

# Odprti podatki in njihova uporaba

Open Data and Data Analysis

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Artificial Intelligence  
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# Open data

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Open data are data that are freely available to everyone to use and republish as they wish, without restrictions from copyright, patents or other mechanisms of control.

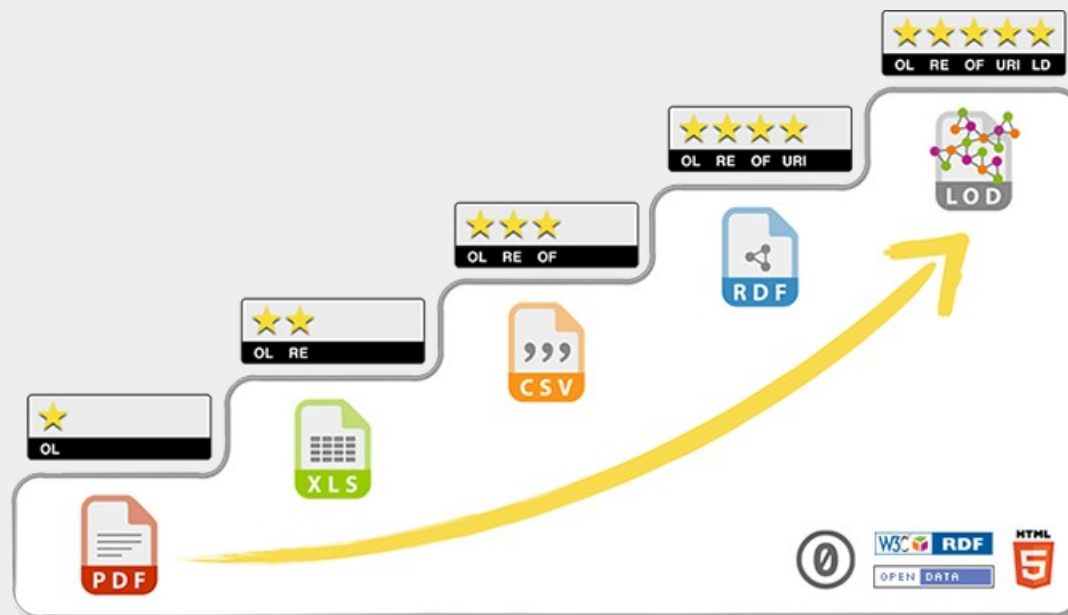
Elements of open data:

- Availability and access: available as a whole, free or for reasonable reproduction costs, preferably downloadable from internet, available in a convenient and modifiable form.
- Re-use and redistribution: terms of use permit re-use and redistribution.
- Universal participation: for anyone for any purpose (no copyright, patents, other control mechanisms)

Formally, open data has a licence saying it is open data. Sometimes licence requires attribution and share-alike.

# Open data

Tim Berners-Lee, the inventor of the Web and Linked Data initiator, suggested a 5-star deployment scheme for Open Data.



Source: <http://5stardata.info/>

1. Make your data available on the Web (in whatever format) under an open license.
2. Make it available as structured data (e.g., Excel instead of image scan of a table).
3. Make it available in a non-proprietary open format (e.g., CSV instead of Excel).
4. Use URIs to denote things, so that people can point at your data.
5. Link your data to other data to provide context.

# Public information

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Public information is all information originating from the field of work of the public sector bodies and occurring in the form of a document, a case, a dossier, a register, a record or other documentary material (hereinafter referred to as “the document”) drawn up by the body, by the body in cooperation with other body, or acquired from other persons.

Natural and legal persons can under certain conditions use this information also for commercial or non commercial reuse.

# Some sources of open data

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- Open data in science:  
[https://en.wikipedia.org/wiki/Open\\_data#In\\_science](https://en.wikipedia.org/wiki/Open_data#In_science)
- Open data in government:  
[https://en.wikipedia.org/wiki/Open\\_data#In\\_Government](https://en.wikipedia.org/wiki/Open_data#In_Government)
- EU Open data portals:  
<https://ec.europa.eu/digital-single-market/en/open-data-portals>
- Open data by American Government:  
<https://www.data.gov/>
- Slovenian National Interoperability Framework Portal:  
<http://nio.gov.si/nio/vstopna.nio?lang=en>
- Slovenian community Opendata.si: <https://opendata.si/>

Some examples of open data and its  
analysis

# Slovenian business registry

Ajpes (The Agency of the Republic of Slovenia for Public Legal Records and Related Services) provided:

- ePRS Slovenian Business Register (central public database on all business and legal entities, their subsidiaries, and other organizations' segments located in Slovenia (public and private institutes)), including deleted companies;
- eRTR - Register of legal entity's bank accounts.

The screenshot displays the ePRS Slovenian Business Register website. The browser address bar shows [www.ajpes.si/?language=english](http://www.ajpes.si/?language=english). The page header includes navigation links: Home, About AJ PES, Telephone/Help, Site map, Terms of use, and Piskotki. The main navigation bar features 'AJ P E S BUSINESS REGISTERS', 'CREDIT RATING', and 'EUROPEAN REGISTER'. Below this, there are tabs for 'START-UPS', 'REGISTERS', and 'CREDIT RATING'. The main content area is titled 'AJ P E S - an indispensable primary source of business information'. It contains a paragraph describing the agency's role and a 'We recommend' section. On the right side, there is a search form titled 'ePRS SLOVENIAN BUSINESS REGISTER' with the instruction: 'Data can be accessed by entering the search criteria in one or more fields, or by selecting the search criterion from the drop-down menu. The search criterion can be any of the following: data, part of the data (word), beginning of the word.' The search form includes fields for: Identification number, Tax Number, Name, Street name and number, City, Municipality, Post office code, Main activity, Institutional sector, Legal organizational form, and Rank. The Rank dropdown menu is currently set to 'active company'. Below the search fields, there is a 'Search' button, an 'Advanced search' button, and a 'Clear form' button. The search results are indicated as 'up to 10 hits'.

## Some other basic registers...

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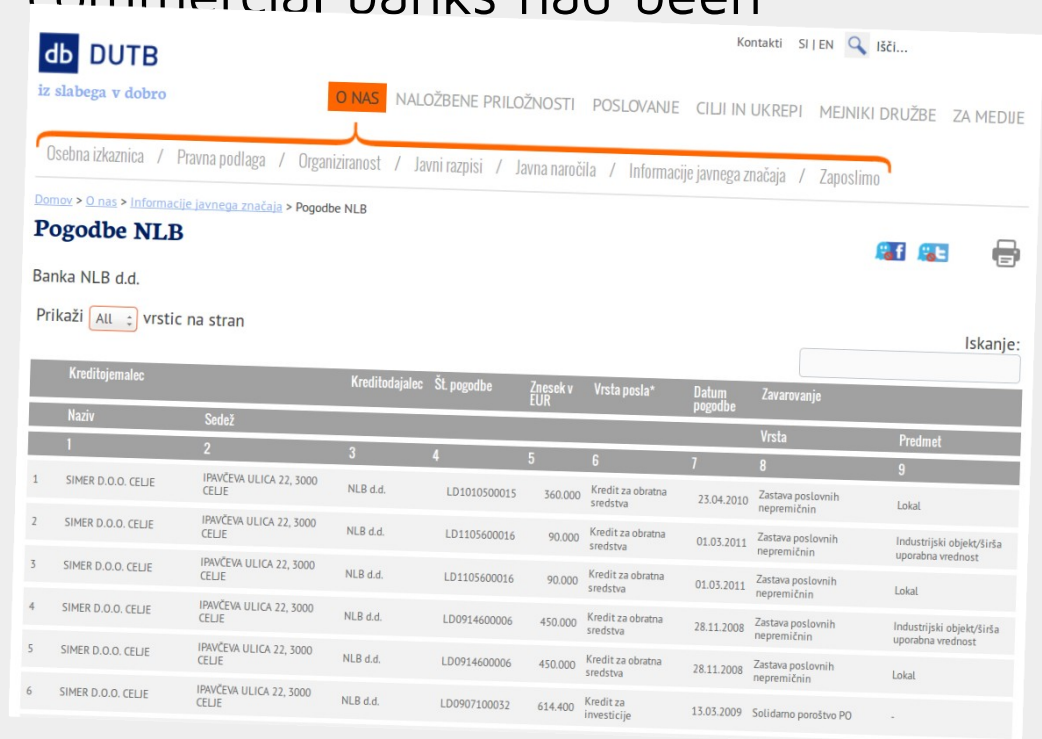
- *Registry of budget users*: list and classification of all direct and indirect Slovenian budget users.
- *Standard Classification of Activities*: the obligatory national standard used for recording, collecting, processing, analysing, mediating and disseminating data connected with activity).
- *CPV (Common procurement vocabulary)*: CPV establishes a single classification system for public procurement aimed at standardising the references used by contracting authorities and entities to describe the subject of procurement contracts.
- ...



## Bad investments transferred on *Bank Assets Management Company*

The Bank Assets Management Company (BAMC) was established in March 2013 as a government-owned company with the task of facilitating the restructuring of banks with systemic importance that were facing severe solvency and liquidity problems.

Non-performing assets of commercial banks had been transferred to BAMC.

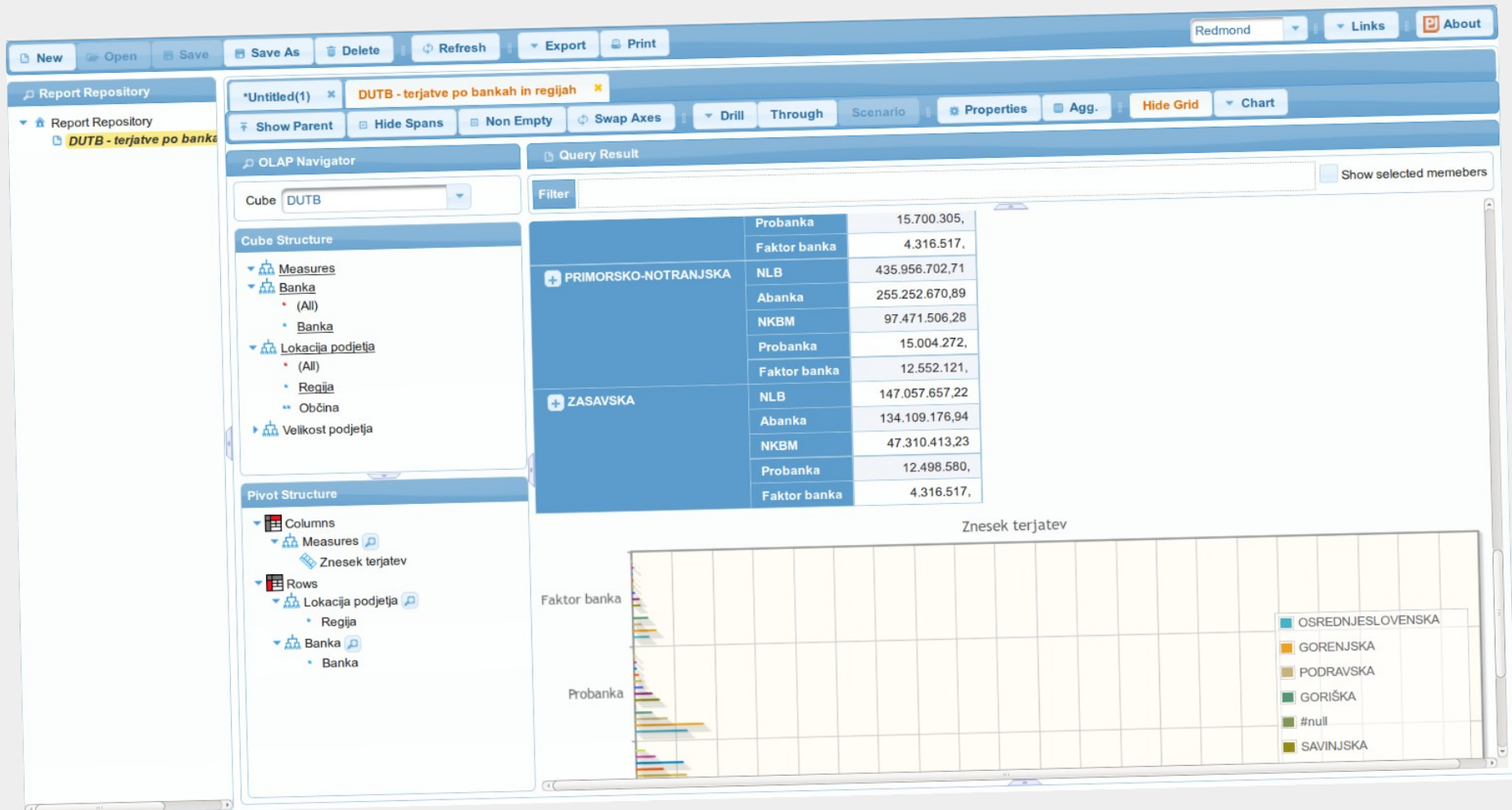


The screenshot shows the website of DUTB (Družba za upravljanje sredstvi) with a navigation menu and a search bar. The main content area displays a table titled "Pogodbe NLB" (Agreements NLB) for Banka NLB d.d. The table lists six agreements with the following data:

| Kreditodajalec | Kreditodajalec     | Št. pogodbe                   | Znesek v EUR | Vrsta posla* | Datum pogodbe | Zavarovanje                |            |                               |   |
|----------------|--------------------|-------------------------------|--------------|--------------|---------------|----------------------------|------------|-------------------------------|---|
| Naziv          | Sedež              |                               |              |              |               |                            |            |                               |   |
| 1              | 2                  | 3                             | 4            | 5            | 6             | 7                          | 8          | 9                             |   |
| 1              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD1010500015 | 360.000       | Kredit za obratna sredstva | 23.04.2010 | Zastava poslovnih nepremičnin | Lokal                                       |
| 2              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD1105600016 | 90.000        | Kredit za obratna sredstva | 01.03.2011 | Zastava poslovnih nepremičnin | Industrijski objekt/sirša uporabna vrednost |
| 3              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD1105600016 | 90.000        | Kredit za obratna sredstva | 01.03.2011 | Zastava poslovnih nepremičnin | Lokal                                       |
| 4              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD0914600006 | 450.000       | Kredit za obratna sredstva | 28.11.2008 | Zastava poslovnih nepremičnin | Industrijski objekt/sirša uporabna vrednost |
| 5              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD0914600006 | 450.000       | Kredit za obratna sredstva | 28.11.2008 | Zastava poslovnih nepremičnin | Lokal                                       |
| 6              | SIMER D.O.O. CELJE | IPAVČEVA ULICA 22, 3000 CELJE | NLB d.d.     | LD0907100032 | 614.400       | Kredit za investicije      | 13.05.2009 | Solidarno poroštvo PO         | -   |

## Bad investments transferred on *Bank Assets Management Company*

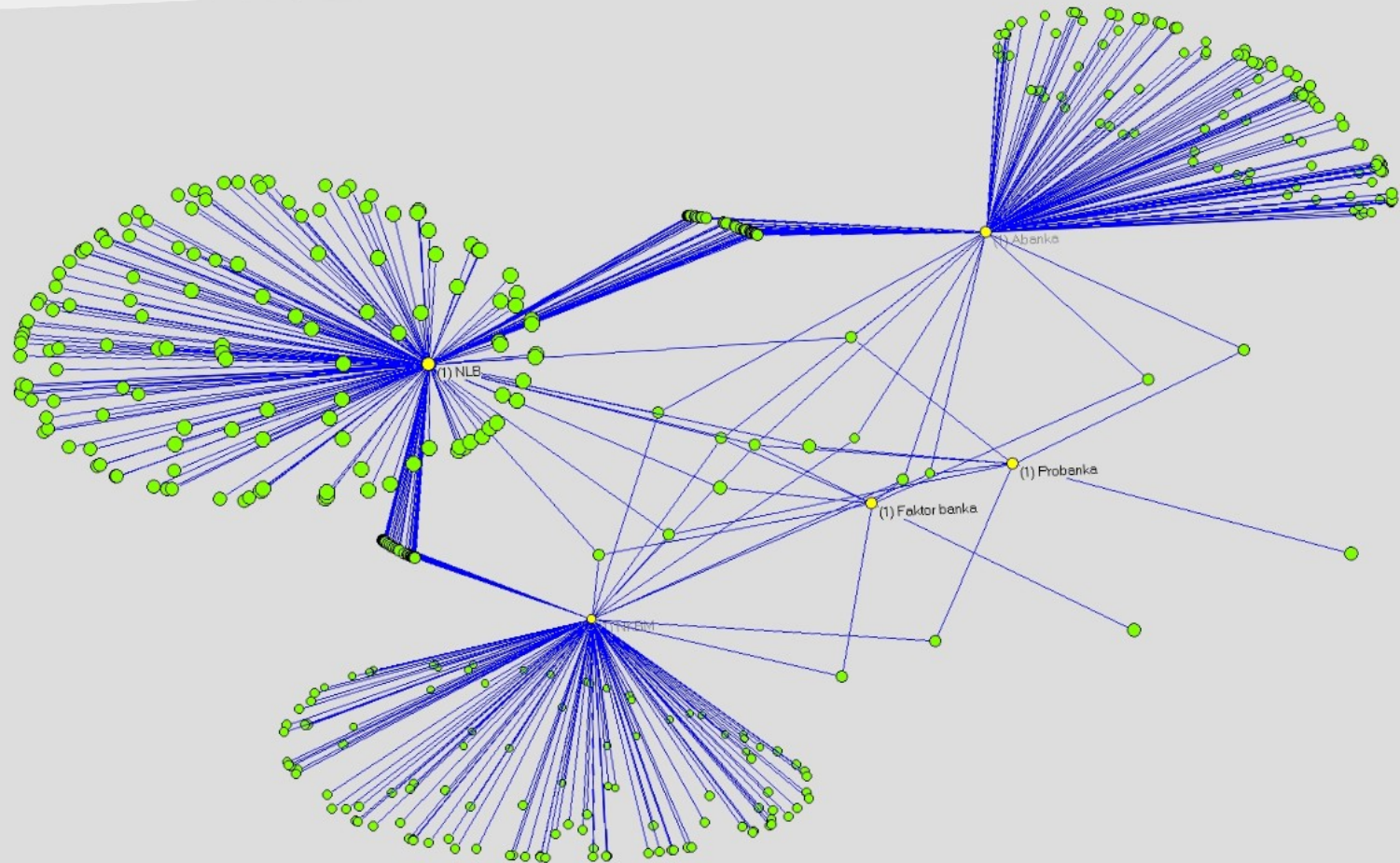
Data has been imported into the database and linked to business registry...



## Bad investments transferred on *Bank Assets Management Company*

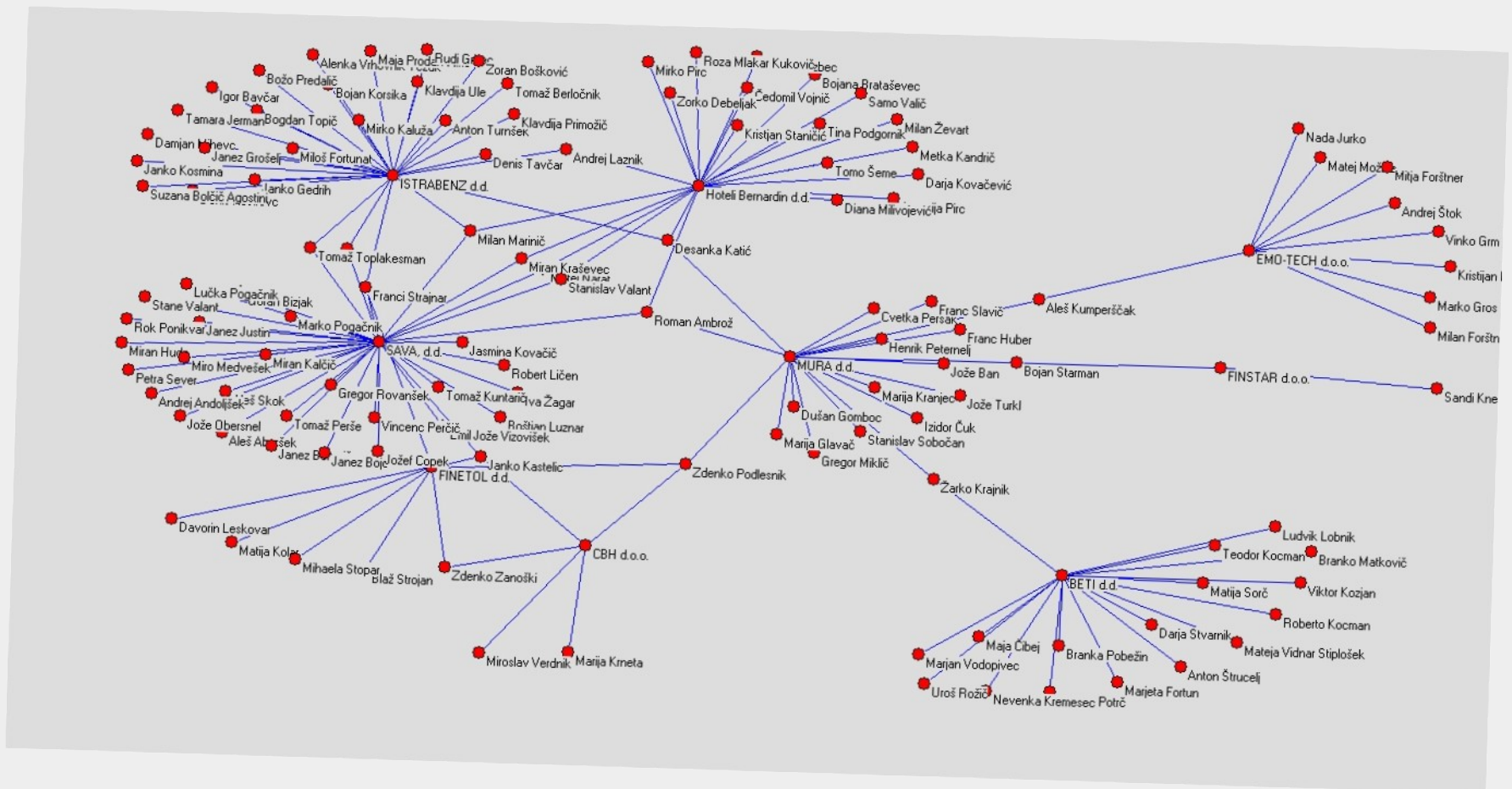
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... multiple bad loans to companies transferred to BAMC has been visualised...



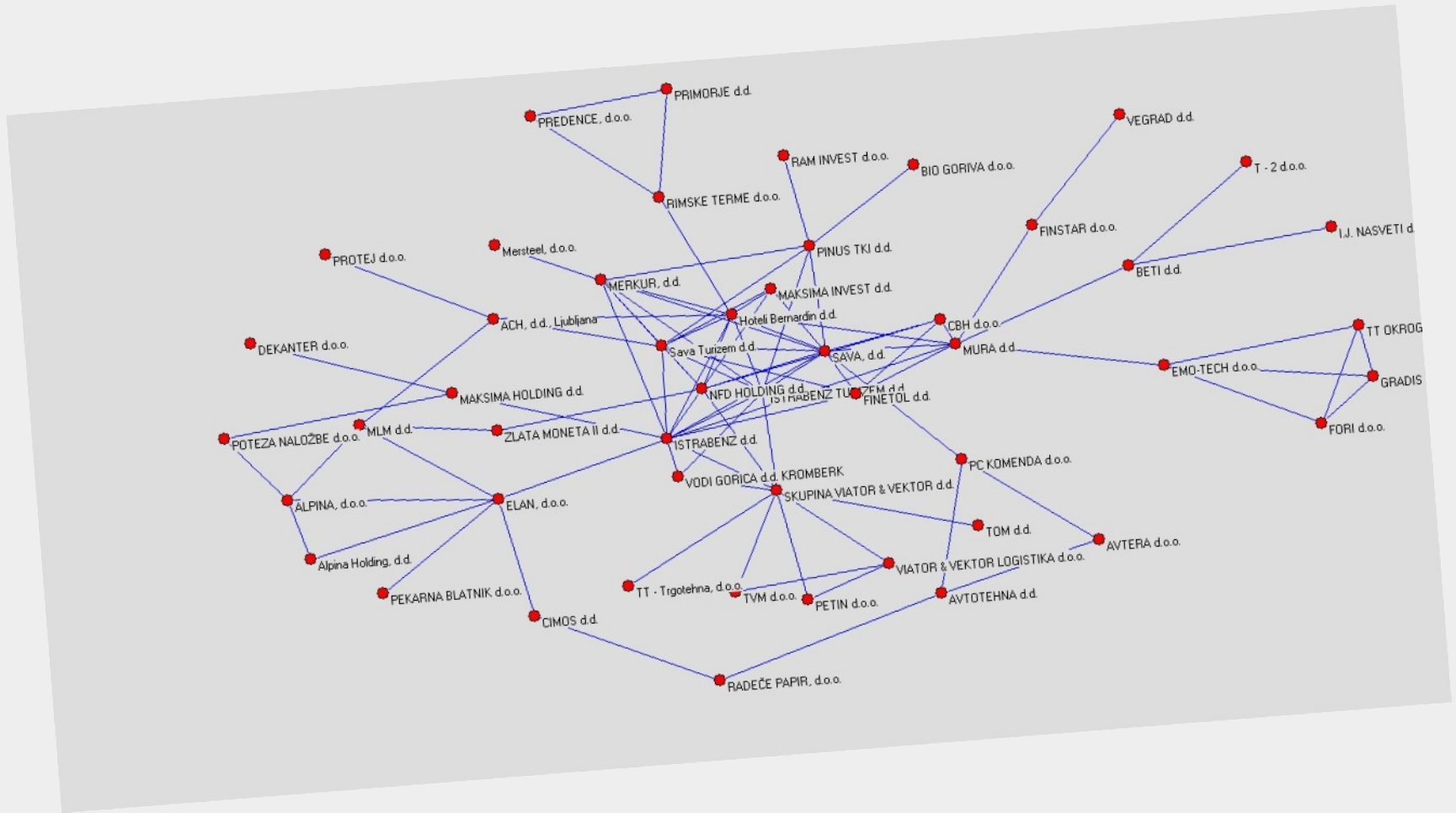
## Bad investments transferred on *Bank Assets Management Company*

... the network of connected persons has been created (persons who are or have been directors and/or members of supervisory boards of those companies).



