台灣地理資料開放的建議

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OpenStreetMap Taiwan Community

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The development of Open Data in Taiwan

- Grassroots communities pay more attentions than governmental agencies
- Lack of high-level policy for Open Data development
- Wrong concepts: Publishing Data is Open Data

Gov. owns the most geo-data

Executive Yuan, Council for Economic Planning and Development (CEPD),
National Geographic Information System Steering Committee

(Convener: CEPD Minister)

National Geographic Information System Steering Committee Working Conference (Deputy Convener: Associate Minister of CEPD and Deputy Minister of Ministry of the Interior) (Staff Unit: CEPD, Department of Urban and Housing Development)

Promotion of Application

National Development and Planning Group Council for Economic Planning and Development

Standards and Service Platform Group Ministry of the Interior (Information Center)

Talent and Technology Development Group Ministry of Education

GIS Industry Application and Planning Group Council for Economic Planning and Development

Disaster Reduction Application Development Group National Science Council (National Science and

Transporation and Traveling Application
Development and Application Group
Ministry of Transportation and Communications

Technology Center for Disaster Reduction)

Databases

Topographic Database Group
Ministry of the Interior (Department of Land Administration)

Public Pipelines Database Group
Ministry of the Interior (Construction and Planning Administration, Public Works Division)

Land-use Planning Database Group Ministry of the Interior (Construction and Planning Administration, Urban and Rural Planning Division)

Land Information Database Group
Ministry of the Interior (Department of Land Administration, Central Region Office)

Transportation Network Database Group
Ministry of Transportation and Communications (Information Management Center)

Social Economic Database Group Ministry of the Interior (Department of Statistics)

Environment Quality Database Group

Executive Yuan, Environmental Protection Administration
(Department of Environmental Monitoring and Information Management)

Natural Resources and Ecological Database Group Executive Yuan, Council of Agriculture (Forestry Bureau)

National Environment Database Group Ministry of Economic Affairs (Information Center)

