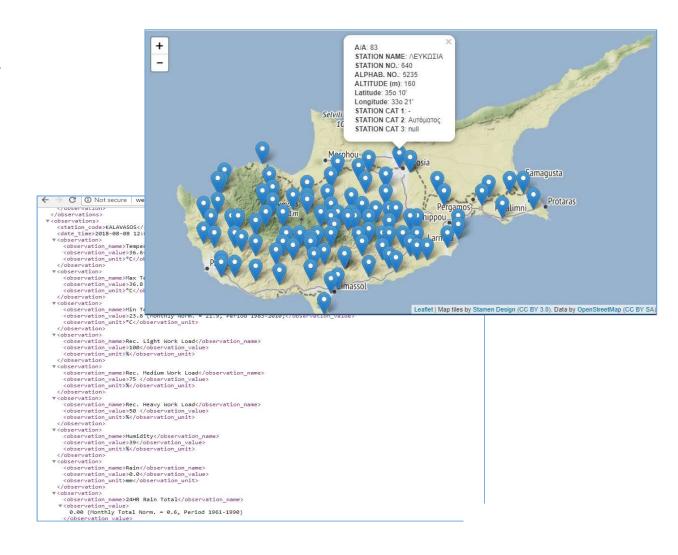
Formats: API (XML)

Frequency: Hourly

Tags: καιρός, κλίμα

Related datasets: Weather Forecasts

by Area



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

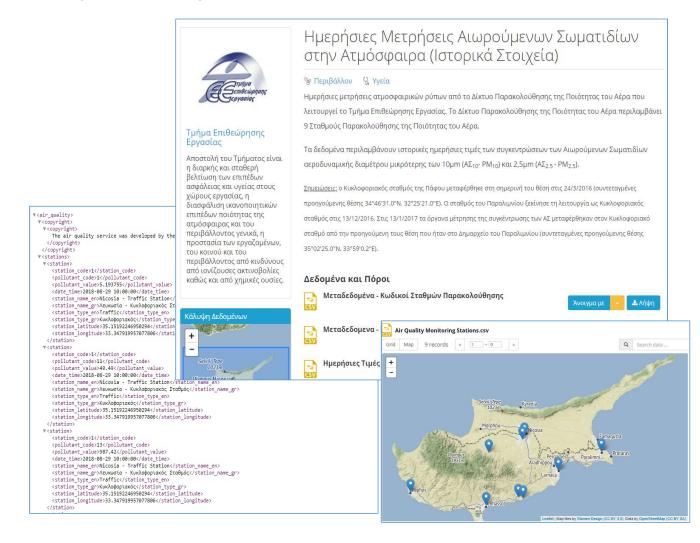
Publisher: Department of Labour Inspection

Themes: Environment

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

Frequency: Hourly, Daily

Tags: ατμόσφαιρα



Companies, Partnerships and Business Names Registry

Publisher: Department of Registrar of Companies and Official Receiver

Themes: Economy and Finance

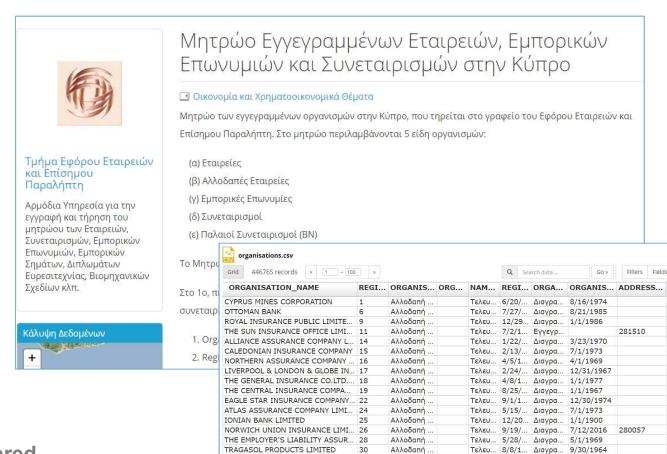
Formats: CSV, API (json)

Frequency: Monthly

Tags: companies registry

Related Datasets: statistics on registered

companies, trade marks, etc



GUARDIAN ASSURANCE COMPANY ... 34

LICENSES & GENERAL INSURANCE ... 36

THE PERFORMING RIGHT SOCIETY ... 37

SINGER SEWING MACHINE CO.