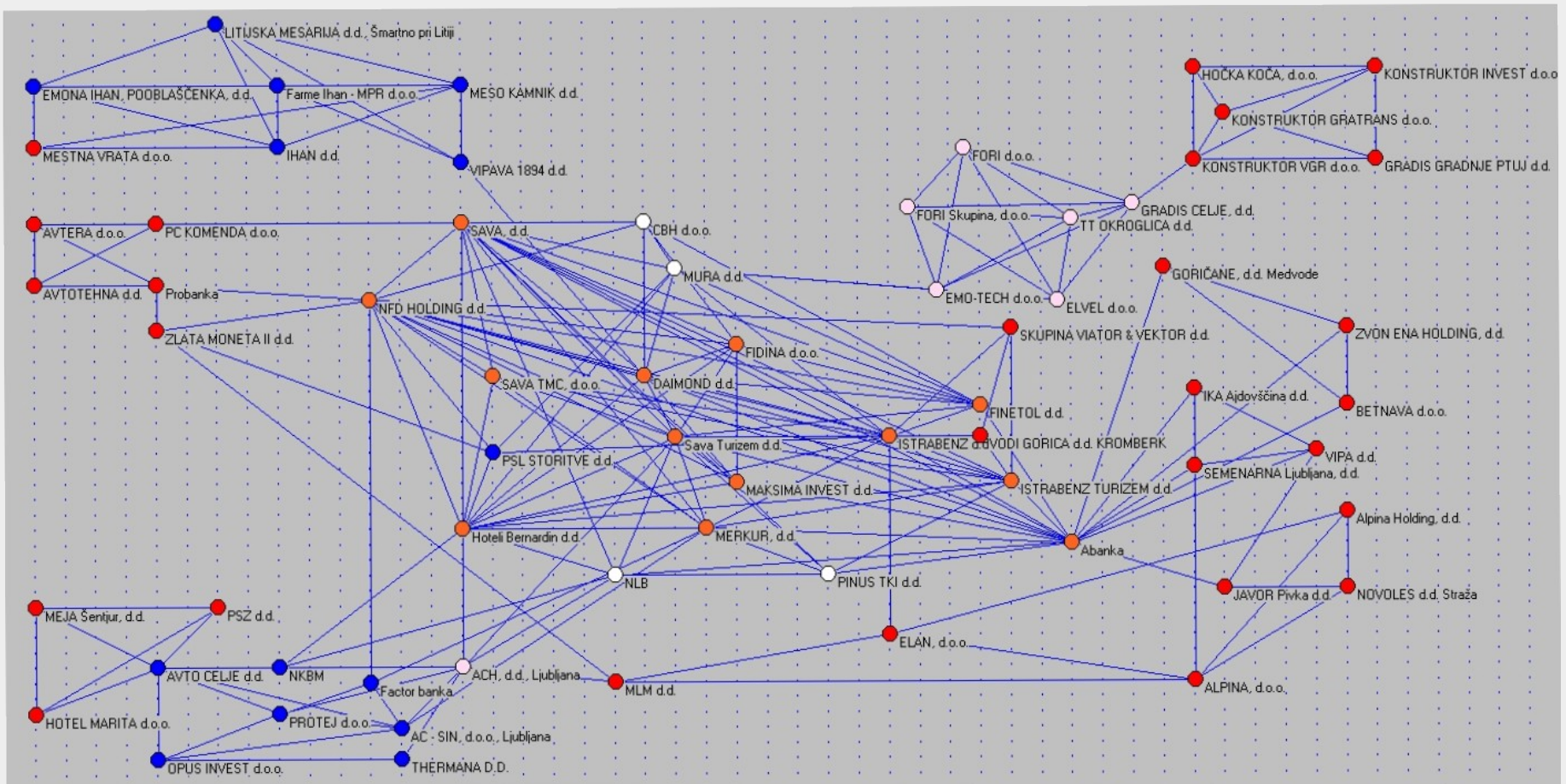
## Bad investments transferred on *Bank Assets Management Company*

The network shows (management) connections among corporations...



## Bad investments transferred on *Bank Assets Management Company*

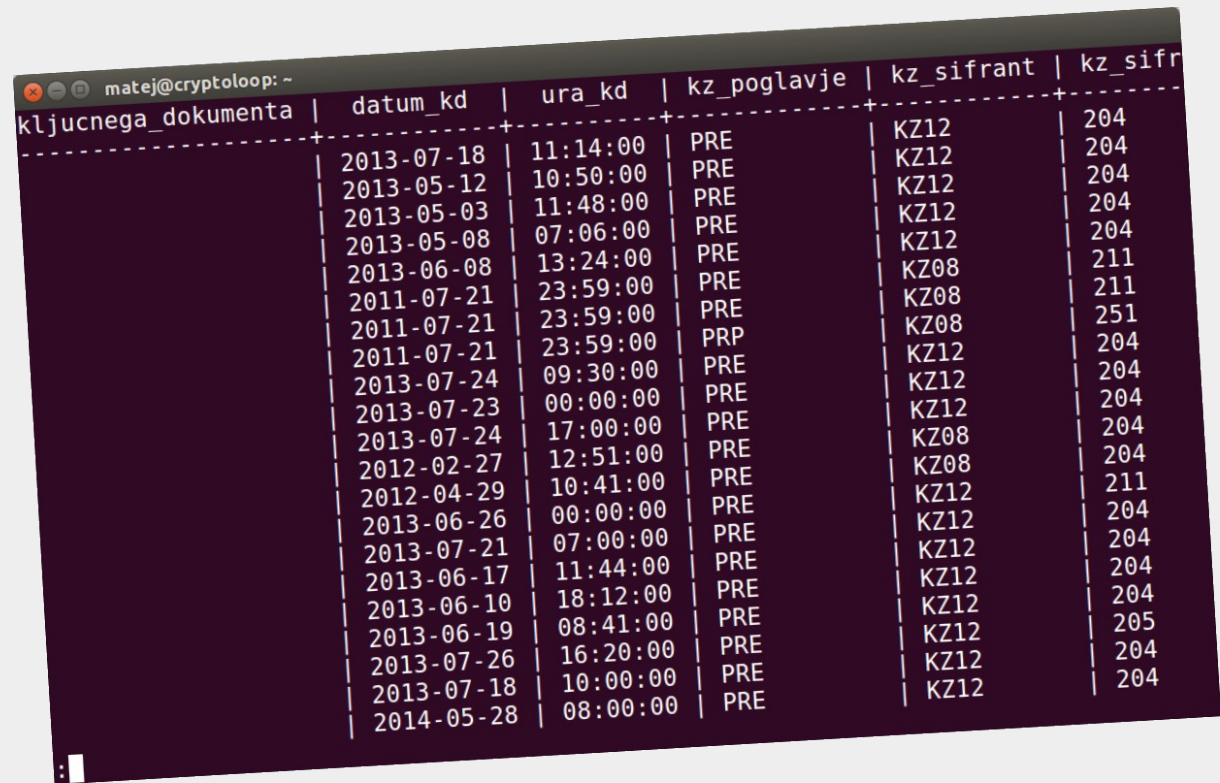
The biggest component of the network contains approx. 33% of all companies transferred to BAMC. Those companies has been granted approx. 61% of bad loans.



## The incidence of crime [police database of all committed offenses]

The Institute of Criminology at the Faculty of Law has obtained access to police records of all committed offences...

Database contains description of committed offence, geolocation data, description of involved persons, description of method of offence, ID of persons, etc.

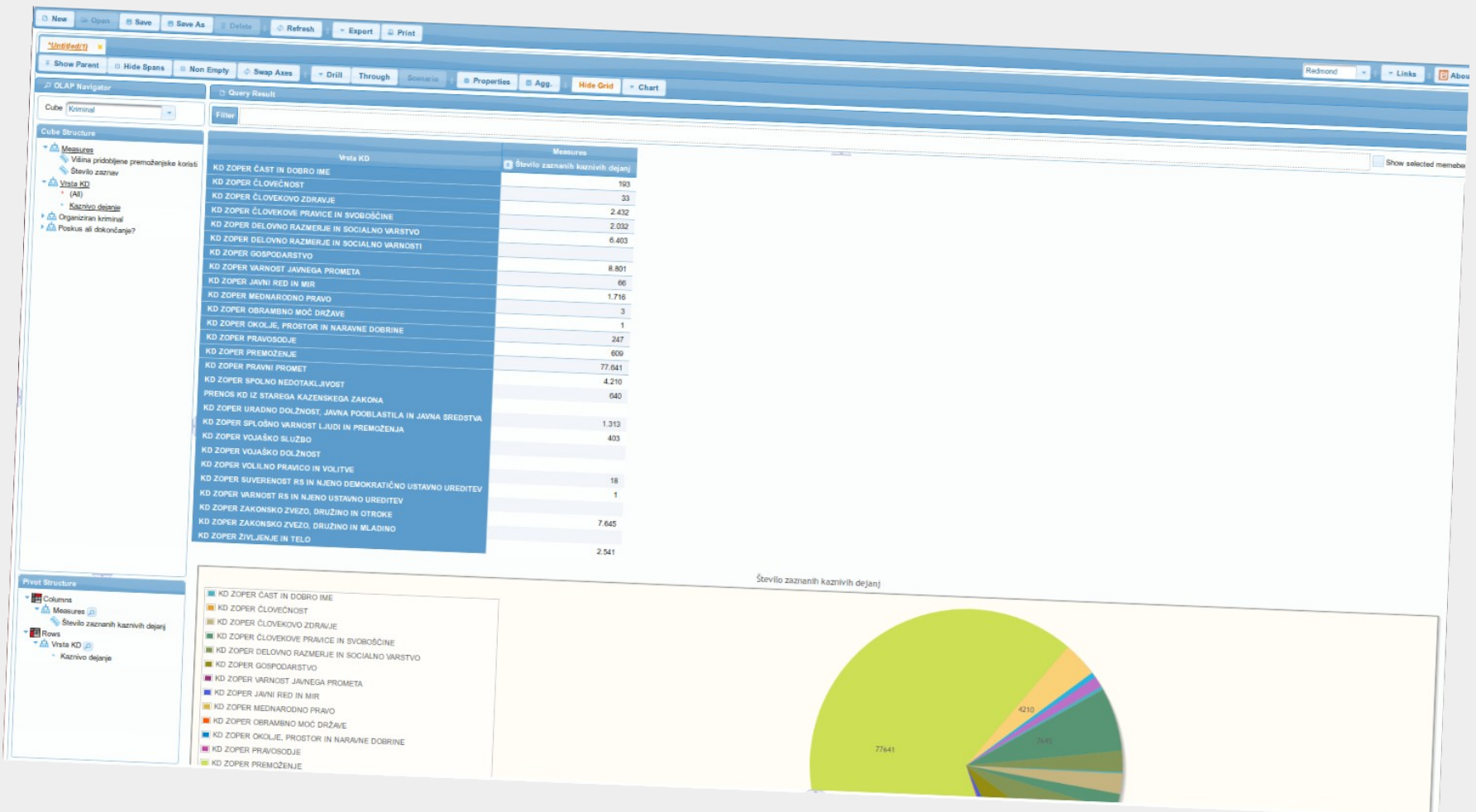


A terminal window with a dark background and light text. The window title is 'matej@cryptoloop: ~'. The terminal displays a table with columns: 'kljucnega\_dokumenta', 'datum\_kd', 'ura\_kd', 'kz\_poglavje', 'kz\_sifrant', and 'kz\_sifr'. The table contains 20 rows of data.

| kljucnega_dokumenta | datum_kd   | ura_kd   | kz_poglavje | kz_sifrant | kz_sifr |
|---------------------|------------|----------|-------------|------------|---------|
|                     | 2013-07-18 | 11:14:00 | PRE         | KZ12       | 204     |
|                     | 2013-05-12 | 10:50:00 | PRE         | KZ12       | 204     |
|                     | 2013-05-03 | 11:48:00 | PRE         | KZ12       | 204     |
|                     | 2013-05-08 | 07:06:00 | PRE         | KZ12       | 204     |
|                     | 2013-06-08 | 13:24:00 | PRE         | KZ08       | 211     |
|                     | 2011-07-21 | 23:59:00 | PRE         | KZ08       | 211     |
|                     | 2011-07-21 | 23:59:00 | PRE         | KZ08       | 251     |
|                     | 2011-07-21 | 23:59:00 | PRP         | KZ08       | 251     |
|                     | 2013-07-24 | 09:30:00 | PRE         | KZ12       | 204     |
|                     | 2013-07-23 | 00:00:00 | PRE         | KZ12       | 204     |
|                     | 2013-07-24 | 17:00:00 | PRE         | KZ12       | 204     |
|                     | 2012-02-27 | 12:51:00 | PRE         | KZ08       | 204     |
|                     | 2012-04-29 | 10:41:00 | PRE         | KZ08       | 204     |
|                     | 2013-06-26 | 00:00:00 | PRE         | KZ12       | 211     |
|                     | 2013-07-21 | 07:00:00 | PRE         | KZ12       | 204     |
|                     | 2013-06-17 | 11:44:00 | PRE         | KZ12       | 204     |
|                     | 2013-06-10 | 18:12:00 | PRE         | KZ12       | 204     |
|                     | 2013-06-19 | 08:41:00 | PRE         | KZ12       | 205     |
|                     | 2013-07-26 | 16:20:00 | PRE         | KZ12       | 204     |
|                     | 2013-07-18 | 10:00:00 | PRE         | KZ12       | 204     |
|                     | 2014-05-28 | 08:00:00 | PRE         | KZ12       | 204     |

# The incidence of crime

Data were imported into the database and simple OLAP analytic has been programmed...





# The incidence of crime

Data could also be easily imported in PSPP (software for advanced statistical analysis).

The screenshot displays the GNU PSPP interface. The main window shows a data table with columns: Case, id\_kd, enota\_ki, id\_dosjeja, id\_zaznave, vrsta\_zaz, st\_1\_zakljucnega, datum\_1, sifra\_1\_z, datum\_ki, ura\_kd, kz\_pogla, kz\_sifran, kz\_odsta, kz\_tocka, kz\_alinej, krim\_ozn, krim\_ozn, krim\_oz. A command window titled '\*kriminal.sps — PSPPIRE Urejevalnik sintakse' contains the following SQL query:

```
GET DATA /TYPE=PSQL  
/CONNECT='host=127.0.0.1 port=5432 dbname= user= password='  
/SQL='select * from kriminal_dogodki.'
```

A red arrow points to the command window. Below it, a window titled 'Rezultati\_analize — PSPPIRE Pregledovalnik rezultatov analize' displays statistical results. It includes a T-TEST summary table and an Independent Samples Test table.

| Group Statistics            |   | organiziran_kriminal | N   | Povprečje | Standardni odklon | Povprečje std. napake: |
|-----------------------------|---|----------------------|-----|-----------|-------------------|------------------------|
| visina_premozenjske_koristi | 0 | 116513               | 443 | 2171,76   | 210282,22         | 616,05                 |
|                             | 1 |                      |     | 1635,14   | 17942,08          | 852,45                 |

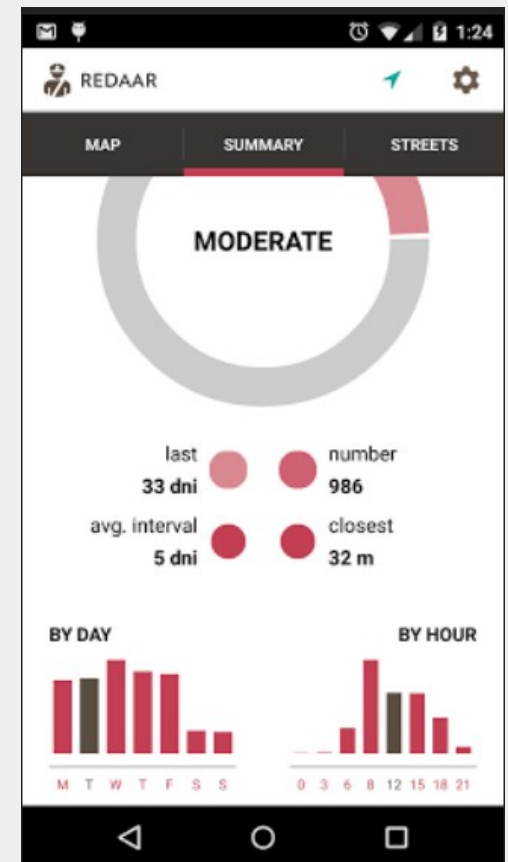
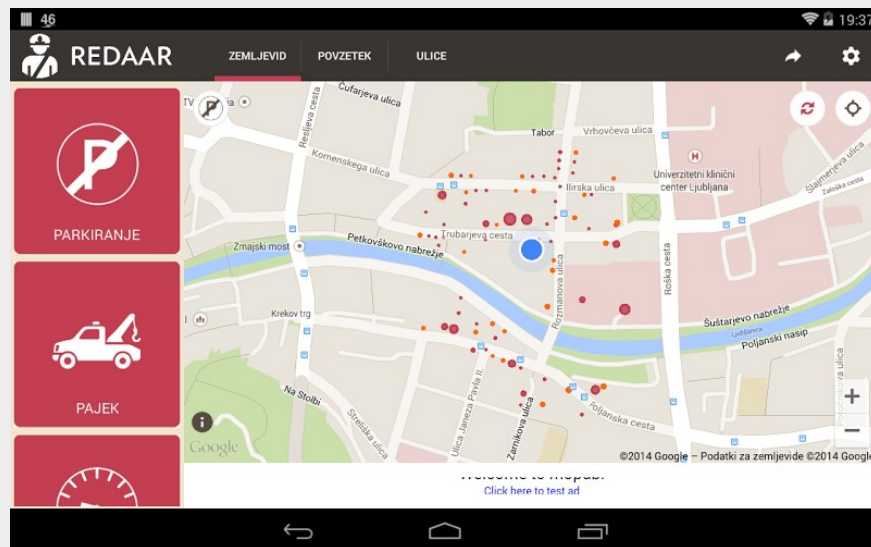
| Independent Samples Test    |                                    | Leveneov test enakosti varianc |                  | t-test for Equality of Means |           |                 |                   |                       |   |          |
|-----------------------------|------------------------------------|--------------------------------|------------------|------------------------------|-----------|-----------------|-------------------|-----------------------|---|----------|
|                             |                                    | F                              | Stat. značilnost | t                            | prost.st. | Sig. (2-tailed) | Povprečna razlika | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                             |                                    |                                |                  |                              |           |                 |                   |                       | spodnja                                   | zgornja  |
| visina_premozenjske_koristi | Equal variances assumed            | ,01                            | ,909             | ,05                          | 116954,00 | ,957            | 536,62            | 9990,99               | -19045,56                                 | 20118,81 |
|                             | Enakost varianc ni predpostavljena |                                |                  | ,51                          | 1023,18   | ,610            | 536,62            | 1051,76               | -1527,23                                  | 2600,47  |

At the bottom of the screenshot, there are buttons for 'Pregled podatkov', 'Pregled spremenljivk', and 'izključeni', 'Uteži izključene', 'No Split'.

# The incidence of crime

Some other possible analysis:

- visualisation of crime locations;
- time series;
- analysis of recidivism;
- clustering of criminal offences;
- crime predictions;
- ...



# Data about lobbyists and lobbying contacts

We have received data about registered lobbying contacts from the *Commission for the Prevention of Corruption*. Unfortunately, data were not provided in machine readable form...

REPUBLIKA SLOVENIJA  
KOMISIJA ZA PREPREČEVANJE KORUPCIJE  
Dunajska 56, 1000 Ljubljana

INTEGRITETA, ODGOVORNOST,  
VLADAVINA PRAVA

REGISTER LOBISTOV

**PRJAVA STIKA Z OSEBO/LOBISTOM, KI SE NI DOŁAN VPISATI V REGISTER**

Skladno z 71. členom Zakona o integriteti in preprečevanju korupcije (ZInPK, Uradni list RS, št. 45/2010, 26/2011 in 43/2011) prijavljam stika z lobistom, ki se ni dołan vpisati v register lobistov.

Čeriti odstavek 58. člena ZInPK določa, da se osebi/lobistu, ki lobira za interesno organizacijo, v kateri je zaposlen, za ta nemerni ni dołan vpisati v register. Enako velja za zakonitega zastopnika, ali izvoljenega predstavnika interesne organizacije.

**1. OSERNI PODATKI LOBIRANCA**

1.1 Priimek, ime: mag. Vajsa Klavora, Franc Jurša, Anton Urh, Matjaž Zanočkar

1.2 Naziv in naslov organa v katerem ste zaposleni (institucija, hiša št., naselje, pošta, kraj): Državni zbor RS, PS DeSUS, Šubičeva 4, 1000 Ljubljana

**2. PODATKI LOBISTA:**

Utemeljite in razumna izbirena lahko več možnosti!

Lobist je vpisan v register lobistov

Lobist lobira za interesno organizacijo, v kateri je zaposlen

Lobist je zakoniti zastopnik interesne organizacije za katero lobira

Lobist je izvoljeni predstavnik interesne organizacije za katero lobira

2.1 Priimek in ime: Leo Oblak (Radio Antena), Rina Klinar (Radio Triglav), Ivan Seljak (Radio Cerčno)

2.2 Prebivališče (ulica, hiša št., naselje, pošta, kraj):

2.3 Naziv in naslov interesne organizacije, ali druge organizacije za katero lobist lobira (ime, hiša št., naselje, pošta, kraj): Radio Antena d.o.o., Stegne 11b, 1000 Ljubljana; Radio Triglav d.o.o., Trig Toneta Čufarja 4, 4270 Jesenica; Radio Cerčno d.o.o., Ličarjeva ulica 7, 5282 Cerčno

2.4 Namen in cilj, zaradi katerega lobist lobira: predstavitev predloga novele Zakona o medijih, ki je bila poslana vsem poslancem na elektronski naslov in tudi v vednost KPK  Da  Ne

2.5 Ali se je lobist identifičiral in pokazal pooblastilo interesne organizacije za lobiranje v določenih zadevah?  Da  Ne

Komisija za preprečevanje korupcije  
Dunajska 56, 1000 Ljubljana  
Tel: 01/400-57-10 Fax: 01/400-04-72

Poslanska skupina Socialnih demokratov (SD)

Štorečla o lobiranju: 24  
KOMTO LOBIRANJE: /  
ME ZAKONITEGA LOBIRANJA: 30

ITVNO PREPOVEDANO LOBIRANJE:  
projekti prijav ni mogoče šteti lobističnih stikov. Z eno prijavo je namreč lahko prijavljenih več lobističnih stikov. projekti prijav so zajete tudi prijave, ki po določbah ZInPK nimajo naravo lobističnega stika.