Laws for Charging for Geo-Data in Taiwan

Charges and Fees
Act
Article 10

Land Surveying and Mapping Act
Article 54

Standard Fee for
Data of Land
Survey and Mapping

Land Use Maps and Data

Base Maps and Topographic Maps

Aerial Photo and Remote Sensing Images

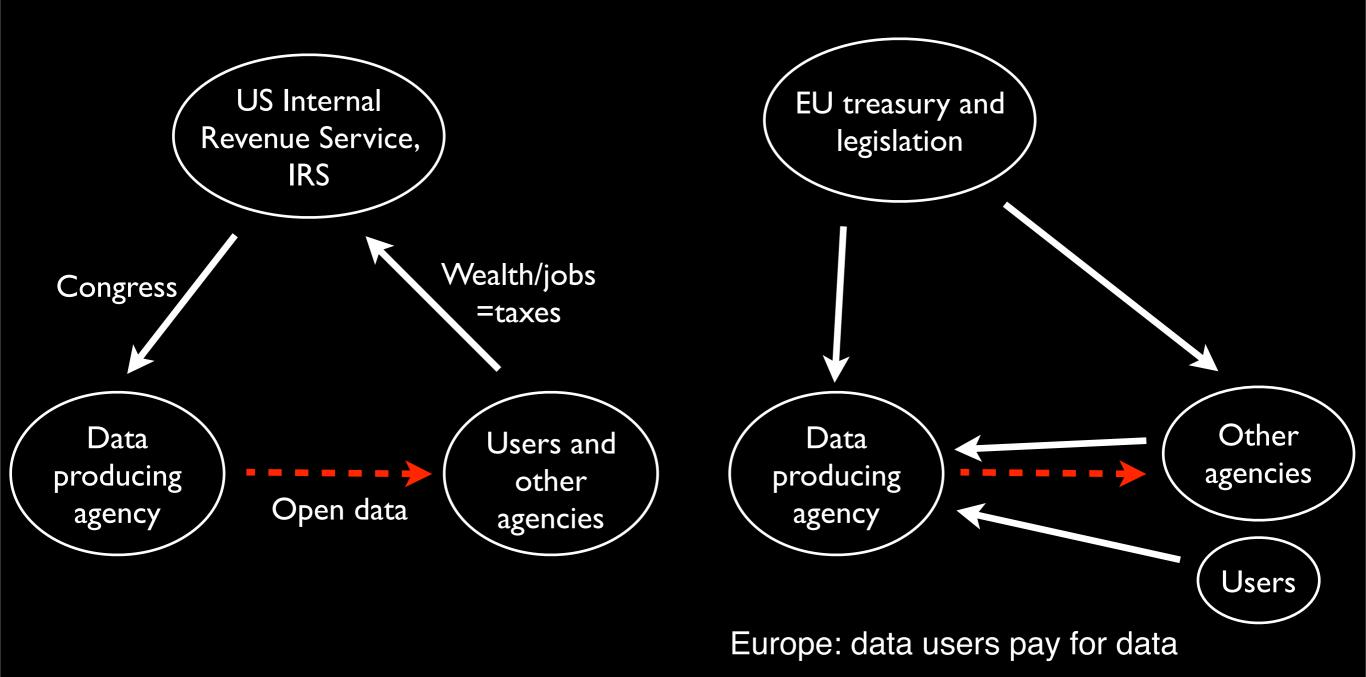
Cadastre Maps

Common Version Electronic Maps

Land Surveying and Mapping Integrated Data

e-GPS Service

Different funding models for PSI

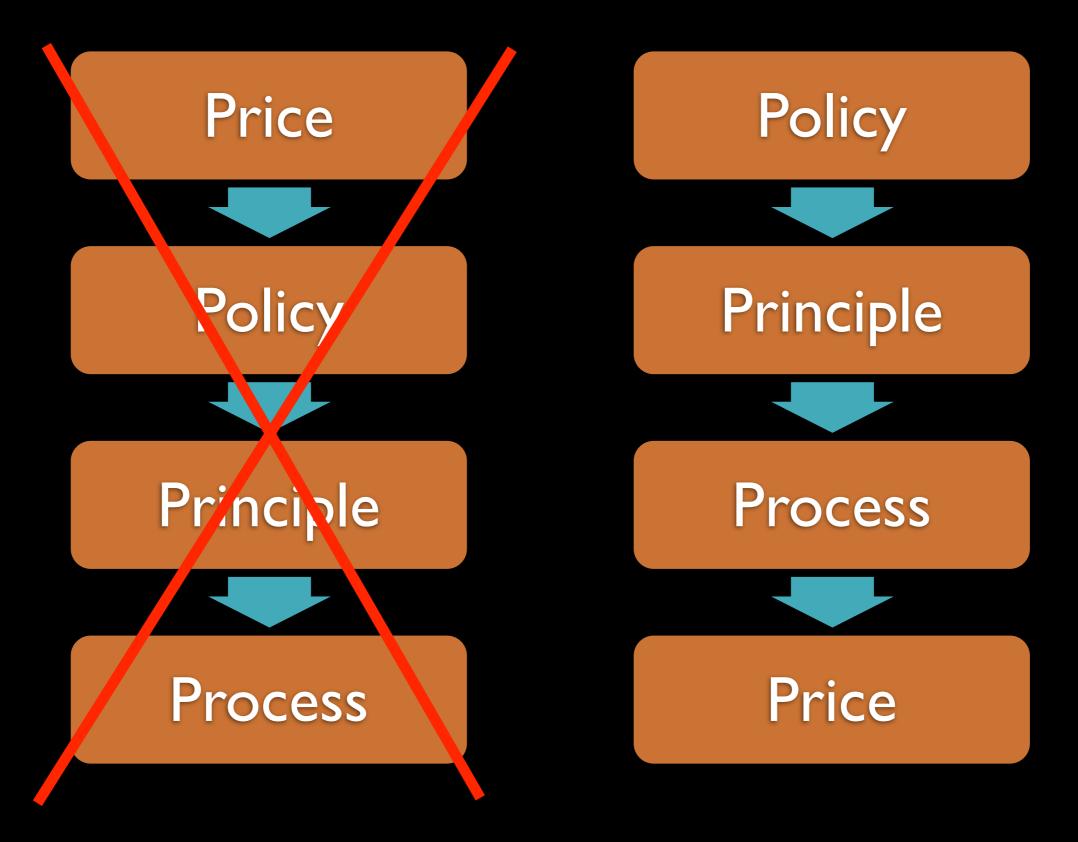


Peter Weiss, 2004. Borders in Cyberspace: Conflicting Public Sector Information Policies and their Economic Impacts, Open Access and the Public Domain in Digital Data and Information for Science, pp. 69-73