Αλλοδαπή.

Αλλοδαπή ...

Αλλοδαπή ...

Αλλοδαπή

Τελευ... 5/21/... Διαγρα... 1/1/1973

Τελευ... 11/19... Διαγρα... 11/2/1970

12

79539

Τελευ... 10/24... Εγγεγρ...

Τελευ... 10/27... Εγγεγρ...

mple

Public Transport Datasets

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

OSEL

ZINON

EMEL

Nicosia Small Buses

OSYPA

INTERCITY

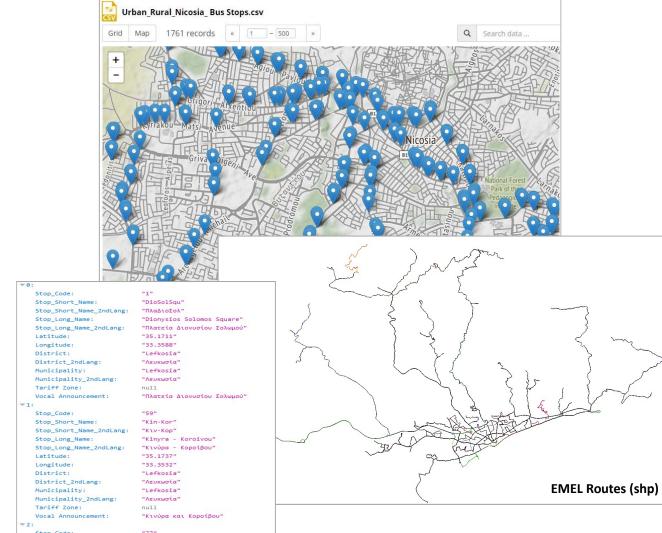
OSEA

Publisher: Departments of Public Works

Themes: Transport

Formats: csv, shp, kml, json

Tags: bus, δημόσιες μεταφορές



Municipality of Nicosia Datasets

Collection of 40+ Datasets that Include:

- Parking Availability
- Upcoming Events
- Parks and Municipal Gardens
- POIs
- Libraries
- Theatres
- Galleries
- Museums

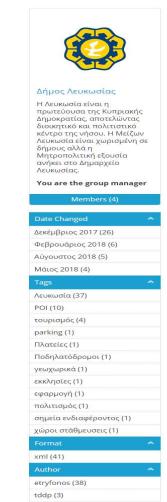
•

Themes: Regions, Cities and Zoning

Formats: XML

Frequency: Real Time, As Required

Tags: Nicosia



Δήμος Λευκωσίας

 Αναζήτηση
 Ταξινόμηση κατά
 Σειρά

 Date Changed
 ▼
 Φθίνουσα
 ▼
 Εφαρμογή

Displaying 1 - 10 of 41 datasets

(9)

Τρέχουσα Διαθεσιμότητα Χώρων Στάθμευσης Δήμου Λευκωσίας

🕮 Δήμος Λευκωσίας

🌬 Επαρχίες, Δήμοι και Ζώνες 💝 Μεταφορές

Υπηρεσία διάθεσης δεδομένων αναφορικά με την τρέχουσα (live) διαθεσιμότητα θέσεων στάθμευσης για 4 δημοτικούς χώρους στάθμευσης του Δήμου Λευκωσίας. Τα δεδομένα διατίθενται σε μορφή XML και για κάθε χώρο περιλαμβάνονται: (α) Κωδικός Χώρου...

xml

Επερχόμενες Εκδηλώσεις του Δήμου Λευκωσίας

🕸 Δήμος Λευκωσίας

🏙 Επαρχίες, Δήμοι και Ζώνες

Υπηρεσία διάθεσης δεδομένων αναφορικά με τις Επερχόμενες Εκδηλώσεις εντός των ορίων του Δήμου Λευκωσίας. Τα δεδομένα διατίθενται σε μορφή ΧΜL και για κάθε επερχόμενη εκδήλωση περιλαμβάνονται: (α) Όνομα Εκδήλωσης (β) Ημερομηνία και Ωρα (γ)...