KOMISIJA ZA PREPREČEVANJE KORUPCIJE, Dunajske ceste 56, 1000 Ljubljana  
Telefoni: +386 1 400 57 10, Fax: +386 1 400 04 72 e-pošta: ast@koc.gov.si, s.k@koc.gov.si, sistema.naslov@koc.gov.si

stran 1 / 1

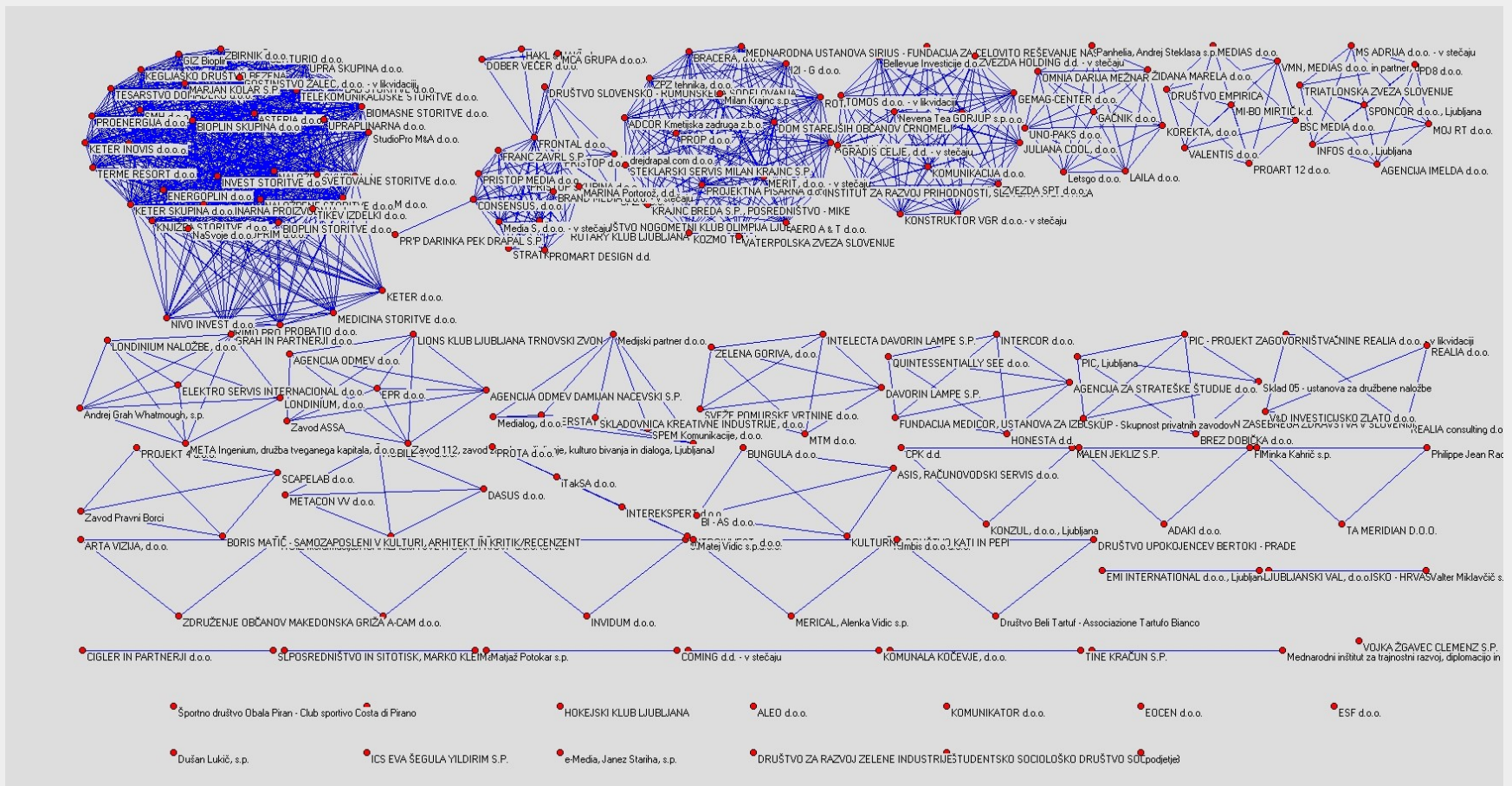
# Data about lobbyists and lobbying contacts

... however, volunteers entered the data into the database...

| AD                   | AE                  | AF                | AG          | AI                    | AJ               | AK  | AL                          | AM   | AN |
|----------------------|---------------------|-------------------|-------------|-----------------------|------------------|---|-----------------------------|--|----|
| lobist_identificiran | nasprotje_interesov | darilo_pogostitev | datum_stika | datum_porocanja_stika | kraj_stika_clean | naziv_1_interesne_org_clean   | naziv_2_interesne_org_clean | naziv_3_interesne_org_clean                      |    |
| 1                    | da                  | ne                | 2011-03-29  | 2011-03-30            | Ljubljana        | HESS, d.o.o.  |                             |  |    |
| 2                    | da                  |                   | 2011-09-15  | 2011-09-16            | Ljubljana        | GIZ RADIODIFUZNIH RADIJSKIH IN TELEVIZIJSKIH MEDIJEV                |                             |  |    |
| 3                    | da                  |                   | 2011-09-23  | 2011-09-26            | Ljubljana        | HSE d.o.o.  | TEŠ d.o.o.                  |  |    |
| 4                    | da                  |                   | 2012-12-07  | 2012-12-07            | Ljubljana        | GZS   |                             |  |    |
| 5                    | da                  |                   | 2011-01-18  | 2011-03-14            | Ljubljana        | EUROLUX d.o.o.  |                             |  |    |
| 6                    | ne                  |                   | 2013-07-24  | 2013-07-25            | Ljubljana        | Dr. Ferk & Partner d.o.o.   |                             |  |    |
| 7                    | da                  | ne                | 2013-06-12  | 2013-06-14            | Ljubljana        | ZAVOD PIP   |                             |  |    |
| 8                    | ne                  | ne                | 2012-09-06  | 2012-09-06            | Ljubljana        | SENG d.o.o.   |                             |  |    |
| 9                    | da                  | ne                | 2011-04-19  | 2011-04-20            | Ljubljana        | FOCUS, DRUŠTVO ZA SONARAVEN RAZVOJ                                  |                             |  |    |
| 10                   | ne                  | ne                | 2012-10-20  | 2012-10-23            | Ljubljana        |   |                             |  |    |
| 11                   | da                  | da                | 2013-09-12  | 2013-09-12            | Ljubljana        | ZDRUŽENJE LASTNIKOV NEPREMIČNIN V SLOVENIJI                         |                             |  |    |
| 12                   | da                  | ne                | 2013-11-26  | 2013-12-13            | Ljubljana        |   |                             |  |    |
| 13                   | da                  | da                | 2013-09-12  | 2013-09-12            | Ljubljana        | ZDRUŽENJE LASTNIKOV NEPREMIČNIN V SLOVENIJI                         |                             |  |    |
| 14                   | da                  | da                | 2013-09-12  | 2013-09-12            | Ljubljana        | ZDRUŽENJE LASTNIKOV NEPREMIČNIN V SLOVENIJI                         |                             |  |    |
| 15                   | da                  | ne                | 2013-09-25  | 2013-09-23            | Ljubljana        | PETROL d.d., Ljubljana  |                             |  |    |
| 16                   | ne                  | ne                | 2013-03-07  | 2013-03-07            | Ljubljana        | MEDNARODNI FORUM ZNANSTVENO RA&NOVARTIS PHARMA SERVICES INC. Podru  | SERVIER PHARMA d.o.o.       |  |    |
| 17                   | ne                  | ne                | 2014-06-13  | 2014-06-17            | Ljubljana        | ECRS  |                             |  |    |
| 18                   | ne                  | ne                | 2014-06-13  | 2014-06-17            | Ljubljana        | ECRS  |                             | ZDRUŽENJE SLOVENSKA UNIJA GLASBENIH USTVARJALCEV |    |
| 19                   | ne                  | ne                | 2012-09-18  | 2012-09-19            | Ljubljana        | ZDRUŽENJE SAZAS   |                             | HIT d.d., Nova Gorica                            |    |
| 20                   | ne                  | ne                | 2013-10-15  | 2013-10-16            | Ljubljana        | CASINO Portorož, d.d.   |                             |  |    |
| 21                   | da                  | ne                | 2011-01-12  | 2011-01-12            | Ljubljana        | UL FS   |                             |  |    |
| 22                   | ne                  | ne                | 2013-11-05  | 2013-11-07            | Ljubljana        | CONSENSUS, d.o.o.   |                             |  |    |
| 23                   | da                  | ne                | 2013-05-08  | 2013-05-08            | Ljubljana        | GZS   |                             |  |    |
| 24                   | ne                  | ne                | 2010-12-08  | 2010-12-08            | Ljubljana        | ZDRUŽENJE LASTNIKOV NEPREMIČNIN V SLOVENIJI                         |                             |  |    |
| 25                   | ne                  | ne                | 2011-04-13  | 2011-11-15            | Ljubljana        | REVOZ d.d.  |                             |  |    |
| 26                   | ne                  | ne                | 2011-03-30  | 2011-03-31            | Ljubljana        | HESS, d.o.o.  |                             |  |    |
| 27                   | da                  | ne                | 2011-04-15  | 2011-04-19            | Ljubljana        | YHD - DRUŠTVO ZA TEORIJO IN KULTURO DRUŠTVO ŽAREK UPANJA, Ljubljana |                             |  |    |
| 28                   | da                  | ne                | 2011-09-08  | 2011-09-08            | Ljubljana        | PEKO, d.d.  |                             | INFORMATIKA d.d.                                 |    |
| 29                   | ne                  | ne                | 2013-03-08  | 2013-03-18            | Ljubljana        | TELEKOM SLOVENIJE, d.d.   |                             |  |    |
| 30                   | ne                  | ne                | 2013-02-15  | 2013-02-19            | Ljubljana        | HOTEL SAVAROGAŠKA d.o.o.  |                             |  |    |
| 31                   | da                  | ne                | 2013-01-22  | 2013-01-23            | Ljubljana        | TERMIA d.o.o.   |                             |  |    |
| 32                   | da                  | ne                | 2013-03-06  | 2013-03-06            | Ljubljana        | SI MOBIL d.d.   |                             |  |    |
| 33                   | da                  | ne                | 2013-07-25  | 2013-07-30            | Ljubljana        | NEVIJA d.o.o.   |                             |  |    |
| 34                   | da                  | ne                | 2011-08-09  | 2012-02-29            | Ljubljana        | NEMESIS d.o.o.  |                             |  |    |
| 35                   | ne                  | ne                | 2014-03-21  | 2014-03-28            | Ljubljana        | TELEKOM SLOVENIJE, d.d.   |                             |  |    |
| 36                   | ne                  | ne                | 2012-10-11  | 2012-10-12            | Ljubljana        | CASINO Portorož, d.d.   |                             | HIT d.d., Nova Gorica                            |    |
| 37                   | da                  | ne                | 2013-10-15  | 2013-10-16            | Ljubljana        | TEŠ d.o.o.  |                             |  |    |
| 38                   | da                  | ne                | 2011-09-22  | 2011-09-29            | Ljubljana        |   |                             |  |    |
| 39                   | ne                  | ne                | 2013-05-31  | 2013-06-03            | Ljubljana        | KZ KRKA z.o.o.  |                             |  |    |
| 40                   | ne                  | ne                | 2014-06-04  | 2014-06-04            | Ljubljana        | DATALAB d.d.  |                             |  |    |
| 41                   | ne                  | ne                | 2013-09-17  | 2013-09-19            | Ljubljana        | ZDRUŽENJE LASTNIKOV NEPREMIČNIN V SLOVENIJI                         |                             |  |    |
| 42                   | da                  | da                | 2013-09-12  | 2013-09-12            | Ljubljana        | VZAJEMNA d.v.z.   |                             |  |    |
| 43                   | da                  | ne                | 2013-10-28  | 2013-10-29            | Ljubljana        |   |                             |  |    |
| 44                   | ne                  | da                |             |                       |                  |   |                             |  |    |

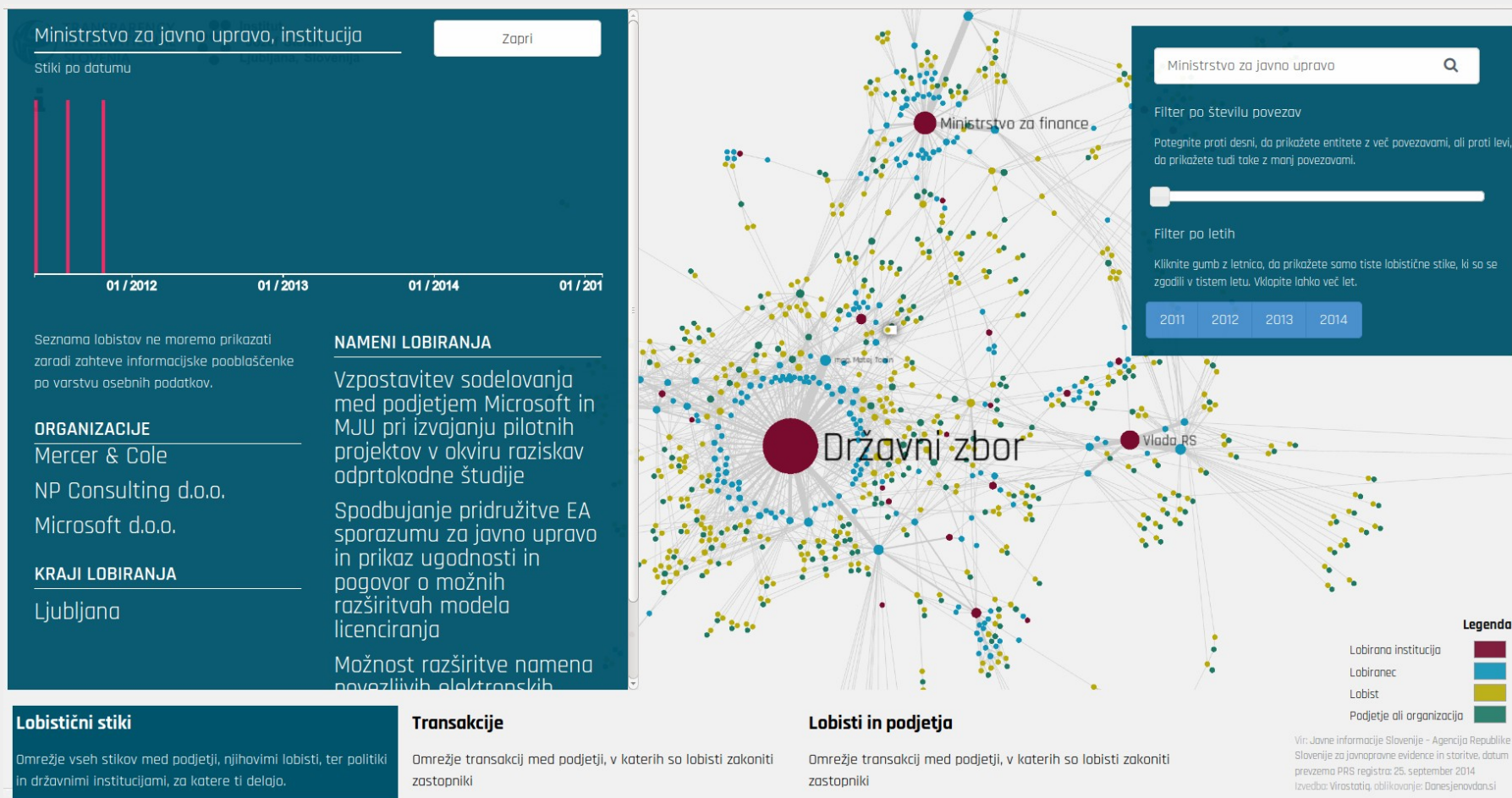
# Data about lobbyists and lobbying contacts

... Database was linked to business registry and some other databases and some analysis of lobbyists and their companies has been prepared.



# Data about lobbyists and lobbying contacts

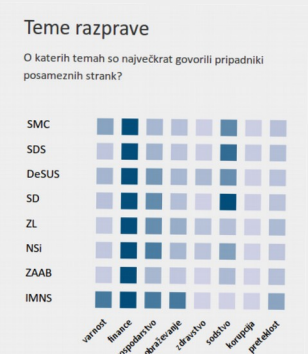
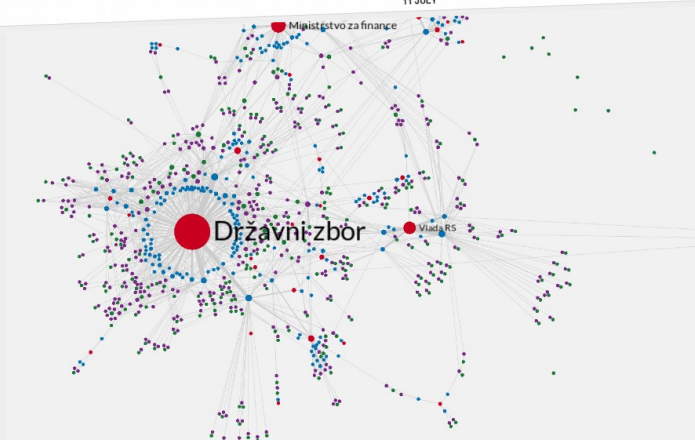
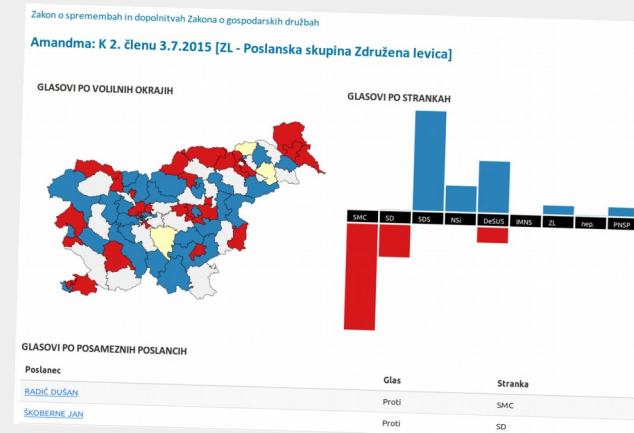
Finally, visualisation of lobbying contacts has been created.



<http://kdovpliva.si/>

# Legislative Monitor [zakonodajni-monitor.si]

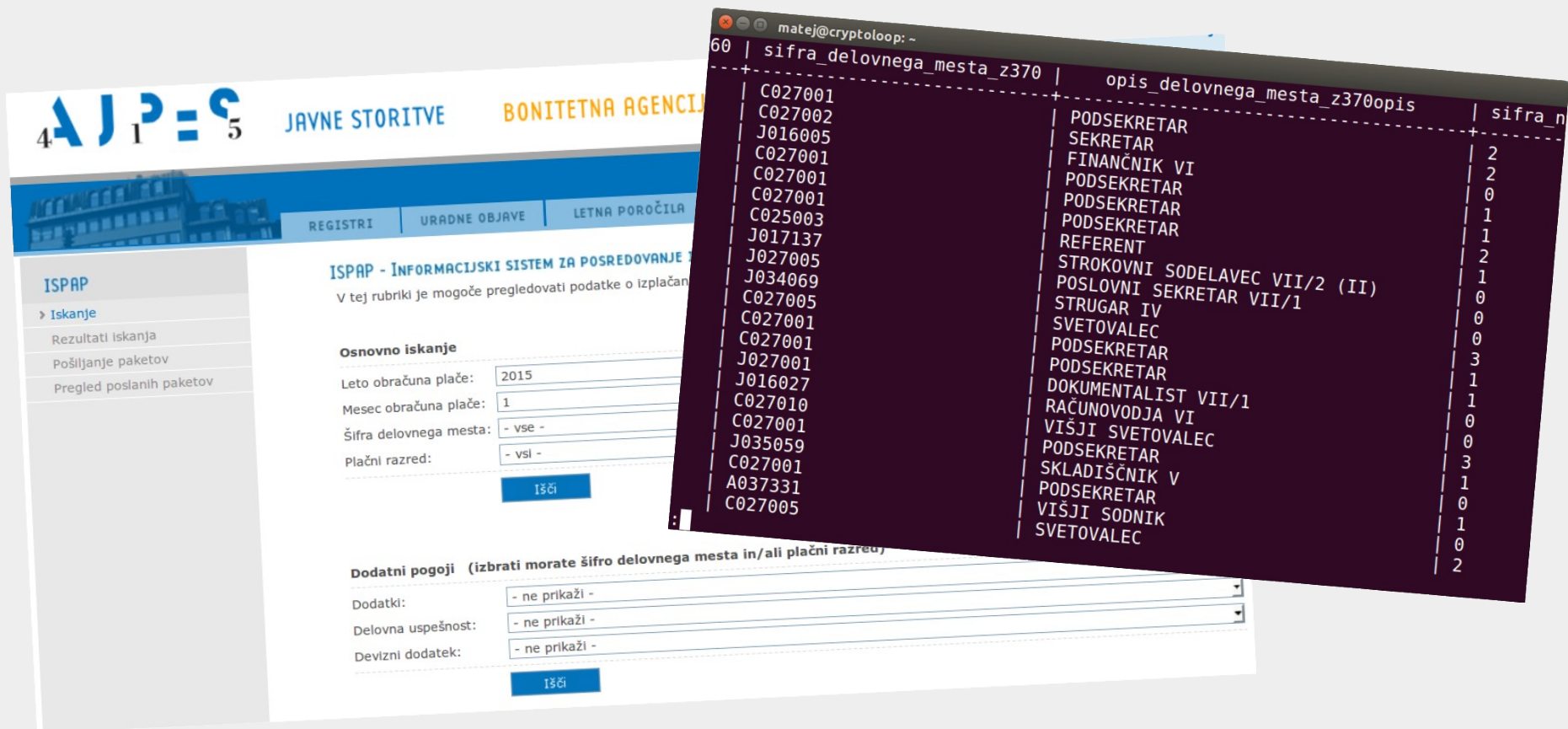
Legislative Monitor is (was) an interactive tool which gives an insight into the legislation process, MEP's activities, analysis of their discussions, reported lobbying contacts, etc.



<http://zakonodajni-monitor.si/>

# Salaries in public sector

Ajpes is collecting all data about salaries of civil servants. Through access of public information act we received the database of salaries from 2010. Database also contains (anonymised) ID's of civil servants.



The image shows a screenshot of the ISPAP website and a terminal window displaying a database query result.

**ISPAP - INFORMACIJSKI SISTEM ZA POSREDOVANJE**

V tej rubriki je mogoče pregledovati podatke o izplačan

**Osnovno iskanje**

Leto obračuna plače: 2015  
Mesec obračuna plače: 1  
Šifra delovnega mesta: - vse -  
Plačni razred: - vsi -

Išči

**Dodatni pogoji (izbrati morate šifro delovnega mesta in/ali plačni razred)**

Dodatki: - ne prikaži -  
Delovna uspešnost: - ne prikaži -  
Devizni dodatek: - ne prikaži -

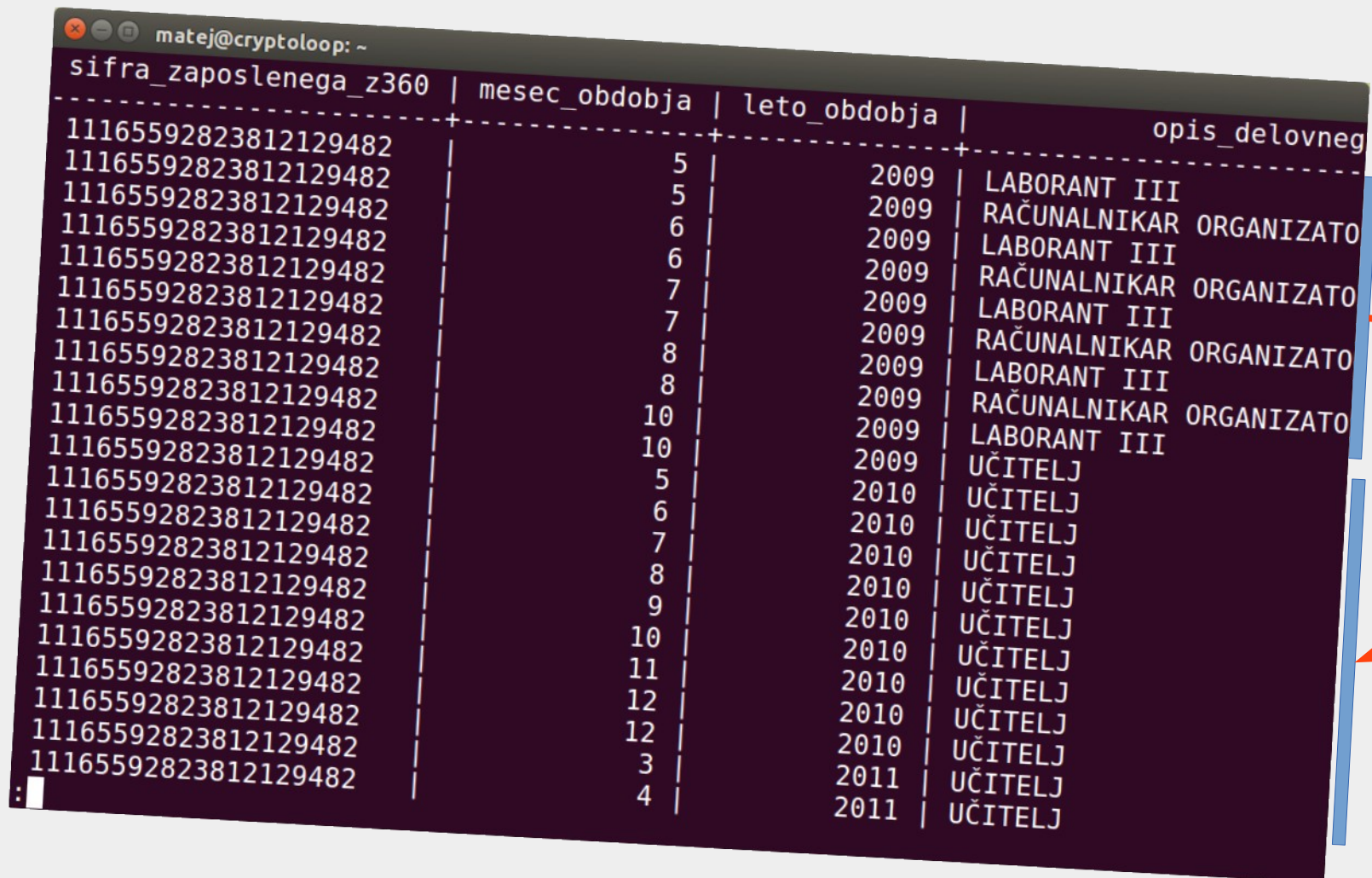
Išči

```
matej@cryptoloop: ~
60 | sifra_delovnega_mesta_z370 | opis_delovnega_mesta_z370opis | sifra n
-----|-----|-----|-----
C027001 |                |                | 2
C027002 |                |                | 2
J016005 |                |                | 0
C027001 |                |                | 0
C027001 |                |                | 1
C027001 |                |                | 1
C025003 |                |                | 2
J017137 |                |                | 1
J027005 |                |                | 1
J034069 |                |                | 0
C027005 |                |                | 0
C027001 |                |                | 0
C027001 |                |                | 3
J027001 |                |                | 1
J016027 |                |                | 1
C027010 |                |                | 0
C027001 |                |                | 0
J035059 |                |                | 3
C027001 |                |                | 1
A037331 |                |                | 0
C027005 |                |                | 1
                |                |                | 0
                |                |                | 2
```



# Salaries in public sector

From the salaries database career paths could be computed...