Open Geo-Data

- By definition of Public Common of Geographic Data (Onsrud, 2004)
- Open domain
 - cannot hold copyright by law, e.g. geo data of US Federal
 - copyright has expired, e.g. Taiwan Bao Maps (over 100 years ago)
 - is not subject to copyright, e.g. facts
- Open Access
 - copyrighted, but use open licenses
 - GPL, CC, ODbL

4Ps to open geo data



Policies for open geo-data

- remove restrictions for accessing governmental geo-data
- remove restrictions on reuse of governmental geo-data
- use standard formats to release geo-data
- Are current laws enough? or create new legal rights to empower the public

Principles

- Completeness
- Primary
- Timeliness
- Access

- Machine readability
- Non-proprietary
- Licensing
- Usage Costs

I.Discover

3.License

2.Process

4.Publish

http://agimo.govspace.gov.au/page/primer-v1/scenarios/

Discovery

Ask

- •What data do we already have?
- •What data have we been asked for?
- •Is this data already public?

Find the data



Then Consider Freedom of Information requests



Examine existing publications

Process

Ask

- •Are there security concerns?
- •Will this data impact on privacy?
- •Is this data at an appropriate level of aggregation?

Then



License

Ask

•Do we own this data?

- •Do we have users' permission to publish this data?
- •How should this data be able to be reused?

Then

Choose a license



Negotiate with owners



Remove 3rd-party data

Ask

- •Should it be a dump, feed or API?
- •Is documentation and metadata required?
- •Is it published in an appropriate format?