×ml

(9)

Πάρκα & Κήποι Δήμου Λευκωσίας

🕸 Δήμος Λευκωσίας

👺 Περιβάλλον 🕍 Επαρχίες, Δήμοι και Ζώνες

Υπηρεσία διάθεσης δεδομένων αναφορικά με τα Πάρκα και τους Κήπους εντός των ορίων του Δήμου Λευκωσίας. Τα δεδομένα διατίθενται σε μορφή ΧΜL και για κάθε σημείο ενδιαφέροντος περιλαμβάνονται: (α) ονομασία (β) περιγραφή (γ) συντεταγμένες X (δ)...

*ml

(1)

Βιβλιοθήκες του Δήμου Λευκωσίας

🔒 Δήμος Λευκωσίας

🟦 Παιδεία, Πολιτισμός και Αθλητισμός 🛮 🕍 Επαρχίες, Δήμοι και Ζώνες

Υπηρεσία διάθεσης δεδομένων αναφορικά με τις Βιβλιοθήκες εντός των ορίων του Δήμου Λευκωσίας. Τα δεδομένα διατίθενται σε μορφή ΧΜL και για κάθε σημείο ενδιαφέροντος περιλαμβάνονται: (α) ονομασία (β) περιγραφή (γ) συντεταγμένες Χ (δ)...

×ml



Θέατρα του Δήμου Λευκωσίας

🕮 Δήμος Λευκωσία

🟛 Παιδεία, Πολιτισμός και Αθλητισμός 🕍 Επαρχίες, Δήμοι και Ζώνες

Υπηρεσία διάθεσης δεδομένων αναφορικά με τα Θέατρα εντός των ορίων του Δήμου Λευκωσίας. Τα δεδομένα διατίθενται σε μορφή ΧΜL και για κάθε σημείο ενδιαφέροντος περιλαμβάνονται: (α) ονομασία (β) περιγραφή (γ) συντεταγμένες Χ (δ) συντεταταγμένες Λ

xml

Collection of Geospatial Data

Collection of 180+ Layers from the:

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

+

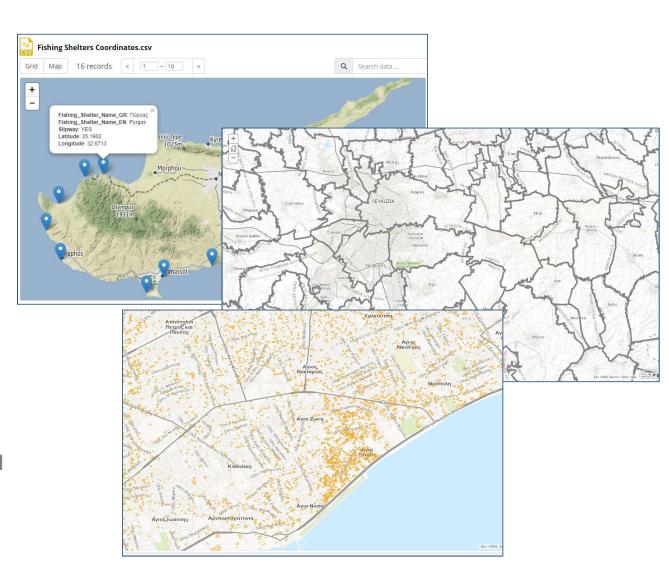
CSS, hospitals, fishing shelters, natural trails, picnic sites, etc....

Publisher: mainly Department of Lands and Surveys

Themes: Regions, Cities and Zoning, Environment

Formats: wms, wfs, gml, shp, soap, kml

Tags: γεωχωρικά



Mole

Other Interesting Datasets

- Fuel Prices API (requires registration)
- Cyprus Post API
- Earthquakes Datasets and APIs
- Forest Fires Datasets
- Police Statistics on Crime
- Public Procurements Catalogue
- Government Budget
- Election Results
- Public Servants (characteristic, sick leave, pay)

- Tourism Statistics
- Night Pharmacies
- Water Quality Checks Results
- Real Estate Statistics
- Immigrations and Asylum Statistics
- Ministerial Council Decisions
- Archeological Sites and Museums
- Post Codes Catalogue
- Pharmaceutical Products Prices





Dimitris Michael

Open Data Team Τμήμα Δημόσιας Διοίκησης και Προσωπικού Ministry of Finance

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