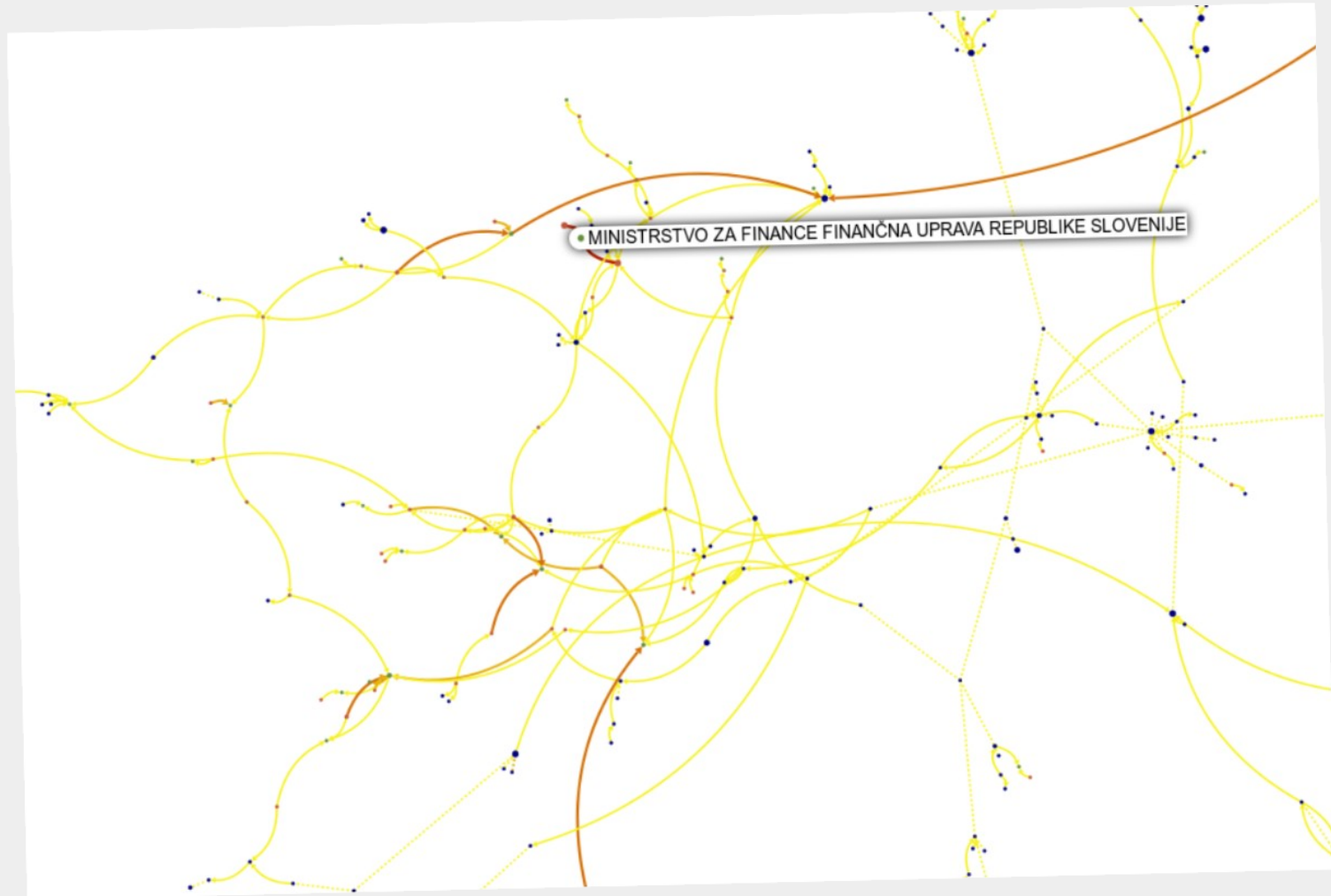
A terminal window showing a table of salary data. The table has four columns: 'sifra\_zaposlenega\_z360', 'mesec\_obdobja', 'leto\_obdobja', and 'opis\_delovneg'. The data shows a progression from 'LABORANT III' in 2009 to 'UČITELJ' in 2011. A blue vertical bar highlights the 'opis\_delovneg' column, and a red arrow points from the right side of the terminal towards the highlighted column.

| sifra_zaposlenega_z360 | mesec_obdobja | leto_obdobja | opis_delovneg           |
|------------------------|---------------|--------------|-------------------------|
| 11165592823812129482   | 5             | 2009         | LABORANT III            |
| 11165592823812129482   | 5             | 2009         | RAČUNALNIKAR ORGANIZATO |
| 11165592823812129482   | 6             | 2009         | LABORANT III            |
| 11165592823812129482   | 6             | 2009         | RAČUNALNIKAR ORGANIZATO |
| 11165592823812129482   | 7             | 2009         | LABORANT III            |
| 11165592823812129482   | 7             | 2009         | RAČUNALNIKAR ORGANIZATO |
| 11165592823812129482   | 8             | 2009         | LABORANT III            |
| 11165592823812129482   | 8             | 2009         | RAČUNALNIKAR ORGANIZATO |
| 11165592823812129482   | 10            | 2009         | LABORANT III            |
| 11165592823812129482   | 10            | 2009         | UČITELJ                 |
| 11165592823812129482   | 5             | 2010         | UČITELJ                 |
| 11165592823812129482   | 6             | 2010         | UČITELJ                 |
| 11165592823812129482   | 7             | 2010         | UČITELJ                 |
| 11165592823812129482   | 8             | 2010         | UČITELJ                 |
| 11165592823812129482   | 9             | 2010         | UČITELJ                 |
| 11165592823812129482   | 10            | 2010         | UČITELJ                 |
| 11165592823812129482   | 11            | 2010         | UČITELJ                 |
| 11165592823812129482   | 12            | 2010         | UČITELJ                 |
| 11165592823812129482   | 12            | 2010         | UČITELJ                 |
| 11165592823812129482   | 3             | 2011         | UČITELJ                 |
| 11165592823812129482   | 4             | 2011         | UČITELJ                 |

# Salaries in public sector

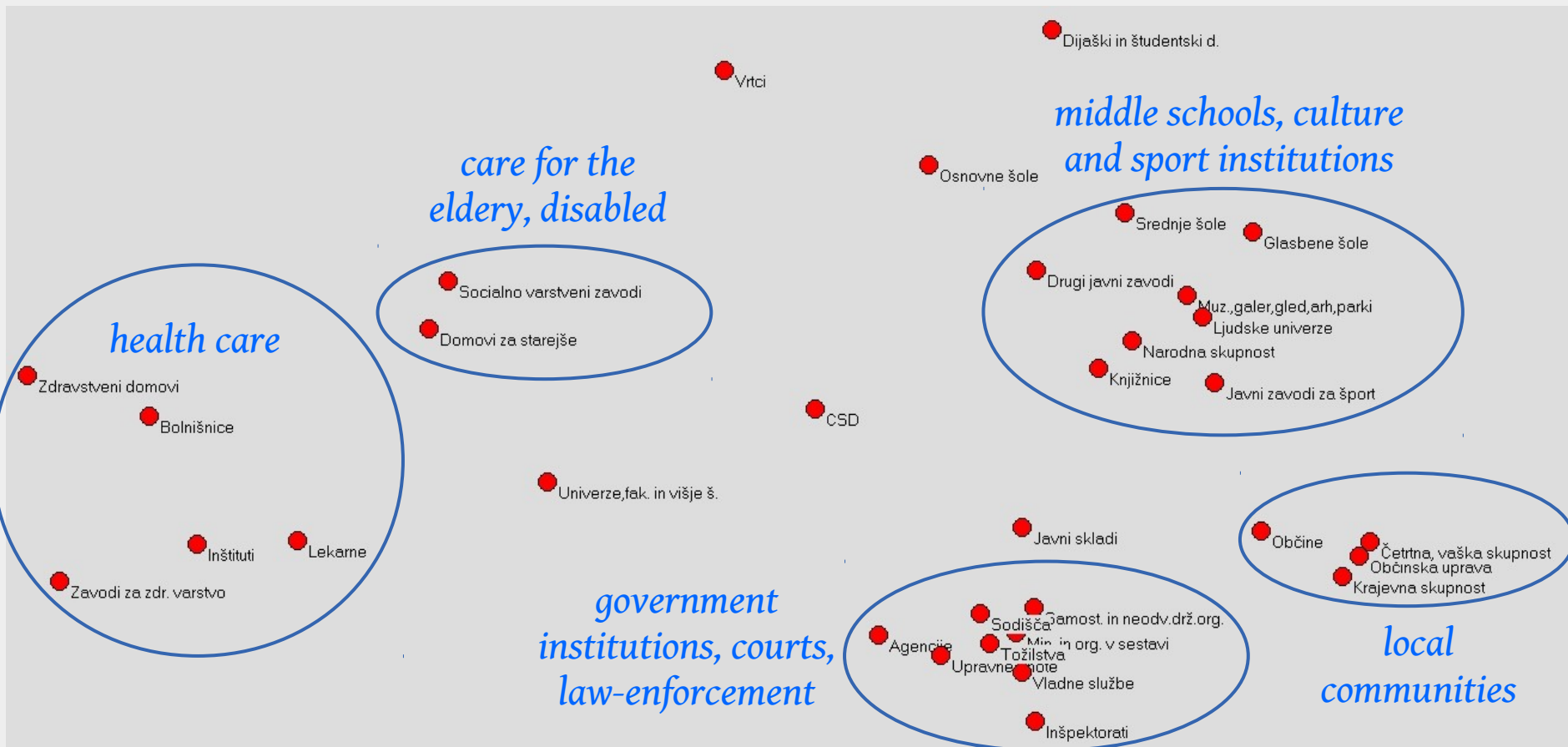
---

... and from career paths migrations of workforce among budget users could be computed and visualised.



# Salaries in public sector

Clustering of employees migrations among public sector bodies.



## Salaries in public sector

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Another possible analysis:

- the influence of leadership change on staff recruitment;
- the influence of leadership change in sick leaves and terminations of employment contracts (possible indicator of mobbing);
- rate between minimum and maximum salary in public different parts of sector;
- amount of women in different employment positions;
- visualisations of wage premiums;
- what-if scenarios for salaries reform;
- ...


# Public procurement database

We have received database of all Slovenian public procurements including small value procurements (published on a portal of public procurements).

**E-NAROČANJE**

Pregled objav | O portalu | Pogoji uporabe | Aktualno | Kontakt

**OBVESTILO O NAROČILU**

 **Blago**

**Razna živila**  
Datum objave: 12. 3. 2015  
Številka objave: JN1614/2015

**ODDELEK I: NAROČNIK**

I.1) **IME, NASLOVI IN KONTAKTNE TOČKE**  
OSNOVNA ŠOLA BIČEVJE, Splitska ulica 13, SI-1000 Ljubljana.  
Tel. +386 12633013, Telefaks +386 12633013, E-pošta o-bicevje.lj@guest.arnes.si.

**Dodatne informacije dobite pri**  
Kot pri zgoraj navedenih kontaktnih točkah.

**Specifikacije in dopolnilno dokumentacijo dobite pri**  
Kot pri zgoraj navedenih kontaktnih točkah.

**Ponudbe in prijave za sodelovanje je treba poslati na naslov**  
Kot pri zgoraj navedenih kontaktnih točkah.

I.2) **VRSTA NAROČNIKA**

I.3) **GLAVNA PODROČJA DEJAVNOSTI**

I.4) **ODDAJA NAROČIL V IMENU DRUGIH NAROČNIKOV**

**ODDELEK II: PREDMET NAROČILA**

II.1) **OPIS**

II.1.1) **Naziv naročila, ki ga je določil naročnik:**  
Sukcesivne nabave konvencionalnih in ekoloških živil.

II.1.2) **Vrsta naročila in mesto gradnje, kraj dobave ali izvedbe**  
Blago.  
Nakup.

II.1.3) **Informacije o javnem naročilu, okvirnem sporazumu ali dinamičnem nabavnem sistemu**

II.1.4) **Informacije o okvirnem sporazumu**

Trajanje okvirnega sporazuma:

**Prijava za naročnike – ZJN-2, ZJNVETPS**

Uporabniško ime (email):

Geslo:

**PRIJAVA**

Pozabljeno geslo  
 Nov uporabnik

# TheyBuyForYou project



Data visualisation

Average Deviation

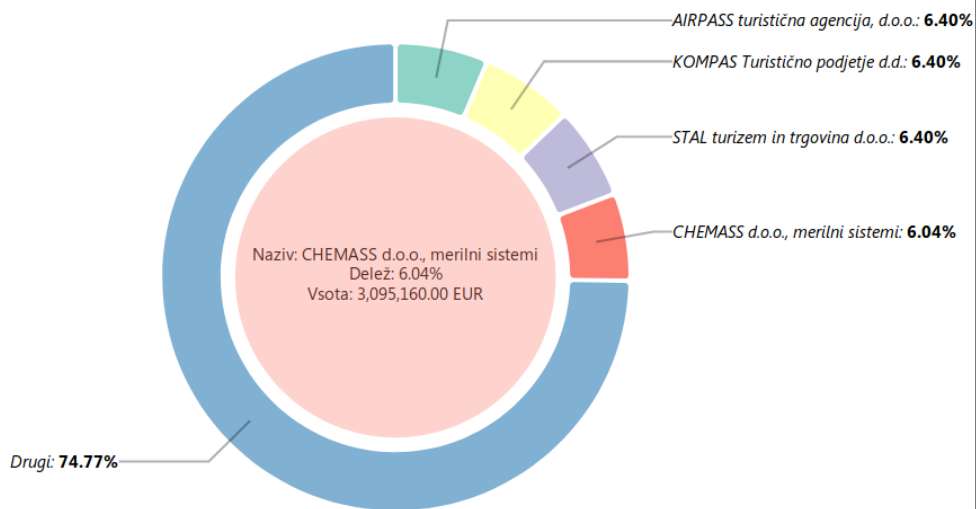
Jenks Natural Breaks

Period Margin

Local Extremes

Time Periods

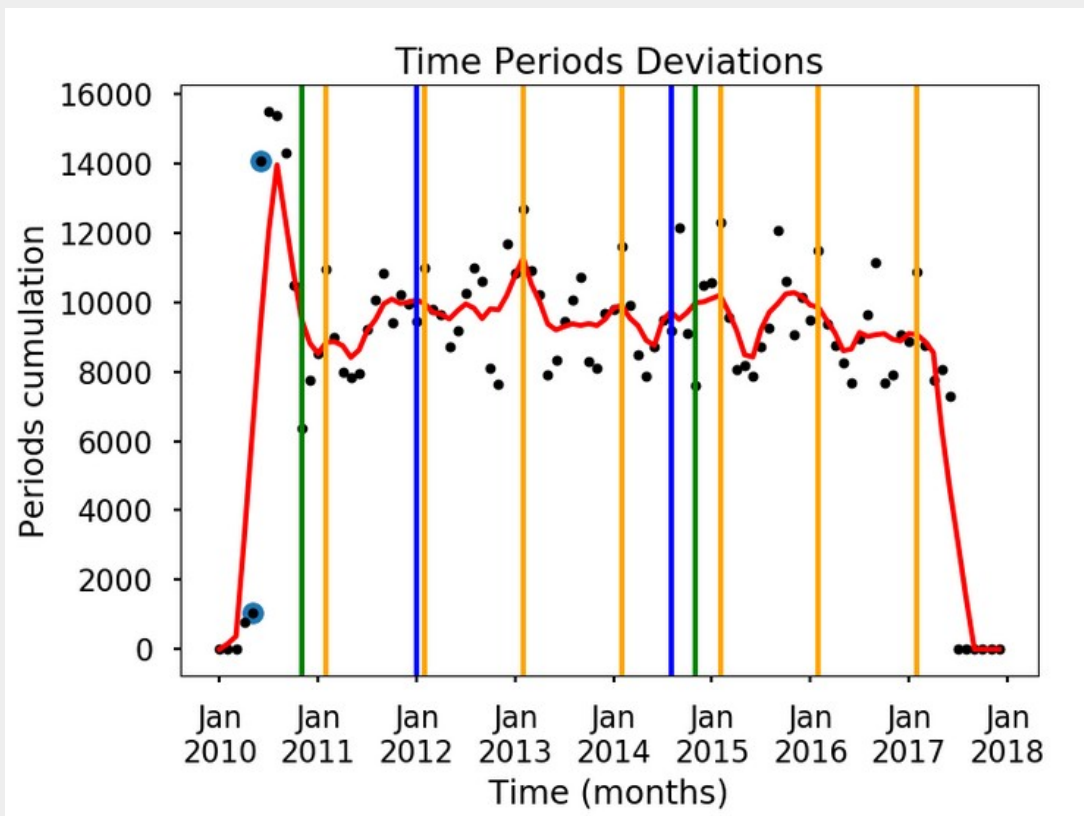
INSTITUT JOŽEF STEFAN V angl.jeziku: Jožef Stefan Institute, Ljubljana, Slovenia



6.40% :: 3,280,000.00 EUR  
[5923719000] AIRPASS turistična agencija, d.o.o.

6.40% :: 3,280,000.00 EUR  
[5448743000] KOMPAS Turistično podjetje d.d.

# TheyBuyForYou project



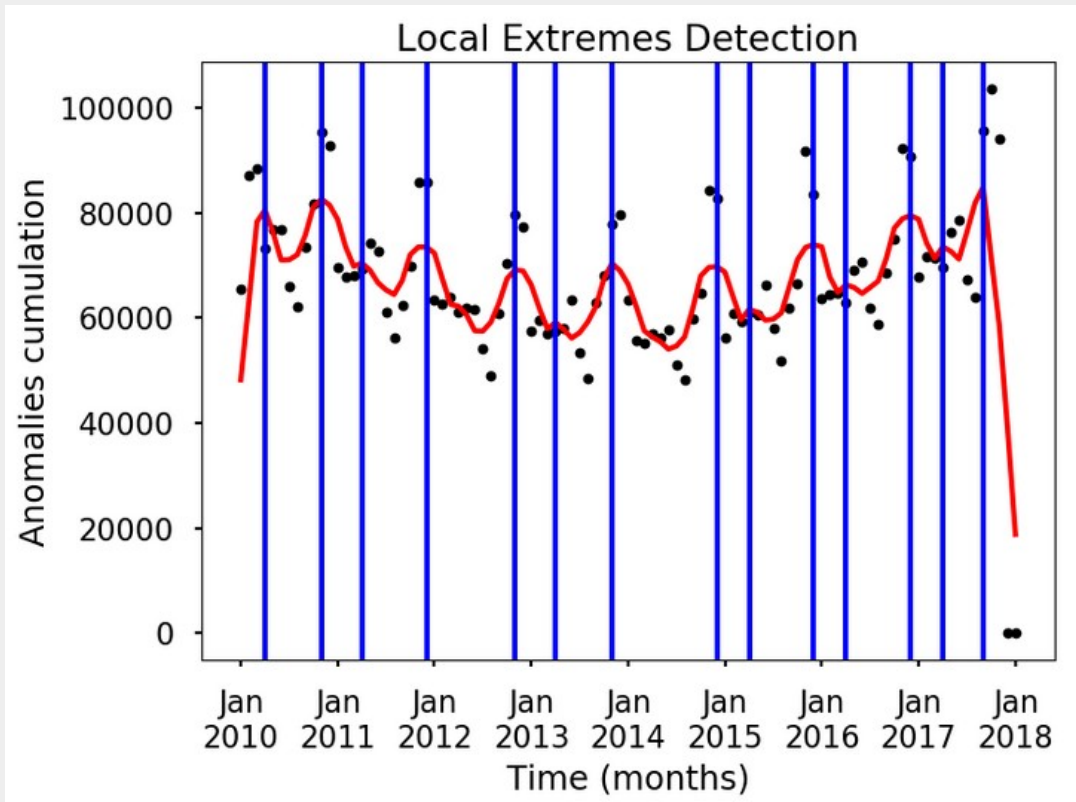
The extremes clearly coincide with dates:

- orange lines: every January (and the beginning of the budget year),
- blue line: local elections,
- green line: parliamentary elections.

Next to that there are some other extremes visible:

- around the first blue line Slovenia was experiencing a political and economic crisis; that was the period when governments were rapidly changing,
- extremes around 2016, where Slovenia was experiencing a migrant crisis.

# TheyBuyForYou project



Interesting observations:

- The graph has a global minimum around the summer of 2014, when Slovenia finally overcame the economic crisis. This can be explained as a consequence of government savings programs
- Specific extremes are associated to certain events: October 2010 (big floods in Slovenia in the previous month), November 2011 (national elections), October 2012 (big floods), November 2014 (local elections).

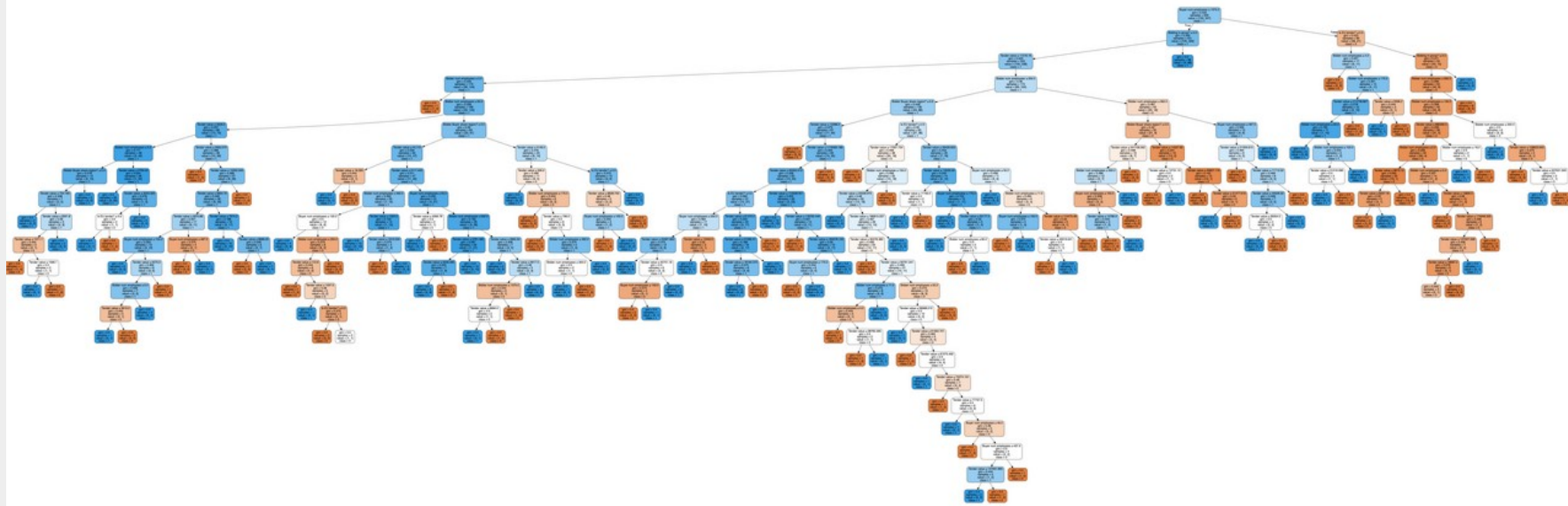
We have also noticed a large jump pattern, followed by a small jump.



# TheyBuyForYou project

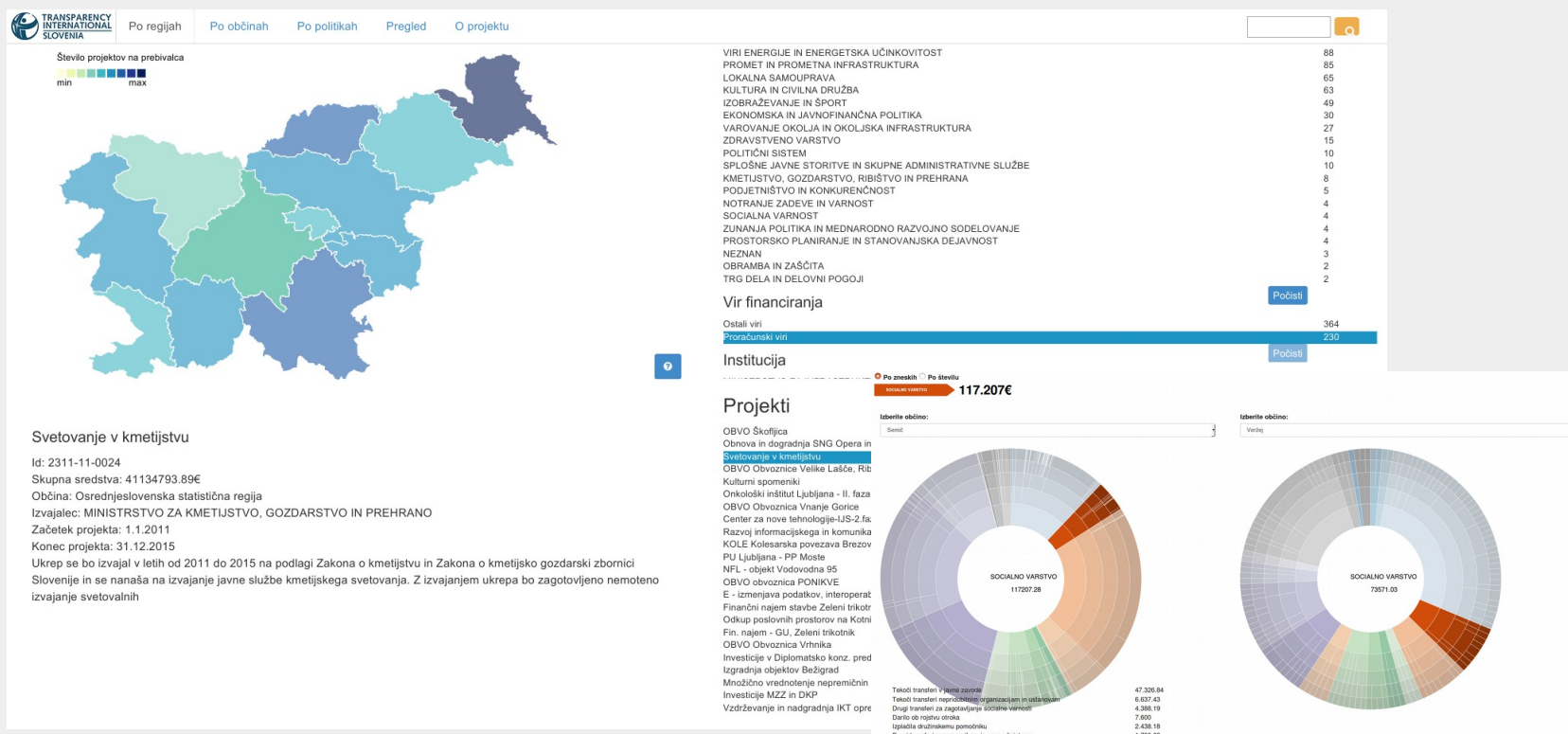
## Decision tree schema

[customize tree](#)



# Visualisation of financial data

In 2016 we did a two small visualizations of open data: municipalities' budgets and development programs of Slovenian government.



<http://www.transparency.si/projekti/drzavni-projekti/>

<http://www.transparency.si/projekti/proracuni-obcin/>

## Financial transactions of public sector

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- Supervisor (now Erar) is an online application which enables simple browsing through the financial transactions and their graphical presentation.
- Application was developed by *Commission for the Prevention of Corruption* in 2011. Later was renamed to Erar.
- User can view all money transfers from selected budget user or all money transfers from the budget user to selected company.
- Application also shows data about public procurements, information about the business entities in Slovenia, accounting entries of payments (for direct budget users), and some other additional data (e.g.: data about tax debtors and transfers to the so called favourable tax environments (“tax havens”), etc.

# Financial transactions of public sector

## Data on monthly sums of funds received from individuals of public funds

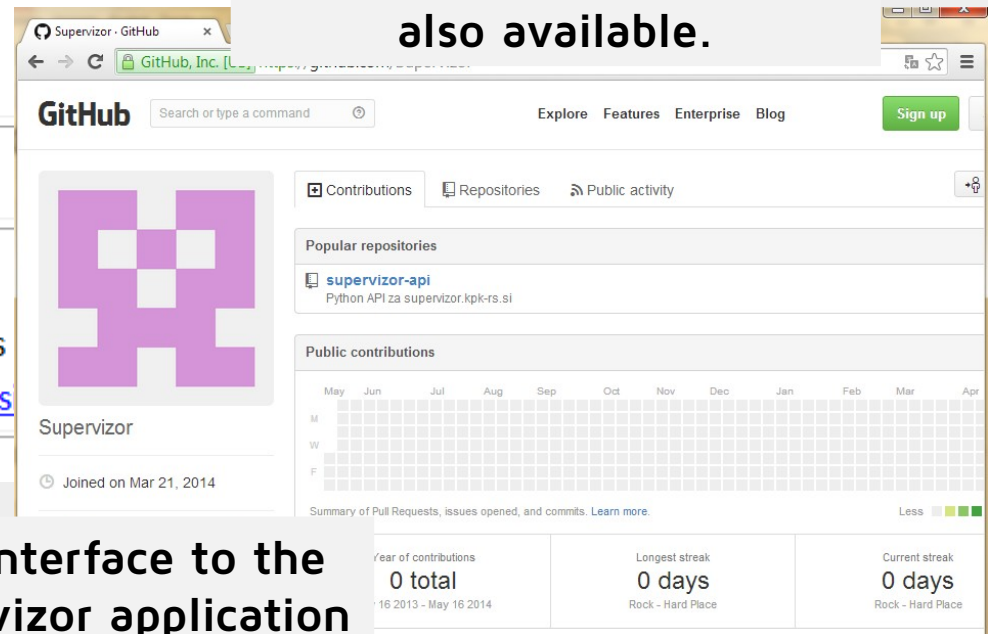
The data is located in a CSV text files (individual fields are in a format with Unix/Linux end of the line. The file has a structure where individual files contain data for each year (since 2003). Files are on a monthly basis. Each file is compressed in gz format.