Convert data format

Then

Describe and document



5 star (geo) open data



on the web, under open license



machine-readable data



non-proprietary format



identifier URI



Linked Data

scanned maps

online mapping

GML, KML

Rdf4Map

LinkedGeoData

Taiwan Gazetteer



http://placesearch.moi.gov.tw

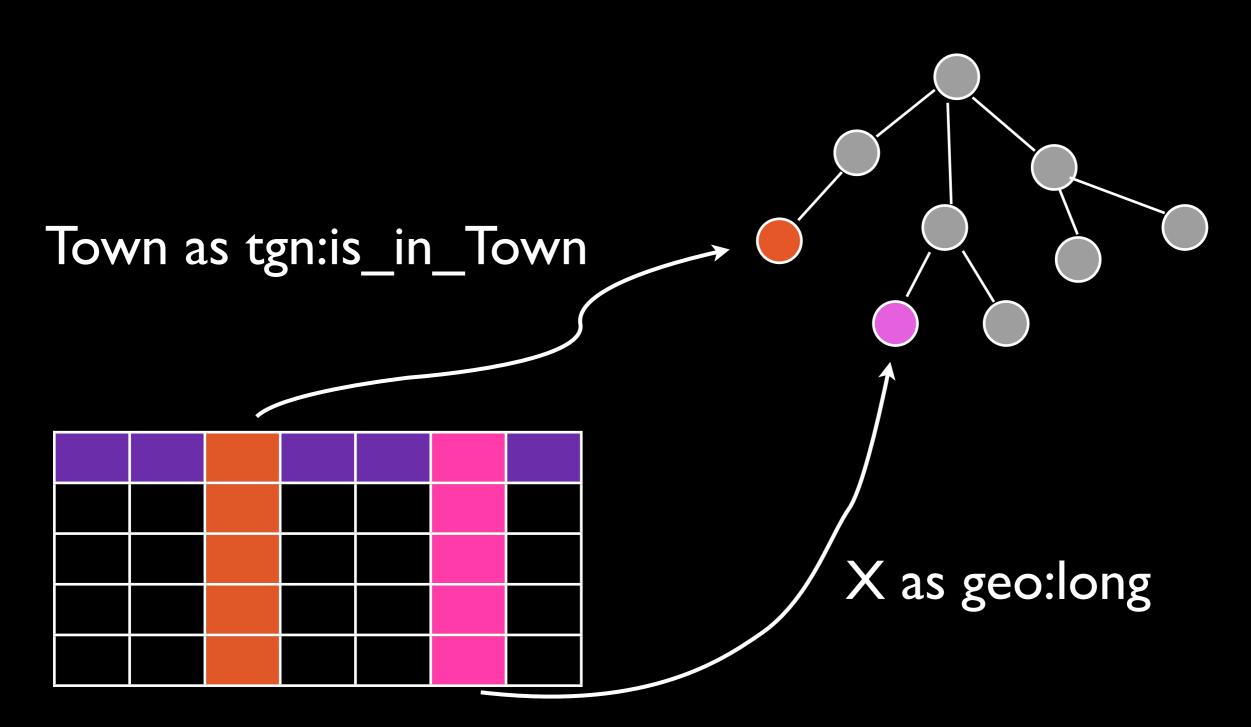
Taiwan Geographic Name Database



Data resource: 6



RDF Triplify



http://pomelo.iis.sinica.edu.tw:2020/page/geoname_tw/100

Link to Geonames.org

Geoname_tw #香蕉市



Resource URI: http://pomelo.iis.sinica.edu.tw:2020/resource/geoname_tw/100

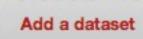
Home | All geoname tw

Property	Value
tgn:address	
tgn:en_name	Xiangjiaoshi
tgn:en_name_hanyu	Xiangjiaoshi
tgn:en_name_tongyong	Siangjiaoshih
tgn:featureType	地名
tgn:id	100 (xsd:integer)
tgn:is_in_County	南投縣
tgn:is_in_Town	中寮鄉
rdfs:label	Geoname_tw #香蕉市
geo:lat	23.892823 (xsd:decimal)
geo:long	120.729244 (xsd:decimal)
tgn:name	香蕉市
tgn:phone	
owl:sameAs	http://www.geonames.org/6650274/
rdf:type	tgn:Geoname_tw

active

tgn

3000



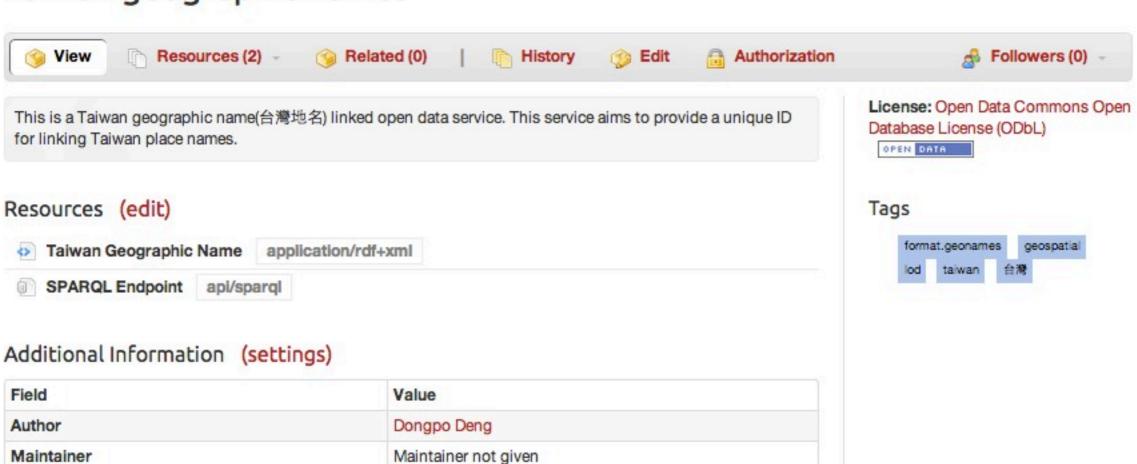
ckan

Search

Groups

Find datasets

Taiwan geographic names



http://pomelo.iis.sinica.edu.tw:2020/

Cite this

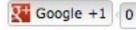
State

Source

Namespace

Taiwan geographic names. Dongpo Deng. Retrieved 08:23, Oct 29, 2012 (UTC). the Data Hub

links:geonames-semantic-web









Conclusion

- Governmental geo-data is infrastructure.
 Pay for using data?
- Need a Open Data Policy for opening geodata
- Still a long way to go