### Data structure description

| <i>field</i>              | <i>field description</i>   |
|---------------------------|--|
| <u>sifra_pu</u>           | Budget user code.  |
| <u>(budget user code)</u> | Codes of budget users<br>( <a href="http://www.ujp.gov.si">http://www.ujp.gov.si</a> ) |

Part of Erar data is available for download in machine readable form.

Description of data is also available.



The screenshot shows a GitHub profile for 'Supervisor', which joined on Mar 21, 2014. The profile features a purple pixelated avatar. The 'Contributions' section shows a calendar grid for the month of May, with a streak of 0 days. The 'Public contributions' section shows a calendar grid for the month of May, with a streak of 0 days. The 'Summary of Pull Requests, issues opened, and commits' section shows 0 total contributions for the year of 2016, with a streak of 0 days. The 'Longest streak' and 'Current streak' are both 0 days, with a 'Rock - Hard Place' status.

API interface to the Supervisor application is also provided.

<http://erar.kpk-rs.si>

# Financial transactions of public sector

With Erar database of financial transactions of public sector several analysis is possible. For instance:

- analysis of payments to media companies;
- analysis of grants paid to private companies;
- correlation of government in charge with financial flows;
- detecting interesting financial flows patterns;
- ...

The image shows a screenshot of a data analysis interface. On the left, there are two panels: 'Cube Structure' and 'Pivot Structure'. The 'Cube Structure' panel shows a hierarchy of dimensions: Measures, Obdobje, Proračunski uporabnik, and Lokacija podjetja. The 'Pivot Structure' panel shows a pivot table with columns for Measures (Nepovratna sredstva, Izplačila) and rows for Proračunski uporabnik categories.

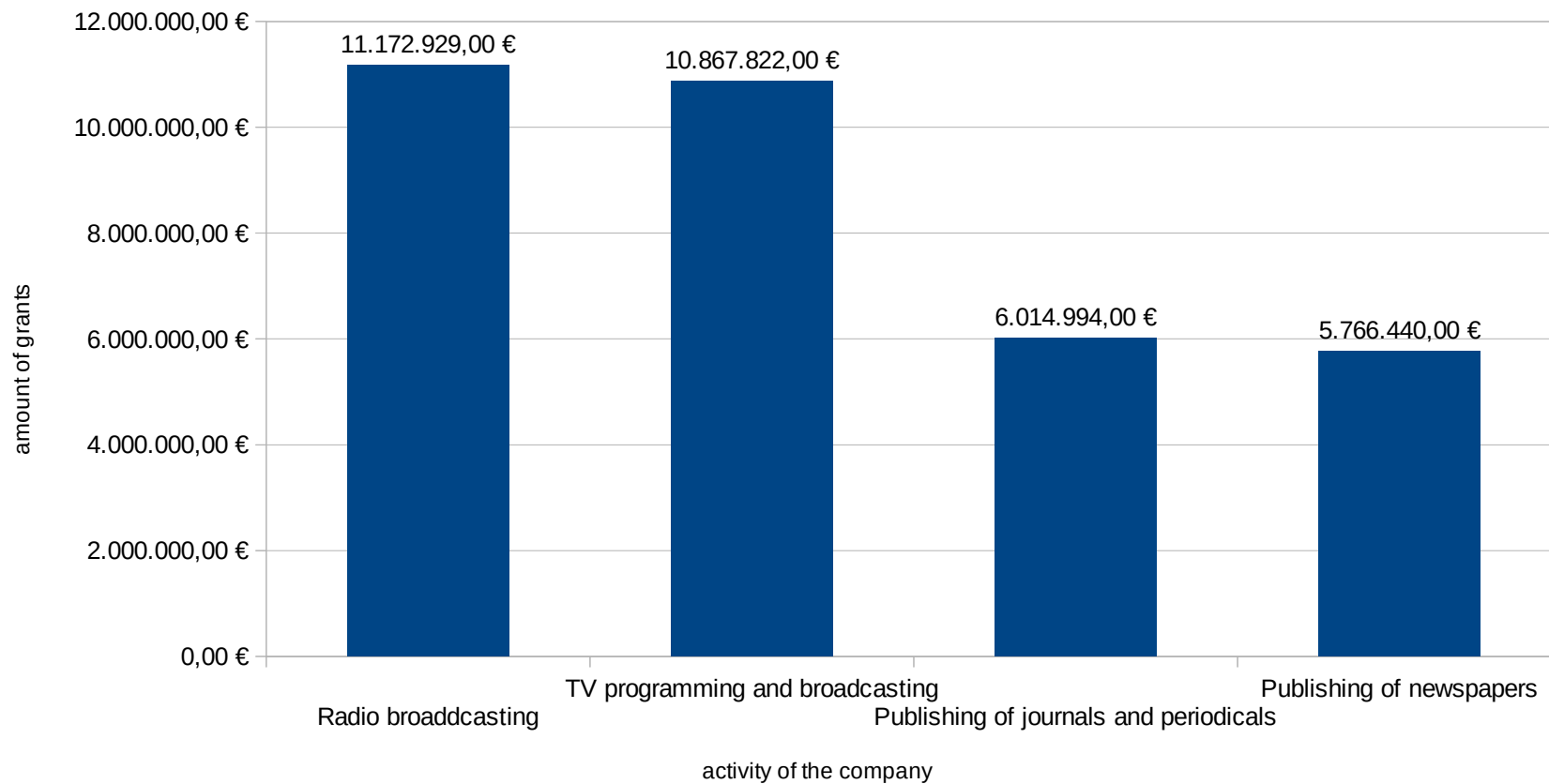
| Proračunski uporabnik            | Measures            |                   |
|----------------------------------|---------------------|-------------------|
|                                  | Nepovratna sredstva | Izplačila         |
| Agencije                         | 40.637.791,75       | 3.084.264.018,36  |
| Bolnišnice                       | 98.444,37           | 5.780.516.587,22  |
| CSD                              | 76.736,98           | 155.772.529,96    |
| Dijaki in študentski d.          | 9.544,37            | 140.439.757,31    |
| Domovi za starejše               | 16.792,25           | 1.127.886.285,47  |
| Drugi javni zavodi               | 110.860.153,81      | 15.841.399.375,82 |
| Glasbene šole                    | 12.832,97           | 107.286.105,63    |
| Inšpektorati                     | 47.170.563,35       | 107.992.109,97    |
| Inštituti                        | 223.587,89          | 1.321.001.783,04  |
| Inštituti                        | 288.873.295,73      | 4.795.237.348,12  |
| Javni skladi                     | 9.267.361,56        | 301.529.239,62    |
| Javni zavodi za šport            | 573.293,18          | 299.811.871,92    |
| Knjižnice                        | 4.949.870,64        | 397.359.044,7     |
| Krajevna skupnost                | 315.215,66          | 5.435.168.755,02  |
| Lekarne                          | 257.558,39          | 70.594.866,22     |
| Ljudske univerze                 | 31.321.475.251,68   | 96.559.551.936,67 |
| Min. in org. v sestavi           | 54.636,9            | 447.180.308,19    |
| Muz., galer., gled., arh., parki | 2.229.875,11        | 13.486.364,29     |
| Narodna skupnost                 | 1.172.483.413,72    | 23.730.934.338,98 |
| Občine                           |                     |                   |

On the right, there is a list of transactions with columns: 'kacije', 'racun\_v\_dobro', and 'naziv\_prejemnika'. The list contains various entries with account numbers and recipient names, such as 'Nova Ljubljanska banka d.d.', 'OSNOVNA ŠOLA PRESERJE', and 'INTEL SERVIS, D.O.O.'.

# Financial transactions of public sector

## Grants to media companies

Grants from January, 1st 2003 till October, 1st 2014

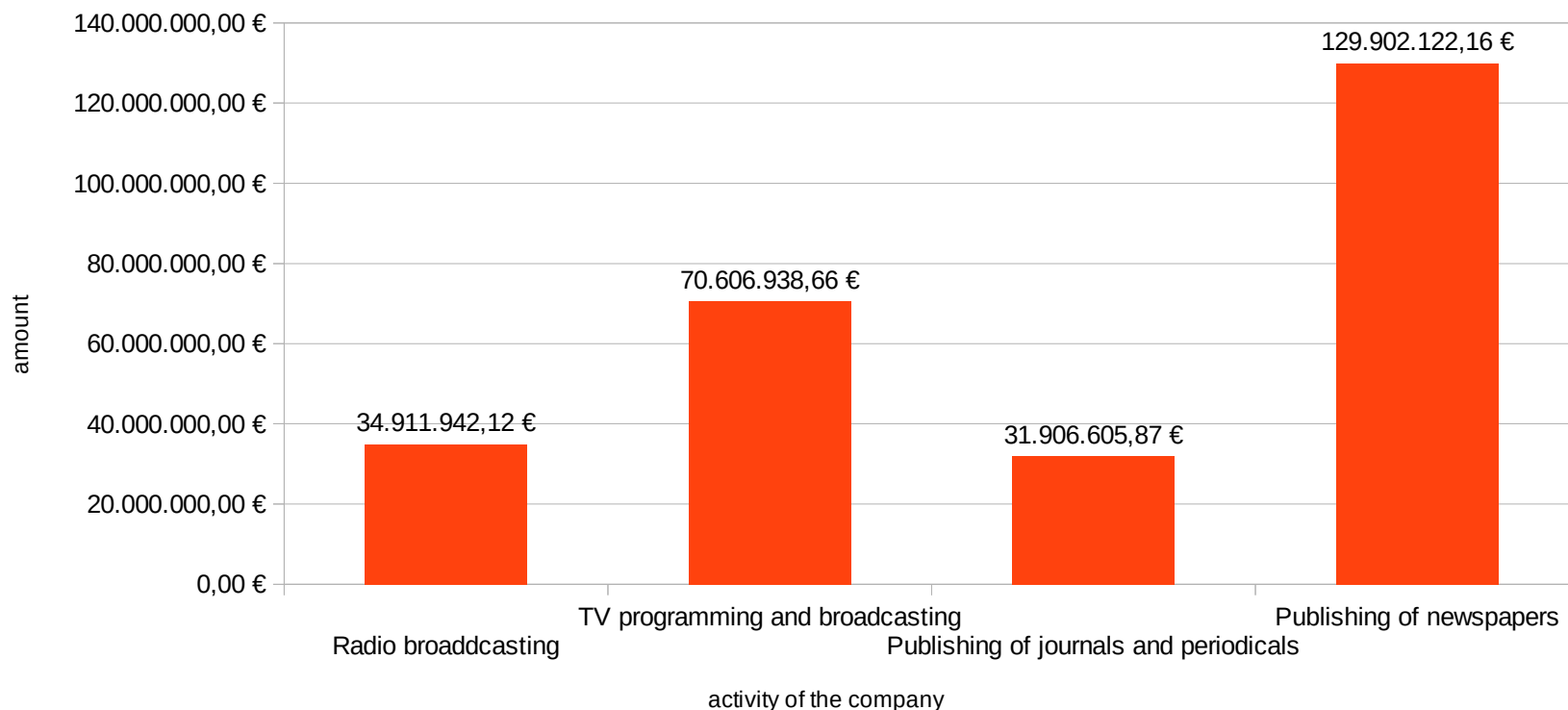


Amount of grants from Slovenian budget users to media companies. Media companies were identified from business registry by their main activity registered.

# Financial transactions of public sector

## All financial transactions to media companies

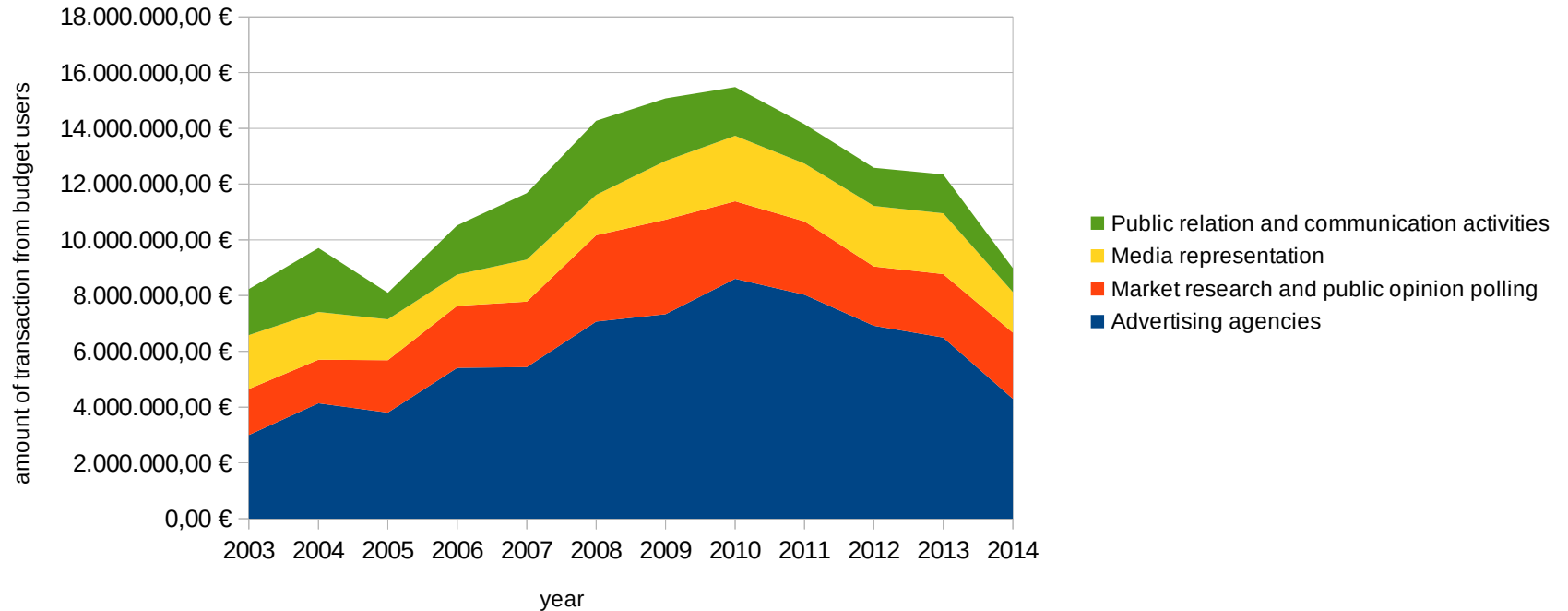
Payments from January, 1st 2003 till October, 1st 2014.



Amount of payments from Slovenian budget users to media companies. Media companies were identified from business registry by their main activity registered.

# Financial transactions of public sector

## Annual transactions to companies registered to...

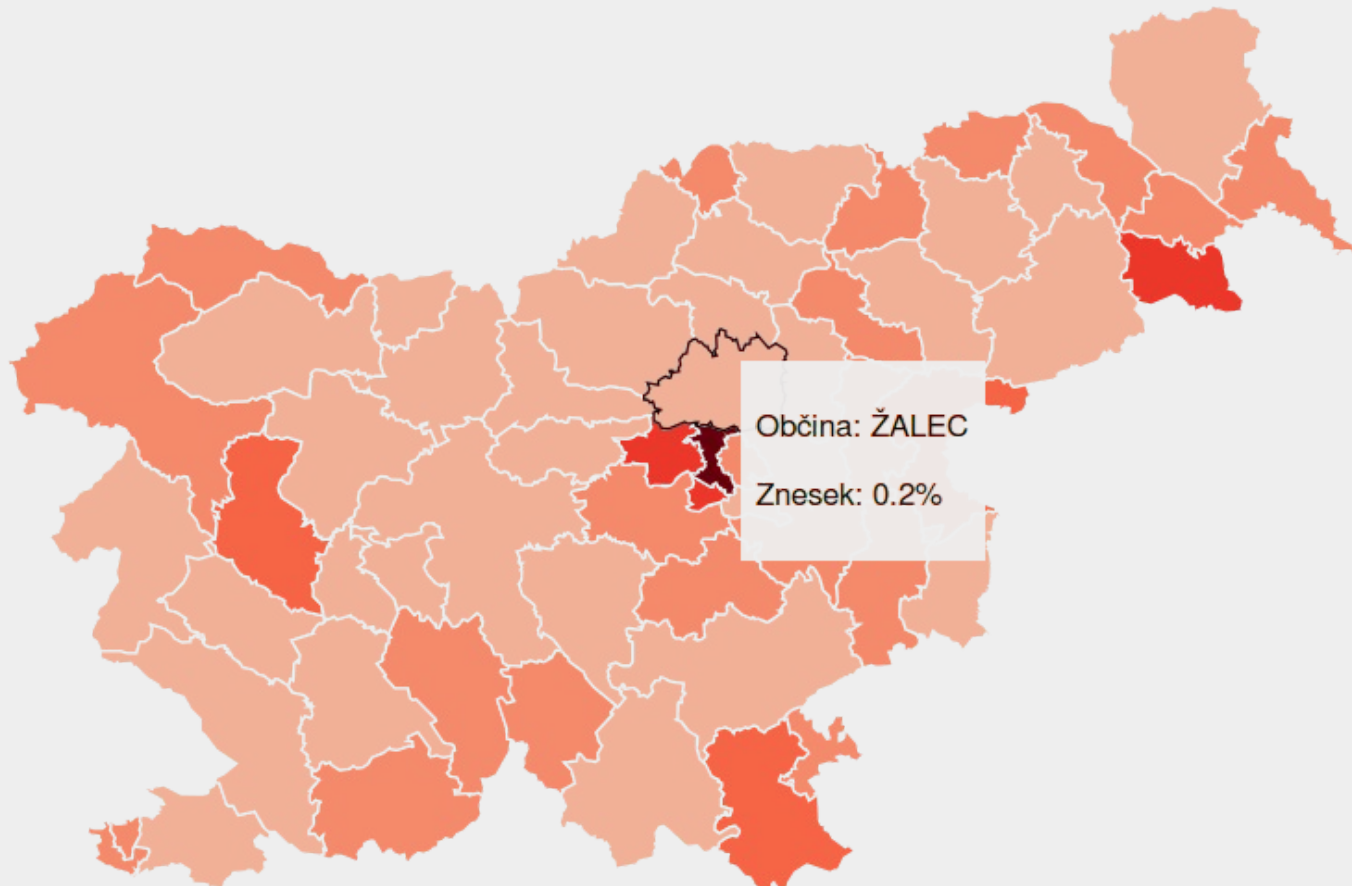


Annual amount of payments from Slovenian budget users to companies registered for management consultancy, PR, advertising, marketing research, etc. Types of companies were identified from business registry by their main activity registered.



# Financial transactions of public sector

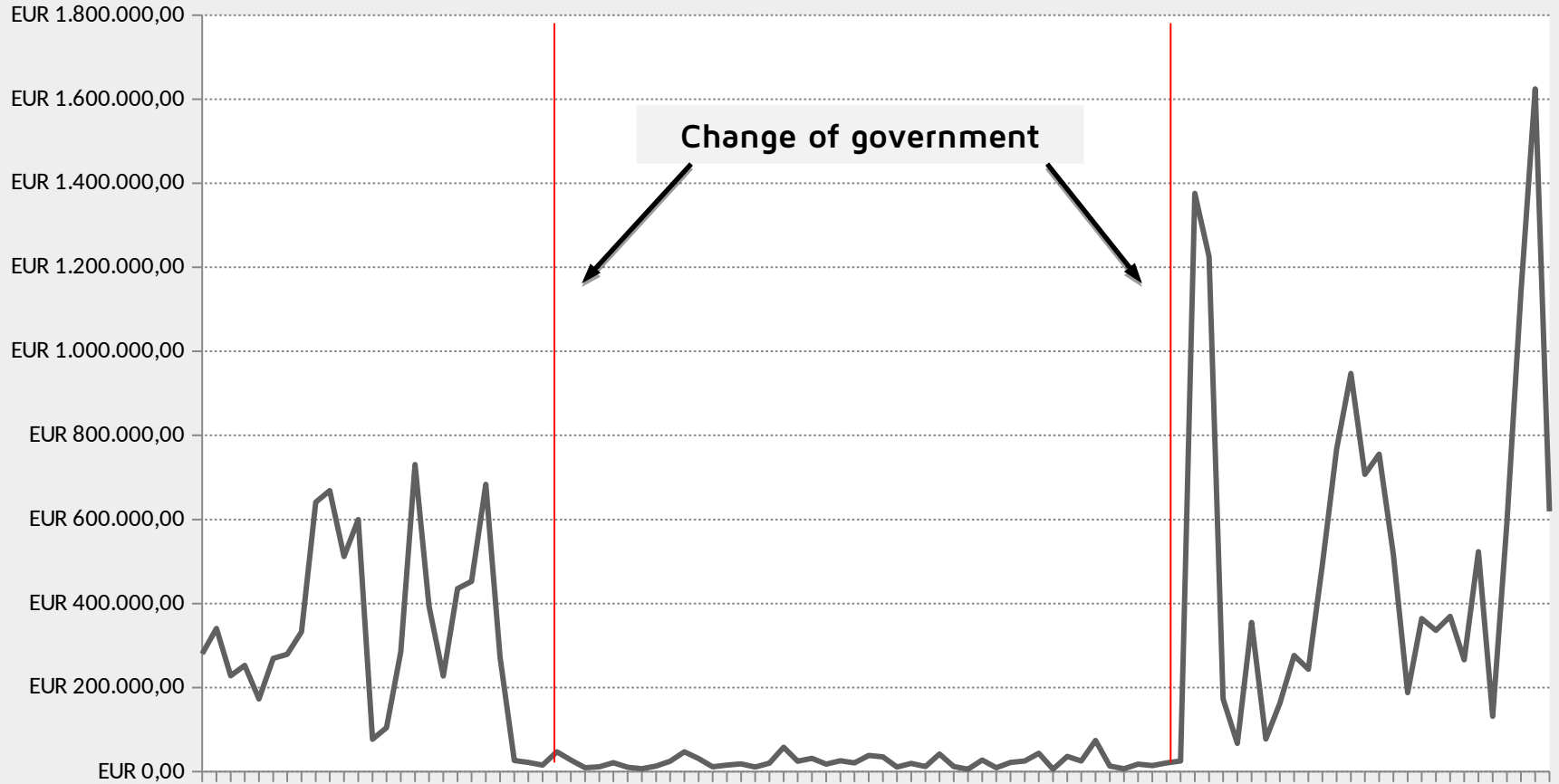
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Visualisation of share of grants paid to companies located in different municipalities.

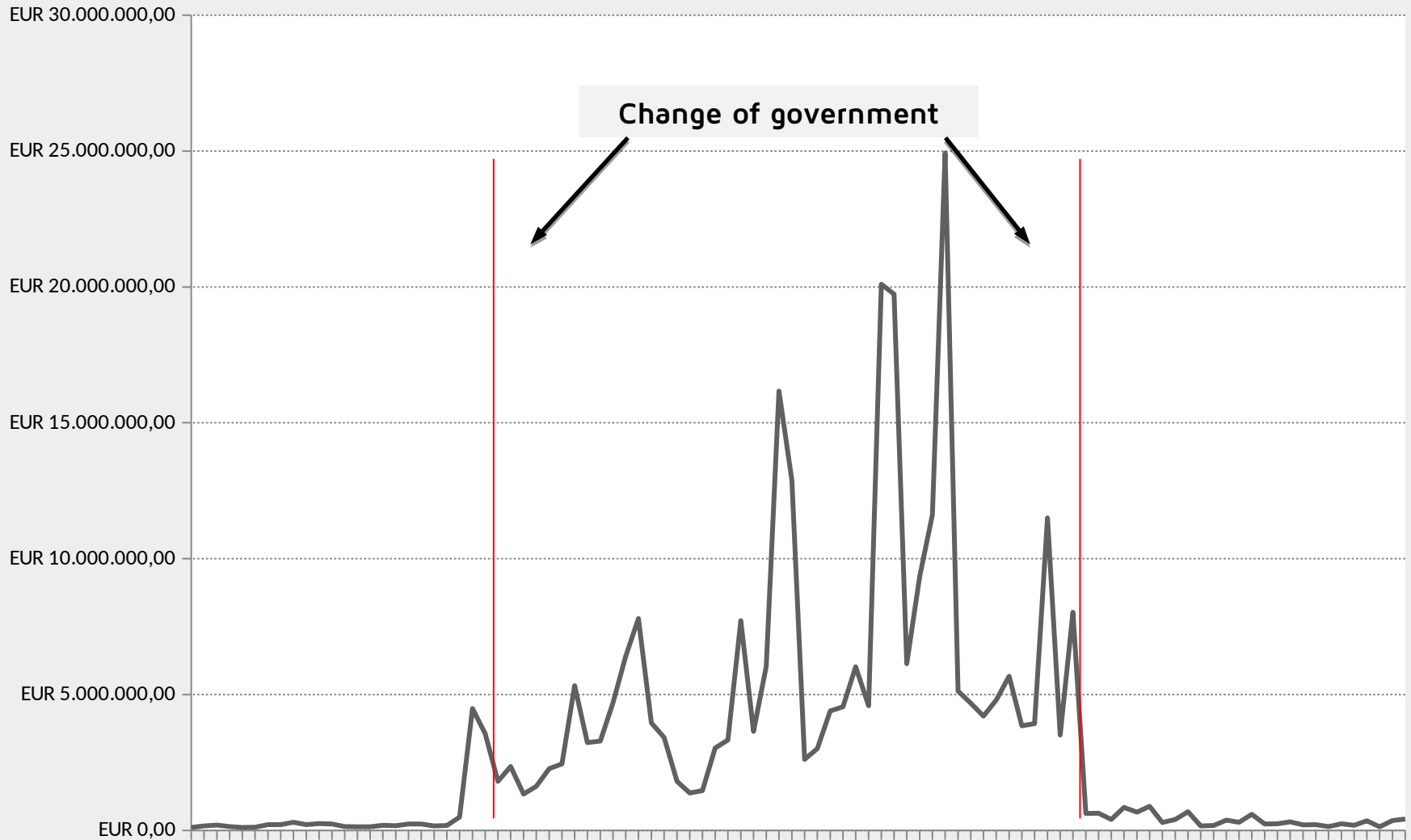
# Financial flow analysis

## Summary of monthly payments to 65 companies



# Financial flow analysis

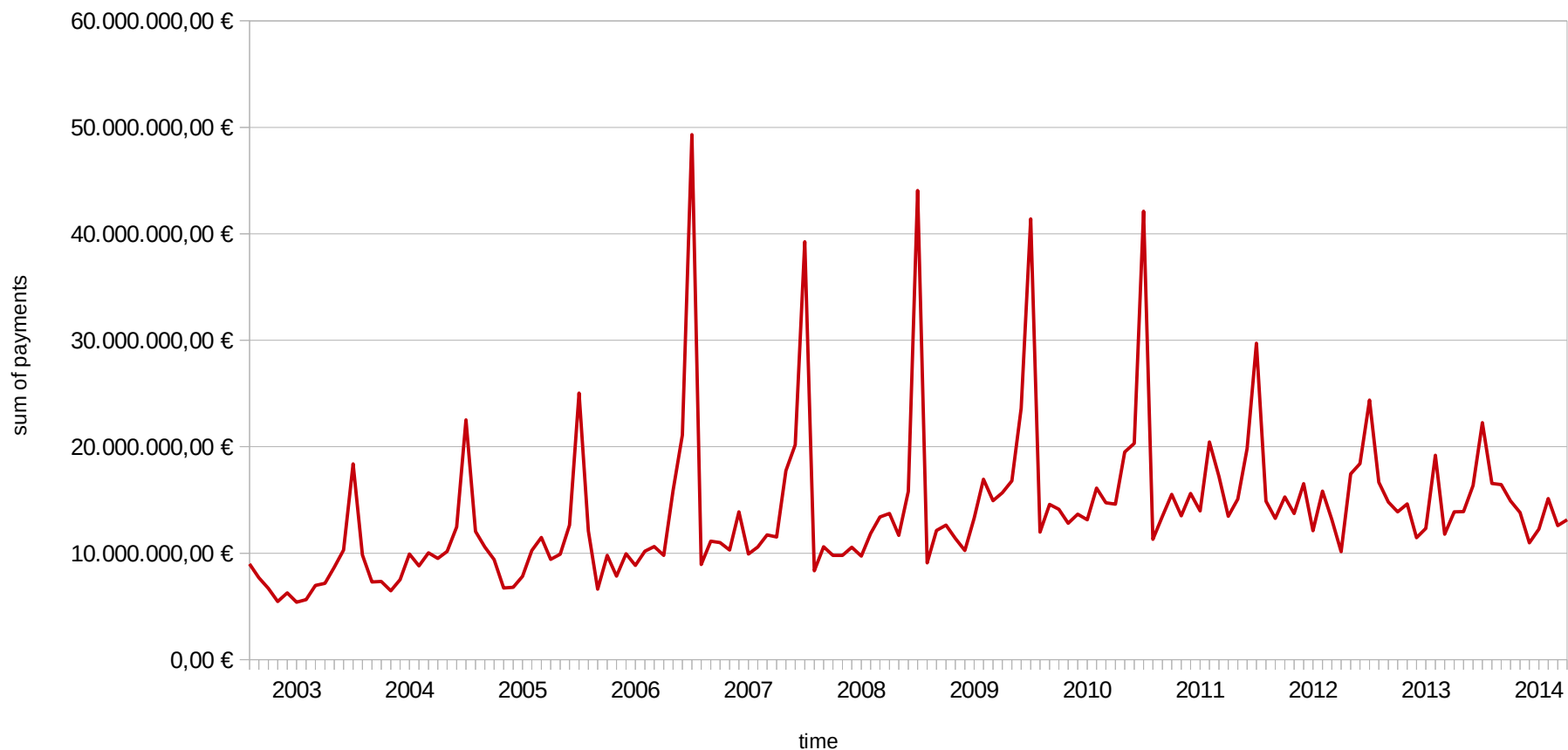
## Summary monthly payments to 252 companies



# Financial flow analysis

## Monthly payments to companies registered for 'IT activities'

In Slovenian Business Register there are 6223 companies registered for 'IT activities', 3796 of them had business with budget users.



## Other Supervisor/Erar datasets

---

Some other datasets:

- impositions of sanctions for offences and inspector decisions;
- list of tax debtors (published on *Tax Administration's* website);
- database of financial transfers to the so-called favourable tax environments ("tax havens"), published on the *Office for Money Laundering Prevention* website;
- accounting entries of payments for direct budget users from MFERAC database (is already included in Erar database, but not published in machine readable form yet);

## Other Supervisor/Erar datasets

---

Some other datasets:

- list of restrictions of business due to conflict of interest, published by *Commission for Prevention of Corruption*;
- database of fiscal stimulus - “*Government for the development of Slovenia*”;
- financial transactions from European funds;
- adopted legislation;
- election candidates;
- list of registered media companies;
- ...

# Other Supervisor/Erar datasets



Visualisation of tax debtors (author Gašper Žejn, <<http://www.kiberpipa.org/~hruske/stuff/durs.html>>).

Example: Detection of restriction  
on business activities violations





# Restrictions on business activities

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Article 35 of the Integrity and Prevention of Corruption Act  
(Restrictions on business activities and the consequences of violations)

(1) A public sector body or organisation which is committed to conducting a public procurement procedure in accordance with the regulations on public procurement or which carries out the procedure for granting concessions or other forms of public-private partnership, may not order goods, services or construction works, enter into public-private partnerships or grant special and exclusive rights to entities in which the official who holds office in the body or organization concerned or in cases where the official's family member has the following role:

- participating as a manager, management member or legal representative; or
- has more than a 5% level of participation in the founders' rights, management or capital, either by direct participation or through the participation of other legal persons.

# Restrictions on business activities

---

Article 35 of the Integrity and Prevention of Corruption  
Act  
(Restrictions on business activities and the consequences  
of violations)

...

(5) Officials shall communicate the name, registration number and head office of those entities with which they or their family members have a relationship, as specified in paragraph ti of this Article, to the body in which they hold office within one month after taking office and then no later than within eight days of any change occurring. The body shall submit the list of entities referred to in the preceding sentence of this Article to the Commission no later than within ti5 days of receipt of information on or a notification of changes regarding the entities. The Commission shall publish the list of entities referred to in the first sentence of this paragraph on its website every month.

...

# List of restrictions

Komisija za preprečevanje korupcije - Mozilla Firefox

https://registri.kpk-rs.si/registri/omejitve\_poslovanja/seznam/#

KOMISIJA ZA PREPREČEVANJE KORUPCIJE

Začetna stran > Omejitve poslovanja > Seznam veljavnih omejitev poslovanja

Hitro iskanje:

Počisti vse

Strojno čitljiv seznam v formatu JSON  
Strojno čitljiv seznam v formatu CSV

| Organizacija                        | Matična    | Davčna   | Šifra PU | Naslov organizacije  | Pošta organizacije | Omejitev do kmetijskega gospodarstva ali do poslovnega subjekta | Naziv poslovnega subjekta  | Matična    |
|-------------------------------------|------------|----------|----------|----------------------|--------------------|---|--|------------|
| UPRavno sodišče Republike Slovenije | 1190989000 | 79787975 | 46116    | FAJFARJEVA ULICA 033 | 1000 Ljubljana     | ps  | FUNDACIJA DR. BRUNO BRESCHI, USTANOVA ZA OHRANJANJE STAREJŠIH DEL SLOVENSKEGA SLOVSTVA | 1421549000 |
| UPRavno sodišče Republike Slovenije | 1190989000 | 79787975 | 46116    | FAJFARJEVA ULICA 033 | 1000 Ljubljana     | ps  | DANCEQUAKE, proizvodnja, storitve, trgovina, d.o.o.                                    | 1702319000 |
| UPRavno sodišče Republike Slovenije | 1190989000 | 79787975 | 46116    | FAJFARJEVA ULICA 033 | 1000 Ljubljana     | ps  | CELJSKA MOHORJEVA DRUŽBA, založništvo, trgovina in storitve, d.o.o.                    | 2028484000 |
| UPRavno sodišče Republike Slovenije | 1190989000 | 79787975 | 46116    | FAJFARJEVA ULICA 033 | 1000 Ljubljana     | ps  | BARTENJEV MITJA - ODVETNIK   | 2367939000 |

# Supervizor/Erar database in machine readable form

The image shows two overlapping browser windows. The background window displays the main page of the Supervizor website, which is a web application for monitoring corruption. The foreground window shows a detailed page about the data format, including a table of field descriptions.

**Supervizor**  
KOMISIJA ZA PREPREČEVANJE KORUPCIJE  
SPLETNA APLIKACIJA ZA SPREMLJANJE

## Podatki

Na tej strani so na voljo podatki o mesečnih seštevkih sredstev.

**OPOZORILO:** podatki se lahko brez opozorila da čiščenje podatkov o plačah in odtegljajih o

- 2003 - [transakcije](#)
- 2004 - [transakcije](#)
- 2005 - [transakcije](#)
- 2006 - [transakcije](#)
- 2007 - [transakcije](#)
- 2008 - [transakcije](#)
- 2009 - [transakcije](#)

### Podatki o mesečnih seštevkih prejetih sredstev po posameznih proračunskih uporabnikih in prejemnikih javnih sredstev


Podatki se nahajajo v CSV tekstovnih datotekah (posamezna polja so ločena s podpičjem) v Unicode (UTF-8) formatu z Unix/Linux koncem vrstice. Datoteka ima vzglavje z imeni podatkovnih polj. V datotekah se nahajajo podatki za vsako leto posebej (od leta 2003 dalje), za zadnje leto pa za vsak mesec posebej. Posamezna datoteka je kompresirana v .gz obliko.

#### Opis strukture podatkov

| Polje    | Opis polja   |
|----------|--|
| sifra_pu | Šifra proračunskega uporabnika.<br>Šifre proračunskih uporabnikov se nahajajo v Registru proračunskih uporabnikov ( <a href="http://www.ujp.gov.si/dokumenti/dokument.asp?id=354">http://www.ujp.gov.si/dokumenti/dokument.asp?id=354</a> ). Za nekatere ukinjene organe so šifre proračunskih uporabnikov dodane ročno. Podatki so v celoštevilskem formatu ( <i>integer</i> ). |

# Overview of reported restrictions

*Integrity And  
Prevention of  
Corruption Act was  
enacted in 2003*



|    | K         | L         | M                         | O                              | P          | Q          |
|----|-----------|-----------|---------------------------|--------------------------------|------------|------------|
|    | PS_DAVCNA | MID       | PS_NASLOV                 | DATUM_OD                       | DATUM_DO   |            |
| 1  |           |           |                           |                                |            |            |
| 2  | 76594912  |           | IDRIJSKA CESTA 013        | 1970-01-01                     |            |            |
| 3  | 33191093  |           | PREŠERNOVA CESTA 008      | 1979-10-01                     |            |            |
| 4  | 27699242  |           | VRAZOVA ULICA 005         | 1980-01-01                     |            |            |
| 5  |           | 100243908 |                           | 1981-01-01                     |            |            |
| 6  | 17142776  |           | LOKEV 165                 | 1981-06-01                     |            |            |
| 7  | 68256183  |           | ULICA STANETA ROZMANA 016 | 1981-07-01                     |            |            |
| 8  |           | 100200859 |                           | 1219 1984-08-01                |            |            |
| 9  | 34423974  |           | VAŠE 011 C                | 1215 Medvode                   | 1986-09-23 |            |
| 10 |           | 100268238 |                           | 3224 dobjje pri planini        | 1988-07-26 |            |
| 11 | 74735705  |           | CESTA NA BOKALCE 040      | 1000 Ljubljana                 | 1989-06-30 |            |
| 12 | 48079421  |           | NA POKLONU 007            | 5281 Spodnja Idrija            | 1989-08-01 | 2013-02-23 |
| 13 | 97905445  |           | OPATJE SELO 003           | 5291 Miren                     | 1989-10-17 |            |
| 14 | 17454352  |           | AHLINOVA ULICA 001        | 1291 Škofljica                 | 1989-12-18 |            |
| 15 |           | 100294298 |                           | 3326 Topolšica                 | 1990-01-01 |            |
| 16 |           | 100314697 |                           | 3325 Šoštanj                   | 1990-01-01 |            |
| 17 | 12455458  |           | EFENKOVA CESTA 061        | 3320 Velenje                   | 1990-01-01 |            |
| 18 | 46871535  |           | KOČEVARJEVA ULICA 004     | 8000 Novo mesto                | 1990-01-13 | 2014-12-29 |
| 19 | 84774533  |           | HOLCERJEVA ULICA 027      | 2204 Miklavž na Dravskem polju | 1990-03-01 |            |
| 20 | 80857175  |           | PANONSKA ULICA 001        | 9250 Gornja Radgona            | 1990-04-09 |            |
| 21 | 91824036  |           | KIDRIČEVA ULICA 035       | 5270 Ajdovščina                | 1990-09-10 |            |
| 22 | 81121903  |           | SAMOVA ULICA 012 A        | 1000 Ljubljana                 | 1990-10-11 |            |
| 23 | 91612900  |           | TEPANJE 063               | 3210 Slovenske Konjice         | 1990-11-14 |            |
| 24 | 92302025  |           | GREGORČIČEVA ULICA 015    | 5280 Idrija                    | 1990-11-20 |            |
| 25 | 69846103  |           | Letališka cesta 032       | 1000 Ljubljana                 | 1991-01-09 |            |
| 26 | 24058807  |           | GRADAC 086                | 8332 Gradac                    | 1991-02-12 |            |
| 27 | 91201055  |           | SMOLINCI 088              | 2236 Cerkevjak                 | 1991-04-01 |            |
| 28 | 10488332  |           | Ulica XIV. divizije 014   | 3000 Celje                     | 1991-04-09 |            |
| 29 | 64679691  |           | DOBJJE PRI PLANINI 032    | 3224 Dobje pri Planini         | 1991-05-07 |            |
| 30 | 82306567  |           | PENOJE 010                | 3215 Loče                      | 1991-05-28 |            |
| 31 | 52087964  |           | LIPTOVSKA ULICA 028       | 3210 Slovenske Konjice         | 1991-06-12 |            |
| 32 | 16466543  |           | LINHARTOVA CESTA 001      | 1000 Ljubljana                 | 1991-06-17 |            |
| 33 | 72903295  |           | LEVSTIKOVA ULICA 001      | 6310 Izola - Isola             | 1991-08-22 |            |
| 34 | 25213800  |           | Meža 114                  | 2370 Dravograd                 | 1991-09-19 |            |

# Overview of reported restrictions

matej@cryptoloop: ~

| organ                          |  |
|--------------------------------|--|
| OBČINA IDRIJA                  | Center za idrijsko dediščino                     |
| OBČINA LENDAVA - LENDVA KÖZSEG | DVOJEZIČNA OSNOVNA ŠOLA LENDAVA                  |
| MESTNA OBČINA MARIBOR          | JAVNI MEDOBČINSKI SREČAVNI CENTER MARIBOR        |
| OBČINA ČRNOMELJ                | JAVNI ZAVOD ZA KOLPA                             |
| OBČINA ROGATEC                 | JAVNI ZAVOD ZA RIZEM IN RAZVOJ OBČINE KOPER ENTE |
| MESTNA OBČINA KOPER            | JAVNI ZAVOD ZA RIZEM IN RAZVOJ OBČINE KOPER ENTE |
| OBČINA ŠKOFJA LOKA             | KNJIŽNICA OBČINE ŠKOFJA LOKA                     |
| OBČINA ŠMARJE PRI JELŠAH       | KNJIŽNICA OBČINE ŠMARJE PRI JELŠAH               |
| OBČINA ZAGORJE OB SAVI         | KRAJEVNA SKUPNOST TOLDOVA                        |
| OBČINA ZAGORJE OB SAVI         | KRAJEVNA SKUPNOST TOLDOVA                        |
| OBČINA ČRNOMELJ                | KRAJEVNA SKUPNOST TOLDOVA                        |
| OBČINA ZAGORJE OB SAVI         | KRAJEVNA SKUPNOST TOLDOVA                        |
| MESTNA OBČINA MARIBOR          | KULTURNI CENTER - DOM ZAGORJE OB SAVI            |
| OBČINA ZAGORJE OB SAVI         | MARIJSKA RAZVOJNA AGENCIJA p.o.                  |
| OBČINA PODLEHNIK               | MLADINSKI CENTER ZAGORJE OB SAVI                 |
| OBČINA KIDRIČEVO               | OBČINA PODLEHNIK                                 |
| OBČINA DOBJE                   | OSNOVNA ŠOLA CIRKOVCE                            |
| OBČINA KOSTANJEVICA NA KRKI    | OSNOVNA ŠOLA DOBJE                               |
| OBČINA ODRANCI                 | OSNOVNA ŠOLA JOŽETA GORJUPA KOSTANJEVICA NA KRKI |
| MESTNA OBČINA VELENJE          | OSNOVNA ŠOLA ODRANCI                             |
| OBČINA ŠTORE                   | OSNOVNA ŠOLA ŠALEK VELENJE                       |
|                                | OSNOVNA ŠOLA ŠTORE - VRTEC LIPA ŠTORE            |



Do they have restriction of business with themselves???

# Overview of reported restrictions



matej@cryptoloop: ~

OBČINA ODRANCI  
MESTNA OBČINA VELENJE  
OBČINA ŠTORE  
MESTNA OBČINA KOPER  
OKROŽNO SODIŠČE V MARIBORU  
MESTNA OBČINA NOVO MESTO  
OBČINA ČRENŠOVCI  
OBČINA ŠKOFJA LOKA  
OBČINA IVANČNA GORICA  
MESTNA OBČINA MARIBOR  
OBČINA LENDAVA - LENDVA KÖZSEG  
OBČINA PODCETRTEK  
MESTNA OBČINA VELENJE  
OBČINA ROGATEC  
OBČINA KOČEVJE  
OBČINA ŠKOFJA LOKA  
OBČINA LENDAVA - LENDVA KÖZSEG  
OBČINA SLOVENSKE KONJICE  
OBČINA ŠMARJE PRI JELŠAH  
MESTNA OBČINA VELENJE  
OBČINA ŽALEC  
(42 rows)  
(END)

OSNOVNA ŠOLA ODRANCI  
OSNOVNA ŠOLA ŠALEK VELENJE  
OSNOVNA ŠOLA ŠTORE - VRTEC LIPA ŠTORE  
POKRAJINSKI MUZEJ KOPER, MUSEO REGIONALE DI CA  
RADIOTELEVIZIJA SLOVENIJA javni zavod, Ljubljana  
RAZVOJNI CENTER NOVO MESTO, Svetovanje in razvoj  
SAUBERMACHER - KOMUNALA - podjetje za  
SMUČARSKO TURISTIČNI CENTER STC STAR  
SREDNJA ŠOLA JOSIPA JURČIČA IVANČNA  
ŠPORTNI OBJEKTI MARIBOR  
TURIZEM LENDAVA d.o.o.  
TURIZEM PODCETRTEK, gospodarsko in  
VETERINA ŠOŠTANJ d.o.o., Šoštanj, Lendava  
ŠPORTNI OBJEKTI MARIBOR

**PRIS - Poslovni register SLOVENIJE**

Podatki o subjektu TURIZEM LENDAVA d.o.o., matična številka: 2080036000

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[Več v FI-PO](#)

| <a href="#">osnovni podatki o subjektu</a> | <a href="#">družbeniki in poslovni deleži</a> | <a href="#">osebe, pooblaščenice za zastopanje</a> | <a href="#">člani organa nadzora</a> | <a href="#">skupščinski sklepi</a> | <a href="#">razno</a> | <a href="#">sprememba družbene pogodbe / statuta</a> |
|--|---|--|--------------------------------------|------------------------------------|-----------------------|--|
|--|---|--|--------------------------------------|------------------------------------|-----------------------|--|

**DRUŽBENIKI**

|  |   |
|--|---|
| zap. št. družbenika:                     | 492897  |
| identifikacijska številka:               | 5874645000 - matična številka (pravna oseba je vpisana v PRS)   |
| firma:                                   | OBČINA LENDAVA - LENDVA KÖZSEG  |
| Naslov:                                  | Lendava, Glavna ulica 20, 9220 Lendava - Lendava  |
| vrsta odgovornosti za obveznosti družbe: | ne odgovarja  |
| datum vstopa:                            | 27.01.2005  |
| zap. št. družbenika:                     | 576081  |
| identifikacijska številka:               | 2220385000 - matična številka (pravna oseba je vpisana v PRS)   |
| firma:                                   | ZVEZA DRUŠTEV ZA MEDKULTURNI DIALOG MURANIA - MURANIA-EGYESÜLETEK SZÖVETÉGE A KULTÚRÁK KÖZÖTTI PÁRBESZÉDÉRT |
| Naslov:                                  | Lendava, Bánffyjev trg 1, 9220 Lendava - Lendava  |
| vrsta odgovornosti za obveznosti družbe: | ne odgovarja  |
| obseg odgovornosti:                      | /   |
| datum vstopa:                            | 20.01.2009  |
| zap. št. družbenika:                     | 740816  |
| identifikacijska številka:               | 5301971000 - matična številka (pravna oseba je vpisana v PRS)   |

**Company established by the municipality**

# Cleaning the data

---

For data cleaning we need *Registry of budget users* (available on web) and *Business registry of Slovenia* (accessible through Access to Public Information Act)...

In first step we...

- remove entities which are in fact budget users;
- remove business entities established by budget users;
- *for other business entities add type, for associations we add type of association;*
- remove »*associations working in public interest*« (firemen associations, hunting and fishing associations, handicapped persons associations);
- remove political parties.



# Cleaning the data

```
omejitve_poslovanja.sql (~/.Namizje/datoteke/open_data/omejitve_poslovanja) - gedit
Odpri Shrani Razveljavi
omejitve_poslovanja.sql x Supervisor_psql.txt x
# zacasna tabela
select organ, kpk_omejitve_poslovanja.sifra_pu, tip_omejitve, ps_naziv, ps_davcna, datum_od, datum_do,
datum_transakcije, znesek_transakcije, namen into temp_krsitve_omejitev from kpk_omejitve_poslovanja,
supervisor_transakcije where (kpk_omejitve_poslovanja.sifra_pu = supervisor_transakcije.sifra_pu) and
(kpk_omejitve_poslovanja.ps_davcna = supervisor_transakcije.davcna_stevilka::text) and (datum_od <
datum_transakcije) and (datum_transakcije < datum_do) and (extract(year from datum_transakcije) >= 2014);
# ali je prejemnik PU?
alter table temp_krsitve_omejitev add column ps_je_pu boolean;
update temp_krsitve_omejitev set ps_je_pu = FALSE;
update temp_krsitve_omejitev set ps_je_pu = TRUE from rpu where (ps_davcna = rpu.davcna::text);
# tip prejemnika
alter table temp_krsitve_omejitev add column ps_oblika text;
update temp_krsitve_omejitev set ps_oblika = kategorija from rpu where (ps_je_pu = TRUE) and (ps_davcna =
rpu.davcna::text);
update temp_krsitve_omejitev set ps_oblika = oblika from prs_enota_rs where (ps_je_pu = FALSE) and
(ps_davcna = prs_enota_rs.davcna::text);
update temp_krsitve_omejitev set ps_oblika = drustvo from prs_enota_rs where (ps_je_pu = FALSE) and
(ps_oblika ~* 'društvo') and (ps_davcna = prs_enota_rs.davcna::text);
update temp_krsitve_omejitev set ps_oblika = trim(ps_oblika);
# ali je ustanovitelj prejemnika PU
alter table temp_krsitve_omejitev add column ps_ustanovil_pu boolean;
update temp_krsitve_omejitev set ps_ustanovil_pu = FALSE;
update temp_krsitve_omejitev set ps_ustanovil_pu = TRUE from prs_enota_rs, prs_ustanovitelji, rpu where
(ps_davcna = prs_enota_rs.davcna::text) and (prs_enota_rs.enota = prs_ustanovitelji.enota) and
(p_subjekt_maticna = rpu.maticna);
```

# Results

---

- Number of all public bodies reported restrictions of business: **294**
- Number of all public bodies, where financial transactions were found in 2014 and 2015: **154**
- Number of public bodies where there is suspicion of violation (cleaned data): **148**
  
- Number of suspicious transactions in 2014: **2.912.193,03 EUR**
- Number of suspicious transactions till end of April 2015: **1.658.190,47 EUR**
  
- **Finally we have 391 pairs public body – company on the list.** Can we remove more data?
  - all remaining associations and clubs?
  - all companies that contain word »*public*« in their name, even if they are not registered as public companies?

# Additional cleaning of data

| prejemki     | st_transakcij | organ                       |   |
|--------------|---------------|-----------------------------|---|
| 63744.8000   | 734           | MESTNA OBČINA MARIBOR       | MARIBORSKI VODOVOD javno podjetje d.d.                      |
| 111916.4800  | 110           | OKROŽNO SODIŠČE V KOPRU     | BANKA KOPER d.d. Dvojezična firma: BANKA KOPER d.d. - s.p.a |
| 5972.1400    | 75            | MESTNA OBČINA NOVA GORICA   | GEN-I, trgovanje in prodaja električne energije, d.o.o.     |
| 1107889.0400 | 72            | MESTNA OBČINA LJUBLJANA     | WALDORFSKA ŠOLA LJUBLJANA                                   |
| 34322.9900   | 62            | OBČINA BRDA                 | VINSKA KLET "GORIŠKA BRDA" druga, kmetijstvo, proizvodnja   |
| 140529.6400  | 33            | MESTNA OBČINA KRANJ         | ZAVOD CARNICA - Zavod za kulturo in turizem                 |
| 16074.8600   | 32            | OBČINA POSTOJNA             | ZVEZA DRUŠTEV MLADINSKI CENTER POSTOJNA                     |
| 8815.0800    | 30            | OKRAJNO SODIŠČE V LJUBLJANI | Odvetniška pisarna Leber Miklič, Rozman d.o.o.              |
| 6291.4900    | 30            | OBČINA SLOVENSKA BISTRICA   | KADRING - kadrovsko in poslovno svetovanje, d.o.o.          |
| 6166.9200    | 30            | OBČINA PIVKA                | NEMEZA, finančni inženjering in storitve d.o.o.             |
| 12580.6100   | 28            | OBČINA VOJNIK               | MPRINT servis in prodaja računalniške opreme, d.o.o.        |
| 10139.1800   | 28            | MESTNA OBČINA MURSKA SOBOTA | DRUŠTVO UPOKOJENCEV MURSKA SOBOTA                           |
| 12073.6700   | 25            | OKROŽNO SODIŠČE V LJUBLJANI | OREL LADO - ODVETNIŠTVO                                     |
| 35952.0200   | 24            | MESTNA OBČINA MARIBOR       | DRUŠTVO ZA POMOČ SAMOPOMOČ NA PODROČJU ZASVOJENOSTI ZDRA    |
| 23404.4200   | 24            | OBČINA ČRNOMELJ             | MLADINSKI CENTER IT angleški prevod firme: YOUTH CENTER BI  |
| 10809.2000   | 24            | OBČINA SLOVENSKE KONJICE    | EKOTIP - KEROMAN KOLAR proizvodnja in storitve, d.n.o. S    |
| 37560.1800   | 23            | OBČINA ŽIRI                 | M SORA, trgovina in proizvodnja, d.d.                       |
| 15747.6800   | 23            | OBČINA SLOVENSKA BISTRICA   | KULTURNO IZOPRAVEVALNO DRUŠTVO KERAMIKOV IN LONČARJEV PODRA |

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Podatki o subjektu MARIBORSKI VODOVOD javno podjetje d.d., matična številka: 5067880000

| <a href="#">osnovni podatki o subjektu</a> | <a href="#">druženiki in poslovni deleži</a> | <a href="#">osebe, pooblaščenice za zastopanje</a> | <a href="#">člani organa nadzora</a> | <a href="#">skupščinski sklepi</a> | <a href="#">razno</a> | <a href="#">sprememba družbene pogodbe / statuta</a> |
|--|--|--|--------------------------------------|------------------------------------|-----------------------|--|
|--|--|--|--------------------------------------|------------------------------------|-----------------------|--|

## OSNOVNI PODATKI O SUBJEKTU

|  |  |
|--|--|
| status subjekta:                       | vpisan                                 |
| datum vpisa subjekta v sodni register: | 23.04.1991                             |
| matična številka:                      | 5067880000                             |
| davčna številka:                       | SI 68041527                            |
| firma:                                 | MARIBORSKI VODOVOD javno podjetje d.d. |
| skrajšana firma:                       | MARIBORSKI VODOVOD d.d.                |
| sedež:                                 | Maribor                                |
| poslovni naslov:                       | Jadranska cesta 24, 2000 Maribor       |
| pravnoorganizacijska oblika:           | <b>Delniška družba d.d.</b>            |
| število delnic:                        | 285.489                                |
| vrsta organa nadzora:                  | Nadzorni svet                          |

**Type of company: Joint-stock company (d.d.)**

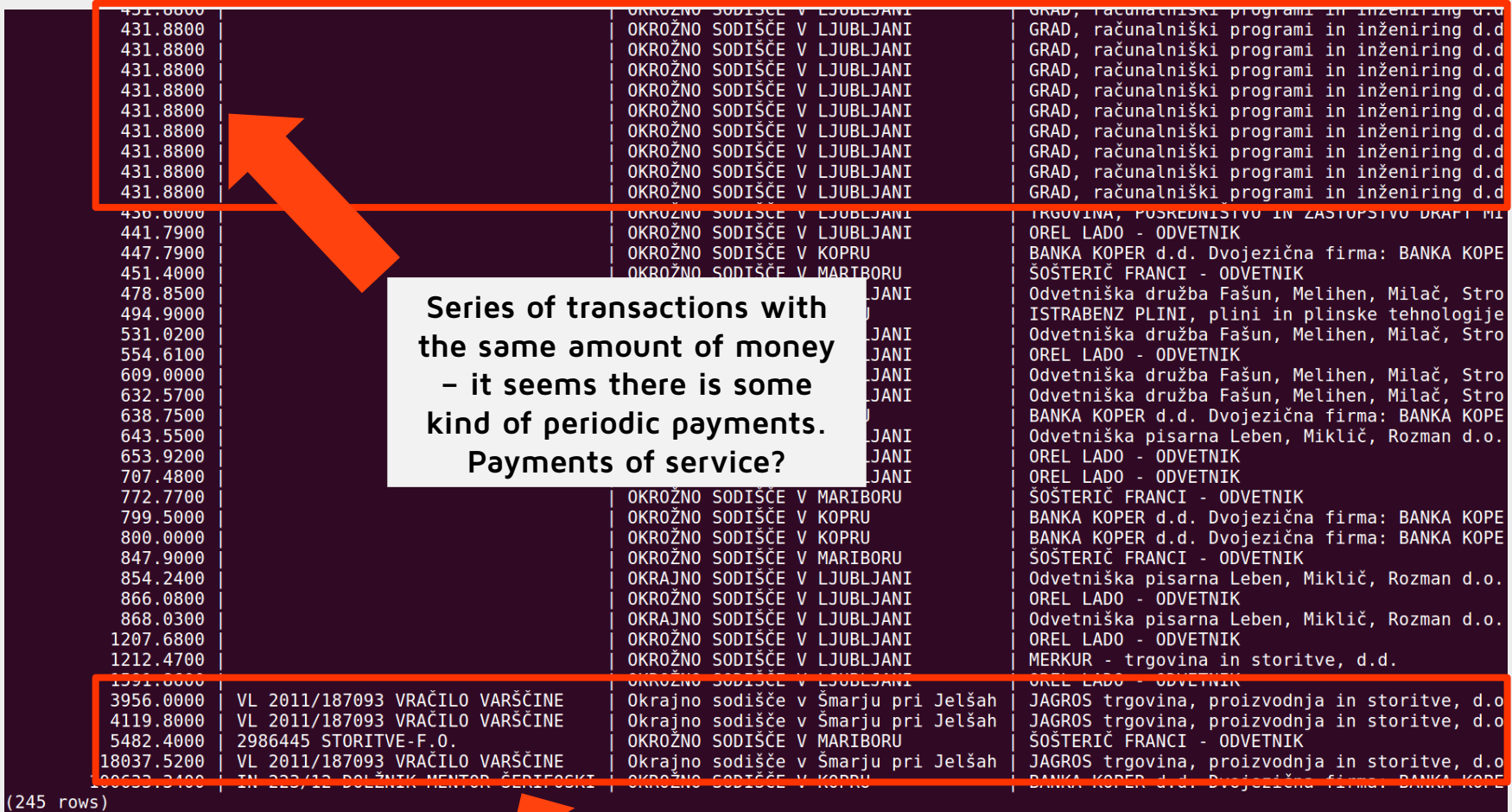
**However from the name of the company we can deduce that it is public company**

# Results

- Transactions of remained business entities:  
**3.510.827,56 EUR.**

| 1     | A                       | B                  | C           | D                                  | E   |
|-------|-------------------------|--------------------|-------------|------------------------------------|---|
| organ | datum transakcije       | znesek transakcije | namen       | ps_naziv                           |   |
| 2     | OBČINA SEŽANA           | 2014-01-31         | 12.507,67 € | 13300298 30.12.2013                | HORTIKULTURA SEŽANA vrtnarstvo, gozdarstvo in komunalne storitve d.o.o.   |
| 3     | OBČINA ZREČE            | 2014-03-21         | 2.354,07 €  | 2014/1000061 8-14 31.01.2014 TRANS | TRANSLES, proizvodno trgovsko podjetje, d.o.o.                            |
| 4     | OBČINA ZREČE            | 2015-01-30         | 2.154,96 €  | 2014/1001953 68-14 30.11.2014 TRAN | TRANSLES, proizvodno trgovsko podjetje, d.o.o.                            |
| 5     | OBČINA IVANČNA GORICA   | 2014-09-19         | 4.453,00 €  | 2014/9002336 NAKUP ZEMLJIŠČA DEDNI | KMETIJSKA ZADRUGA STIČNA zadruga z omejeno odgovornostjo v Ivančni Gorici |
| 6     | OBČINA ZREČE            | 2015-03-27         | 2.154,96 €  | 2015/1000111 2 03.02.2015 TRANSLES | TRANSLES, proizvodno trgovsko podjetje, d.o.o.                            |
| 7     | MESTNA OBČINA LJUBLJANA | 2014-01-03         | 49.282,20 € | 2160329 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 8     | MESTNA OBČINA LJUBLJANA | 2014-01-06         | 8.696,07 €  | 2163349 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 9     | MESTNA OBČINA LJUBLJANA | 2014-01-22         | 5.877,24 €  | 2207004 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 10    | MESTNA OBČINA LJUBLJANA | 2014-02-06         | 8.857,96 €  | 2248560 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 11    | MESTNA OBČINA LJUBLJANA | 2014-02-17         | 49.537,61 € | 2269922 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 12    | MESTNA OBČINA LJUBLJANA | 2014-02-17         | 9.752,28 €  | 2269925 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 13    | MESTNA OBČINA LJUBLJANA | 2014-03-03         | 6.740,45 €  | 2305635 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 14    | MESTNA OBČINA LJUBLJANA | 2014-03-04         | 49.282,20 € | 2306335 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 15    | MESTNA OBČINA LJUBLJANA | 2014-03-06         | 8.791,88 €  | 2315394 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 16    | MESTNA OBČINA LJUBLJANA | 2014-03-19         | 49.198,05 € | 2341036 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 17    | MESTNA OBČINA LJUBLJANA | 2014-04-03         | 9.279,25 €  | 2387160 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 18    | MESTNA OBČINA LJUBLJANA | 2014-04-30         | 8.325,17 €  | 2457799 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 19    | MESTNA OBČINA LJUBLJANA | 2014-05-07         | 49.198,05 € | 2473606 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 20    | MESTNA OBČINA LJUBLJANA | 2014-05-23         | 9.361,70 €  | 2502348 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 21    | MESTNA OBČINA LJUBLJANA | 2014-05-30         | 5.000,87 €  | 2532449 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 22    | MESTNA OBČINA LJUBLJANA | 2014-05-30         | 2.381,45 €  | 2532513 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 23    | MESTNA OBČINA LJUBLJANA | 2014-06-05         | 13.073,14 € | 2545523 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 24    | MESTNA OBČINA LJUBLJANA | 2014-06-06         | 53.002,89 € | 2548969 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 25    | MESTNA OBČINA LJUBLJANA | 2014-06-23         | 49.198,05 € | 2578646 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 26    | MESTNA OBČINA LJUBLJANA | 2014-07-01         | 4.318,10 €  | 2611321 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 27    | MESTNA OBČINA LJUBLJANA | 2014-07-09         | 11.873,58 € | 2632201 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 28    | MESTNA OBČINA LJUBLJANA | 2014-07-31         | 11.127,33 € | 2686412 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 29    | MESTNA OBČINA LJUBLJANA | 2014-08-08         | 49.198,05 € | 2707840 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 30    | MESTNA OBČINA LJUBLJANA | 2014-08-08         | 2.987,93 €  | 2707841 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 31    | MESTNA OBČINA LJUBLJANA | 2014-08-19         | 49.198,05 € | 2723661 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 32    | MESTNA OBČINA LJUBLJANA | 2014-09-01         | 2.313,97 €  | 2757916 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 33    | MESTNA OBČINA LJUBLJANA | 2014-09-02         | 10.933,57 € | 2758347 STORITVE                   | WALDORFSKA ŠOLA LJUBLJANA   |
| 34    | MESTNA OBČINA LJUBLJANA | 2014-09-17         | 49.765,95 € | 2792281 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |
| 35    | MESTNA OBČINA LJUBLJANA | 2014-09-30         | 2.189,67 €  | 2831570 REFUNDACIJE-DOTACIJE       | WALDORFSKA ŠOLA LJUBLJANA   |

# Overview of purposes of transactions



|             |                                    |                                     |  |
|-------------|------------------------------------|-------------------------------------|--|
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 431.8800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | GRAD, računalniški programi in inženiring d.o.o. |
| 458.6000    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | TRGOVINA, POSREDNITVO IN ZASTUPSTVO DRAFT MI     |
| 441.7900    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | OREL LADO - ODVETNIK                             |
| 447.7900    |                                    | OKROŽNO SODIŠČE V KOPRU             | BANKA KOPER d.d. Dvojezična firma: BANKA KOPE    |
| 451.4000    |                                    | OKROŽNO SODIŠČE V MARIBORU          | ŠOŠTERIČ FRANCI - ODVETNIK                       |
| 478.8500    |                                    |                                     | Odvetniška družba Fašun, Melihen, Milač, Stro    |
| 494.9000    |                                    |                                     | ISTRABENZ PLINI, plini in plinske tehnologije    |
| 531.0200    |                                    |                                     | Odvetniška družba Fašun, Melihen, Milač, Stro    |
| 554.6100    |                                    |                                     | OREL LADO - ODVETNIK                             |
| 609.0000    |                                    |                                     | Odvetniška družba Fašun, Melihen, Milač, Stro    |
| 632.5700    |                                    |                                     | Odvetniška družba Fašun, Melihen, Milač, Stro    |
| 638.7500    |                                    |                                     | BANKA KOPER d.d. Dvojezična firma: BANKA KOPE    |
| 643.5500    |                                    |                                     | Odvetniška pisarna Leben, Miklič, Rozman d.o.    |
| 653.9200    |                                    |                                     | OREL LADO - ODVETNIK                             |
| 707.4800    |                                    |                                     | OREL LADO - ODVETNIK                             |
| 772.7700    |                                    | OKROŽNO SODIŠČE V MARIBORU          | ŠOŠTERIČ FRANCI - ODVETNIK                       |
| 799.5000    |                                    | OKROŽNO SODIŠČE V KOPRU             | BANKA KOPER d.d. Dvojezična firma: BANKA KOPE    |
| 800.0000    |                                    | OKROŽNO SODIŠČE V KOPRU             | BANKA KOPER d.d. Dvojezična firma: BANKA KOPE    |
| 847.9000    |                                    | OKROŽNO SODIŠČE V MARIBORU          | ŠOŠTERIČ FRANCI - ODVETNIK                       |
| 854.2400    |                                    | OKRAJNO SODIŠČE V LJUBLJANI         | Odvetniška pisarna Leben, Miklič, Rozman d.o.    |
| 866.0800    |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | OREL LADO - ODVETNIK                             |
| 868.0300    |                                    | OKRAJNO SODIŠČE V LJUBLJANI         | Odvetniška pisarna Leben, Miklič, Rozman d.o.    |
| 1207.6800   |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | OREL LADO - ODVETNIK                             |
| 1212.4700   |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | MERKUR - trgovina in storitve, d.d.              |
| 1591.8000   |                                    | OKROŽNO SODIŠČE V LJUBLJANI         | OREL LADO - ODVETNIK                             |
| 3956.0000   | VL 2011/187093 VRAČILO VARŠČINE    | Okrajno sodišče v Šmarju pri Jelšah | JAGROS trgovina, proizvodnja in storitve, d.o.   |
| 4119.8000   | VL 2011/187093 VRAČILO VARŠČINE    | Okrajno sodišče v Šmarju pri Jelšah | JAGROS trgovina, proizvodnja in storitve, d.o.   |
| 5482.4000   | 2986445 STORITVE-F.O.              | OKROŽNO SODIŠČE V MARIBORU          | ŠOŠTERIČ FRANCI - ODVETNIK                       |
| 18037.5200  | VL 2011/187093 VRAČILO VARŠČINE    | Okrajno sodišče v Šmarju pri Jelšah | JAGROS trgovina, proizvodnja in storitve, d.o.   |
| 100633.3400 | IN 223/12 DOLŽNIK MENTOR ČERIFČAKI | OKROŽNO SODIŠČE V KOPRU             | BANKA KOPER d.d. Dvojezična firma: BANKA KOPE    |

Series of transactions with the same amount of money - it seems there is some kind of periodic payments. Payments of service?

»VRAČILO VARŠČINE« (RETURN OF JUDICIAL SECURITY) - probably there is no business.  
»STORITVE F. O.« - services of natural persons?

# Overview of purposes of transactions

---

- ŠOŠTANJ MUNICIPALITY -> NTS, navtika, trgovina in storitve, d.o.o.
  - 2014-09-30, 2.547,99 €
  - »ASIGNACIJA« (*ASIGNATION*)
- ŽIRI MUNICIPALITY -> M SORA, trgovina in proizvodnja, d.d.
  - 2015-02-23, 4.052,90 €
  - »TAX REFUND«
- ŽELEZNIKI MUNICIPALITY -> DOMEL, Elektromotorji in gospodinjski aparati, d.o.o.
  - 2014-07-30, 20.000,00 €
  - »RN41412014042NAKUP ENOSOBNEGA« (*THE PURCHASE OF ONE-ROOM (APARTMENT)*)

## Overview of purposes of transactions

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- SLOVENSKE KONJICE MUNICIPALITY -> MLADINSKI CENTER DRAVINJSKE DOLINE
  - 2014-11-18, 2.280,00 €
  - *»PF 2014/8000555 SOF.MLAD.PROGRAMA« (CO-FINANCING OF YOUTH PROGRAM)*
- LOVRENC NA POHORJU MUNICIPALITY -> PERGOLA, družba za gradbeništvo, posredovanje, trgovino in druge storitve, d.o.o.
  - 2014-07-21, 38.253,60 €
  - *»PLAČILO RAČUNA PF 2011/D000180 004« (BILL PAYMENT)*
- MESTNA OBČINA CELJE, CELJE -> NT&RC Podjetje za časopisno in radijsko dejavnost d.o.o. Celje
  - 2015-04-10, 3.008,55 €
  - *»PLAČ.RAČ.-OPRAV.STORITVE« (BILL PAYMENT – SERVICES PROVIDED)*

## Overview of purposes of transactions

---

- BRDA MUNICIPALITY -> VINSKA KLET "GORIŠKA BRDA" zadruga, kmetijstvo, proizvodnja vina in trgovine z.o.o. Dobrovo
  - 2014-10-06, 3.518,84 €
  - »*PL.RAČ. ZA VINO*« (*BILL PAYMET FOR VINE*)
- KRŠKO MUNICIPALITY -> AVTOBUSNI PREVOZI BOŽIDAR BRAČUN S.P.
  - 2015-04-01, 2.787,60 €
  - »*PREVOZI ŠOL. OTROK 2-2015 2015/300*« (*TRANSPORTATION OF SCHOOL CHILDREN*)
- BLED MUNICIPALITY -> PROMOTIVA, ORGANIZACIJA DOGODKOV, ANTOLIN GREGA S.P.
  - 2014-11-13, 3.000,00 €
  - »*RN?101-2014-OTROŠKI ANIMACIJSKI NA*« (*CHILDRENS ENTERTAINMENT*)



# Overview of purposes of transactions

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- ŽALEC MUNICIPALITY -> DRUŠTVO SVETNIKOV SDS ŽALEC:
  - 2014-10-27: 622,60 €
  - 2014-09-22: 877,20 €
  - 2014-09-02: 877,20 €
  - 2014-07-11: 877,20 €
  - 2014-06-24: 877,20 €
  - 2014-05-29: 877,20 €
  - 2014-04-22: 877,20 €
  - 2014-03-18: 2.631,60 €
- OKROŽNO SODIŠČE V LJUBLJANI -> GRAD, računalniški programi in inženiring d.d.:
  - 2015-04-13: 417,24 €
  - 2015-03-19: 417,24 €
  - 2015-02-25: 417,24 €
  - 2015-01-12: 431,88 €
  - 2014-12-10: 431,88 €
  - 2014-12-01: 431,88 €
  - 2014-10-13: 431,88 €
  - 2014-09-15: 431,88 €
  - 2014-08-14: 431,88 €
  - 2014-07-14: 431,88 €
  - 2014-06-27: 431,88 €
  - 2014-05-15: 431,88 €
  - 2014-04-14: 431,88 €
  - 2014-03-17: 431,88 €
  - 2014-02-14: 431,88 €
  - 2014-01-15: 431,88 €

# Example: Text analysis of Slovenian legislation



# Text analysis of Slovenian legislation

---

- Slovenian legislation (full text) was obtained in HTML format and imported into the database with some additional metadata.
- Data were exported to “named-line documents format”: first word is the name of the document (act), after space/tab there is a full text of the document till the newline:

```
\COPY (select replace[naslov_zakona, ' ', '_'],  
regexp_replace[vsebina_zakona, E'[\n\r\u2028]+', ' ', 'g'] from  
zakonodaja_zakoni, zakonodaja_besedila where [zakonodaja_zakoni.sop  
= zakonodaja_besedila.sop] and [id ~* 'zak']) to  
'slovenian_acts.txt' delimiter E'\t';
```

- Slovenian characters (čšž) were removed:

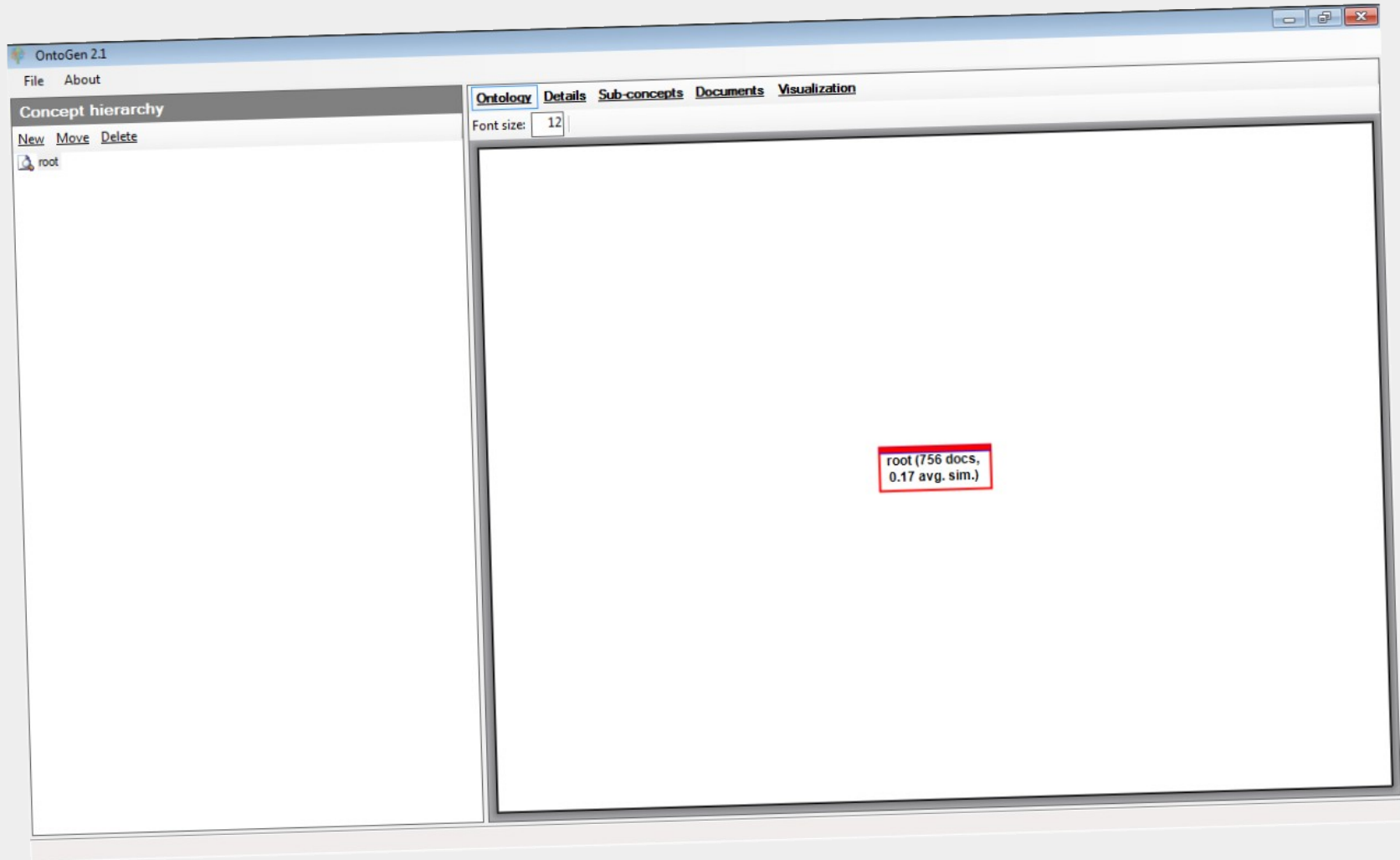
```
sed 's/\č/c/g' slovenian_acts.txt | sed 's/\š/s/g' | sed 's/\ž/z/g'  
| sed 's/\Č/C/g' | sed 's/\Š/S/g' | sed 's/\Ž/z/g' >  
slovenian_acts_csz.txt
```

- OntoGen application is quite old and unfortunately does not use UTF-8 encoding, so file needs to be encoded in CP1250:

```
iconv -c -f utf-8 -t cp1250 slovenian_acts_csz.txt >  
slovenian_acts_win.txt
```

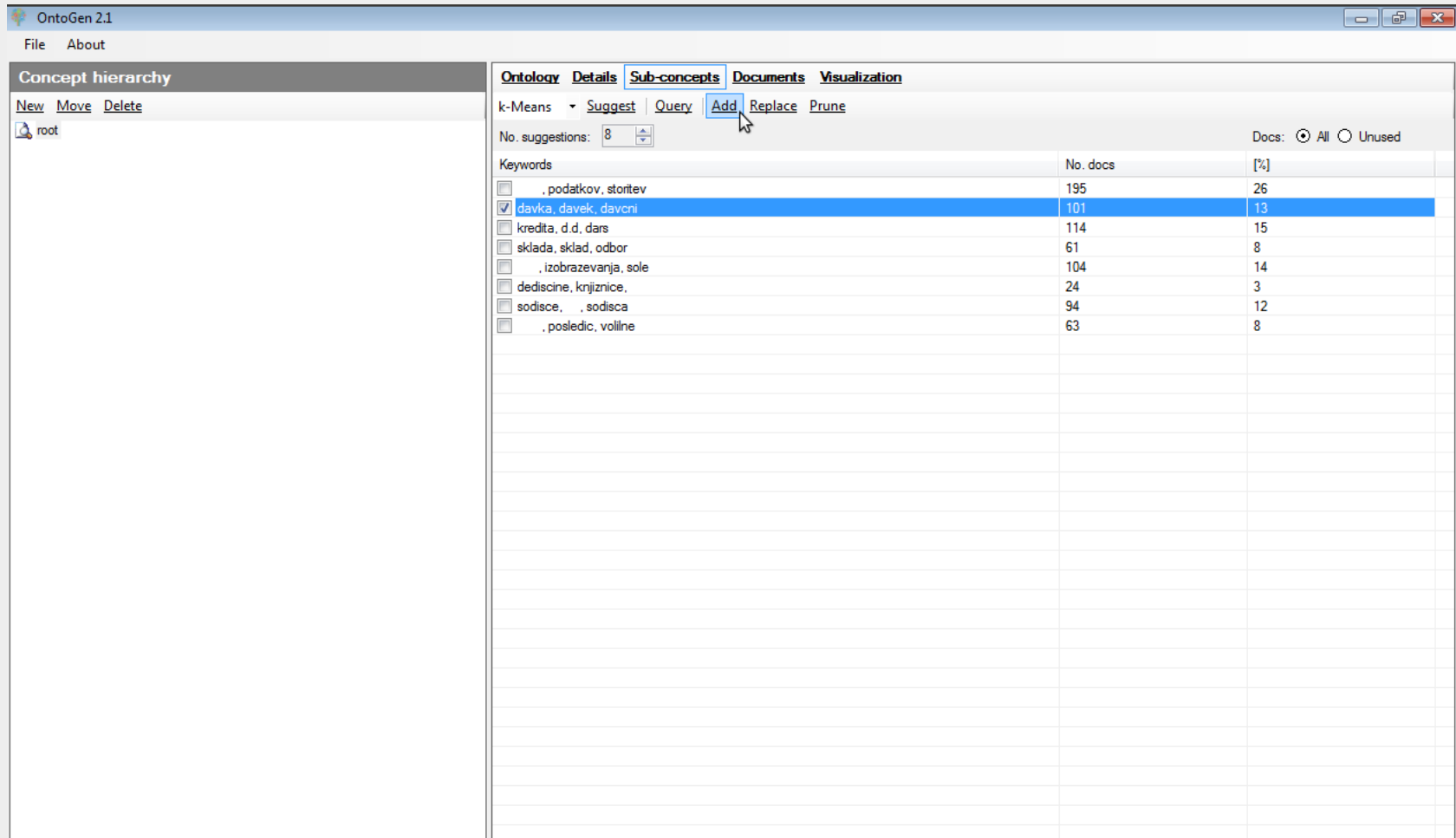
# Text analysis of Slovenian legislation

Slovenian legislation is then imported into OntoGen...



# Text analysis of Slovenian legislation

OntoGen suggests us 8 subconcepts. We add subconcept named "tax"...



The screenshot shows the OntoGen 2.1 application window. The 'Sub-concepts' tab is active, displaying a table of suggestions. The table has three columns: 'Keywords', 'No. docs', and 'Docs: [%]'. The row for 'davka, davek, davčni' is selected, and the 'Add' button is highlighted by a mouse cursor.

| Keywords   | No. docs | Docs: [%] |
|--|----------|-----------|
| <input type="checkbox"/> .podatkov, storitev             | 195      | 26        |
| <input checked="" type="checkbox"/> davka, davek, davčni | 101      | 13        |
| <input type="checkbox"/> kredita, d.d, dars              | 114      | 15        |
| <input type="checkbox"/> sklada, sklad, odbor            | 61       | 8         |
| <input type="checkbox"/> .izobrazevanja, sole            | 104      | 14        |
| <input type="checkbox"/> dediscine, knjiznice,           | 24       | 3         |
| <input type="checkbox"/> sodisce, .sodisca               | 94       | 12        |
| <input type="checkbox"/> .posledic, voline               | 63       | 8         |

# Text analysis of Slovenian legislation

For this subconcept we can preview documents included into this concept. We can also add or remove documents...

The screenshot displays the OntoGen 2.1 application window. On the left, the 'Concept hierarchy' shows a tree structure with 'root' and a sub-concept 'davka, davek, davčni'. The main area is divided into several panes. The top pane, 'Documents', shows a list of documents with their titles and similarity scores. The document 'Zakon o finančni upravi' is selected and highlighted in blue. Below this list, there is a 'Keywords for selected documents' section with a 'Refresh' button. The right pane shows a preview of the selected document, titled 'Zakon o finančni upravi', with its text content. At the bottom, a graph shows a curve representing the similarity of documents, with a vertical line indicating the position of the selected document.

| Document   | Similarity |
|--|------------|
| <input checked="" type="checkbox"/> Zakon o davku od iger na sreco -- ZAKON O DAVKU OD IGE...          | 0,400      |
| <input checked="" type="checkbox"/> Zakon o izvrševanju proračunov Republike Slovenije za leti 201...  | 0,399      |
| <input checked="" type="checkbox"/> Zakon o posebnem prometnem davku od posebnih iger na srec...       | 0,394      |
| <input checked="" type="checkbox"/> Zakon o dodatnem davku od dohodkov članov poslovodstev in...       | 0,348      |
| <input checked="" type="checkbox"/> Zakon o davku od prometa zavarovalnih poslov -- Opozorilo: B...    | 0,347      |
| <input checked="" type="checkbox"/> Zakon o davku na motoma vozila -- ZAKON O DAVKIH NA M...           | 0,341      |
| <input checked="" type="checkbox"/> Zakon o davku na dobitke pri klasičnih igrah na sreco -- Opoz...   | 0,338      |
| <input checked="" type="checkbox"/> Zakon o denacionalizaciji -- Opozorilo: Besedilo osnovnega pre...  | 0,327      |
| <input checked="" type="checkbox"/> Zakon o izvrševanju proračunov Republike Slovenije za leti 201...  | 0,325      |
| <input checked="" type="checkbox"/> Zakon o davčni službi -- ZAKON O DAVČNI SLUŽBI (ZDS-1) 1...        | 0,325      |
| <input checked="" type="checkbox"/> Zakon o davku od dobitka od odsvojitve izvedenih finančnih in...   | 0,320      |
| <input checked="" type="checkbox"/> Zakon o izvrševanju proračunov Republike Slovenije za leti 201...  | 0,319      |
| <input checked="" type="checkbox"/> Zakon o davku na vodna plovila -- Opozorilo: Besedilo osnovn...    | 0,317      |
| <input checked="" type="checkbox"/> Zakon o davku na bilanco vsoto bank -- ZAKON O DAVKU N...          | 0,304      |
| <input checked="" type="checkbox"/> Zakon o ureditvi določenih vprašanj v zvezi z graditvijo avtoce... | 0,293      |
| <input checked="" type="checkbox"/> Zakon o finančni upravi -- Opozorilo: Besedilo osnovnega pred...   | 0,290      |
| <input checked="" type="checkbox"/> Zakon o davku na dodano vrednost -- ZAKON O DAVKU NA ...           | 0,279      |
| <input checked="" type="checkbox"/> Zakon o ureditvi določenih vprašanj -- _v_zvezi_z_graditvijo_z...  | 0,278      |
| <input checked="" type="checkbox"/> Zakon o stavbnih zemljiščih -- Opozorilo: Besedilo osnovnega p...  | 0,276      |
| <input checked="" type="checkbox"/> Zakon o urejanju trga dela -- Opozorilo: Besedilo osnovnega pr...  | 0,274      |
| <input checked="" type="checkbox"/> Zakon o posebnem davku na določene prejemke -- Opozorilo: ...      | 0,272      |

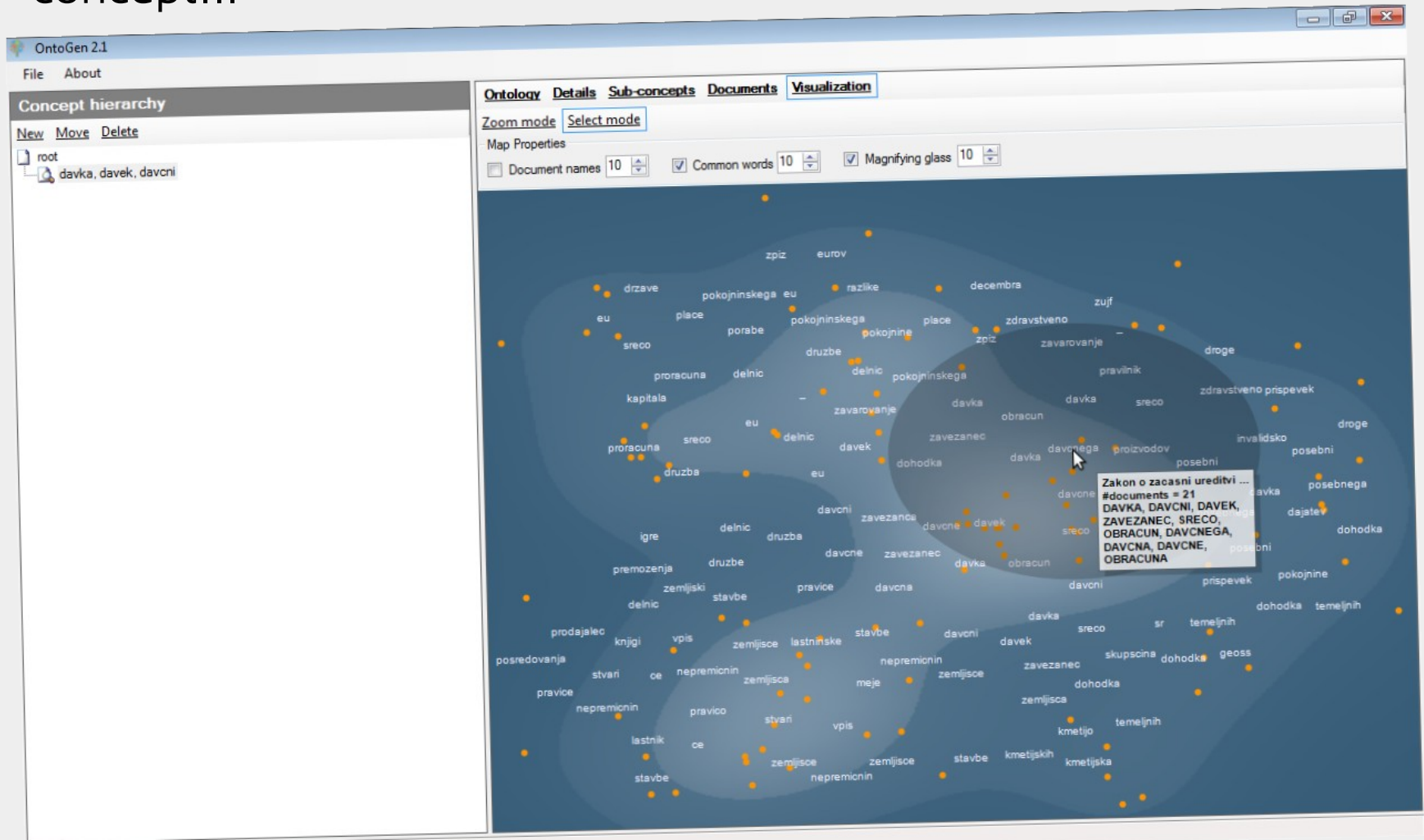
Keywords for selected documents:

Keywords: davka, davek, davčni, zavezanec, nepremicnina, nepremicnin, stavbe, davčni zavezanec, dohodka

Document name: Zakon o davku od dobitka od odsvojitve izvedenih finančnih instrumentov

# Text analysis of Slovenian legislation

Ontogen creates visualisation of the documents within the same concept...



# Text analysis of Slovenian legislation

We can view concept details...

The screenshot displays the OntoGen 2.1 application window. On the left, the 'Concept hierarchy' pane shows a tree structure with 'root' and a sub-entry 'davka, davek, davcni'. The main area is titled 'Ontology' and has several tabs: 'Details', 'Sub-concepts', 'Documents', and 'Visualization'. The 'Details' tab is active, showing the following information:

- Name: davka, davek, davcni
- Top keywords: davka, davek, davcni, zavezanec, nepremicnine, nepremicnin, . stavbe, davcni zavezanec, dohodka
- Central documents: Zakon\_o\_davcnem\_postopku, Zakon\_o\_davkih\_obcanov, Zakon\_o\_davku\_na\_nepremicnine, Zakon\_o\_davku\_na\_promet\_nepremicnin, Zakon\_o\_davku\_na\_dediscine\_in\_darila, Zakon\_za\_uravnotezenje\_javnih\_financ, Zakon\_o\_davku\_od\_sreck, Zakon\_o\_dohodnini, Zakon\_o\_davku\_od\_dohodkov\_pravnih\_oseb, Zakon\_o\_davku\_na\_financne\_storitve
- SVM Keywords: davka, davek, davcni, nepremicnine, zavezanec, nepremicnin, stavbe, pokojninskega, zemljisca, dohodka
- All documents: 101
- Unused documents: 101
- Avg. similarity: 0,244

A red arrow points from a text box to the SVM Keywords field. The text box contains the following text:

Keywords, which separate the selected concept from other concepts most

The Windows taskbar at the bottom shows the system tray with the time 14:28 and date 14.9.2015, and the system tray icons including SL, network, volume, and power.



# Text analysis of Slovenian legislation

We can zoom in the concept...

The screenshot displays the OntoGen 2.1 application window. On the left, the 'Concept hierarchy' panel shows a tree structure starting with 'root' and a sub-item 'davka, davek, davčni'. The main area is divided into several sections:

- Navigation:** 'File' and 'About' menus.
- Tabbed Interface:** 'Ontology', 'Details', 'Sub-concepts', 'Documents', and 'Visualization' (selected).
- Zoom mode:** A 'Select mode' dropdown and a 'Zoom mode' label.
- Search:** A 'Name:' field containing 'zemljisca, gradnjo, stavbnih' and a 'Keywords:' field containing 'zemljisca, gradnjo, stavbnih, razlastitev, nepremicnino, zemljisce, objektov, javno, zemljisci, zemljiscu'. 'Add' and 'Prune' buttons are present.
- Map Properties:** Checkboxes for 'Document names', 'Common words', and 'Magnifying glass', each with a value of '10'.
- Visualization:** A word cloud of Slovenian legislation. A mouse cursor is hovering over a large, dark oval containing the text: 'Zakon o stavbnih zemljiscih #documents = 1 ZEMLJISCA, STAVBNEGA, ZEMLJISCE, STAVBNIH, GRADITEV, OBJEKTOV, ZEMLJISCU, STAVBNO, UREJANJA, SKLAD'. Other visible text includes 'Zakon o Nordijskem centru Planica', 'Zakon o graditvi objektov na mejnih prehodih', 'Zakon o ugotavljanju vzajemnosti stavbe', 'Zakon o lastninjenju nepremicnin v ...', 'Zakon o vzpostavitvi etazne lastni', 'Zakon o denacionalizaciji', 'Zakon o posebnih pogojih za vpis ...', 'Zakon o doloceni obvezni ... vprasanj', 'Zakon o evidentiranju nepremicnin', 'Zakon o ureditvi dolocenih vprasanj v zvezi ...', 'Zakon o temeljnih stninskopravnih ...', 'Zakon o nepremicninskem posredovanju', 'Zakon o lastninjenju nepremicnin v ...', 'Zakon o graditvi objektov na mejnih prehodih', 'Zakon o ugotavljanju vzajemnosti stavbe', 'Zakon o Nordijskem centru Planica', 'na nepremicnino', 'Zakon o stavbnih zemljiscih', 'Zakon o poslovnih stavbah in ...', and 'Stanovanjski zakon'.

# Text analysis of Slovenian legislation

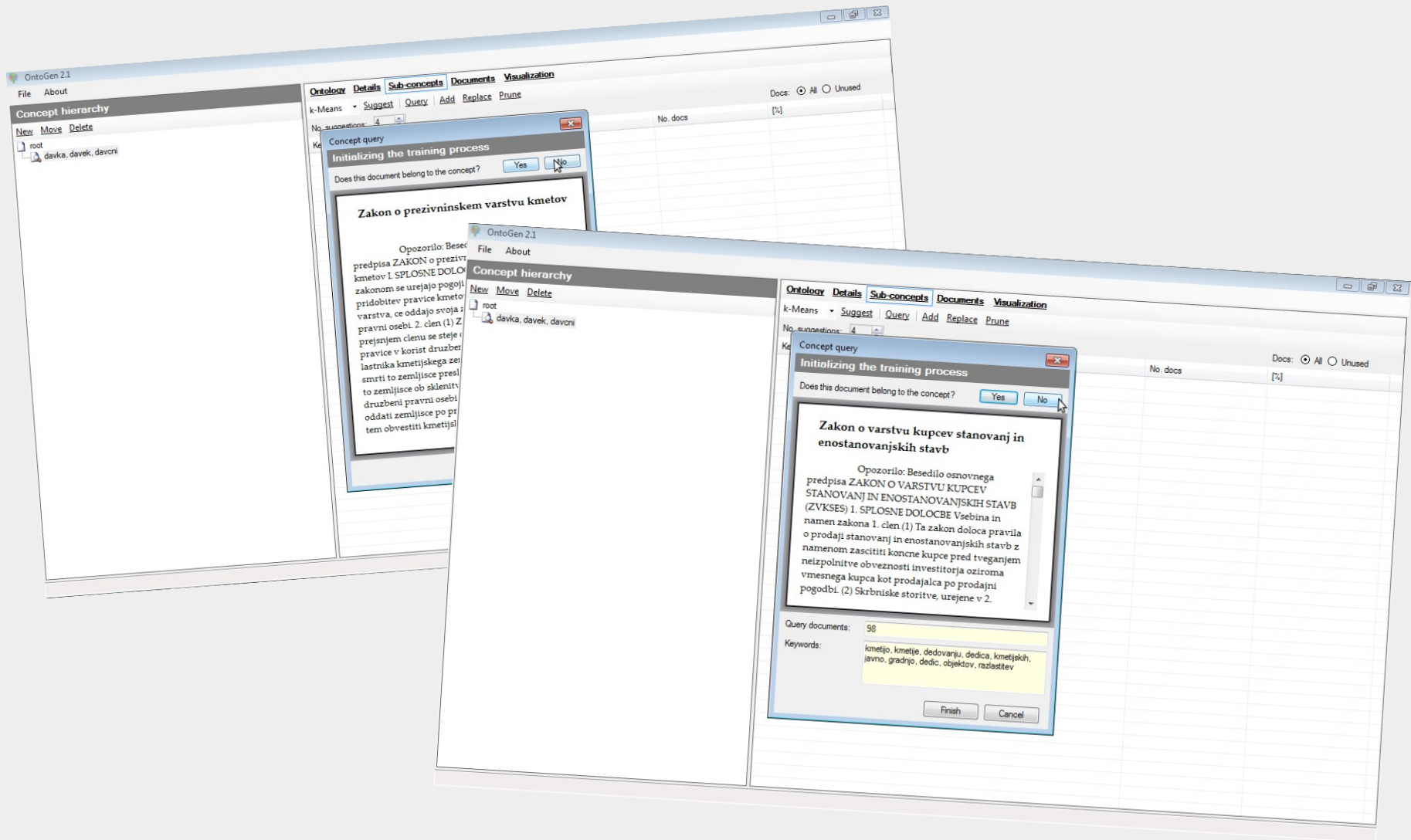
We can add new (sub)concept by learning...

The screenshot displays the OntoGen 2.1 application window. The main interface is divided into several sections:

- Concept hierarchy:** Located on the left, it shows a tree structure with a root node and a sub-node labeled "davka, davek, davcni".
- Ontology Details:** The central area, currently showing the "Sub-concepts" tab. It includes a menu bar with "k-Means", "Suggest", "Query", "Add", "Replace", and "Prune". Below the menu, there is a "No. suggestions:" field set to "4".
- Concept query dialog:** A modal window titled "Concept query" is open in the foreground. It contains a text input field with the text "zemljiisce" and two buttons at the bottom: "Query" and "Cancel".
- Documents:** On the right side, there is a table with columns "No. docs" and "Docs: [All] [Unused]". The table is currently empty.

# Text analysis of Slovenian legislation

We can add new (sub)concept by learning...



# Text analysis of Slovenian legislation

Documents from concept »tax« are automatically classified to subconcept »land«.

The screenshot displays the OntoGen 2.1 application window. On the left, the 'Concept hierarchy' panel shows a tree structure with 'zemlisce' selected, displaying 'All docs: 13' and 'Unused docs: 13'. The main area shows a 'Visualization' of document classification, with various Slovenian legal terms like 'Zakon o denacionalizaciji' and 'Zakon o vzpostavitvi etazne lastnine' overlaid on a blue background.

# Example: Anonymisation of court decisions



# Anonymisation of court decisions

Tacita is a tool helping anonymisation of court decisions. Based on a machine learning, the system has been taught which words to remove from the text. System has currently 91,8% recall (i.e. true positives).

ponarejanja denarja po drugem in prvem odstavku 243. člena KZ-1, zoper obdolženega [REDACTED] za kaznivo dejanje ponarejanja denarja po drugem odstavku 243. člena KZ-1 in obdolženega [REDACTED] za kaznivo dejanje ponarejanja denarja po prvem odstavku 243. člena v zvezi z drugim odstavkom 20. člena KZ-1. Preiskovalna sodnica je v obširnih razlogih sklepa o uvedbi preiskave (strani 6-39) utemeljila utemeljenost suma obdolžencem očitanih kaznivih dejanj. Zoper obdolženega [REDACTED] pa je sklep o preiskavi z dne 15. 4. 2015 zaradi kaznivih dejanja ponarejanja denarja po drugem odstavku 243. člena v zvezi z 20. členom KZ-1 in neupravičene proizvodnje in prometa s prepovedanimi pravnomočen. Tudi po presoji Vrhovnega sodišča se utemljevanje zahtev za izpustitev obdolženca v zvezi z 186. člena KZ-1 očitanih kaznivih dejanj med preiskavo z do sedaj izvedenimi preiskovalnimi ukrepi ne morejo pritrrditi navedbam zagovornika obdolženega [REDACTED] v odgovor na predlog državne tožilke, da se vloga obdolženca pri kaznivem dejanju zazna šele decembra 2014 in ne osem mesecev prej kot se mu to očita. Vrhovno sodišče je sledilo predlogu državne tožilke in pripor zoper obdolžene **Roda** [REDACTED] podaljšalo iz pripornega razloga po 3. točki prvega odstavka 201. člena ZKP. Po presoji Vrhovnega sodišča se okoliščine od zadnjega sli [REDACTED] (Okrožnega sodišča v **Ljubljani** z dne 30. 3. 2015) niso v ničemer spremenili. [REDACTED] (tiskanje, prenos, prevzem, shranjevanje, ponarejanje denarja) ter okoliščine izvršitve teh kaznivih dejanj (denarja v [REDACTED] bankovcev, razpečevanje in spravlanje v obtok tako ponarejenega denarja v [REDACTED] na dobro organiziranost, ozek in zaprt način delovanja udeležencev pri teh kaznivih dejanjih, pri čemer je imel vsak od obdolžencev točno določeno vlogo, vsi pa so bili motivirani s pridobitvijo protipravne premoženjske koristi. Obdolženi [REDACTED] je že bil obravnavan za premoženjska kazniva dejanja (sodba Okrožnega sodišča v Krškem z dne 19. 2. 2013 in z dne 9. 7. 2013, ko mu je zaradi kaznivih dejanj tatvine oziroma velike tatvine bil izrečen vzaoini ukrep). ie brez zaposlitve in se po lastni izjavi

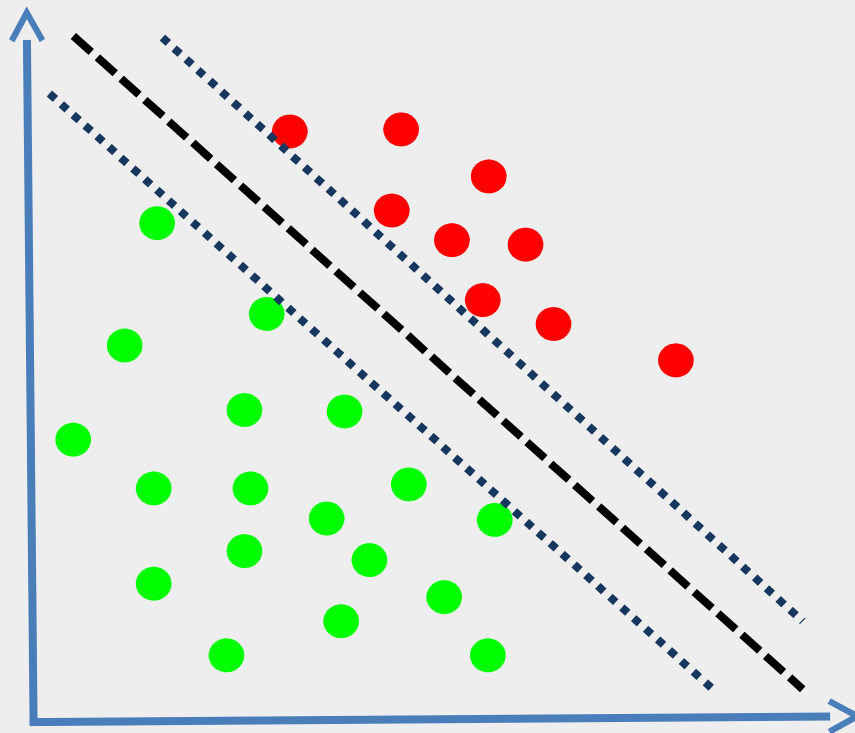
System has correctly detected typing error

Instead of *Roka »Novaka«* it has been written *Roda »Novaka«*

# Anonymisation of court decisions

---

Classification of words in two classes with the method of **support vectors**.



Linear distinguishable example

Word is represented as  $m$ -dimensional vector of several **features** (in our case  $m \sim 600$ ).

Method tries to find an optimal **hyperplane**, which segregates points (words represented by vectors) in this (mapped) place.

Example: Geolocation of photographs





# Geolocation of photographs

---

- Photographs taken from mobile phones have embed several metadata, including GPS location (usually in WGS 84 format).
- So we grab all data from the JPG images in a directory:

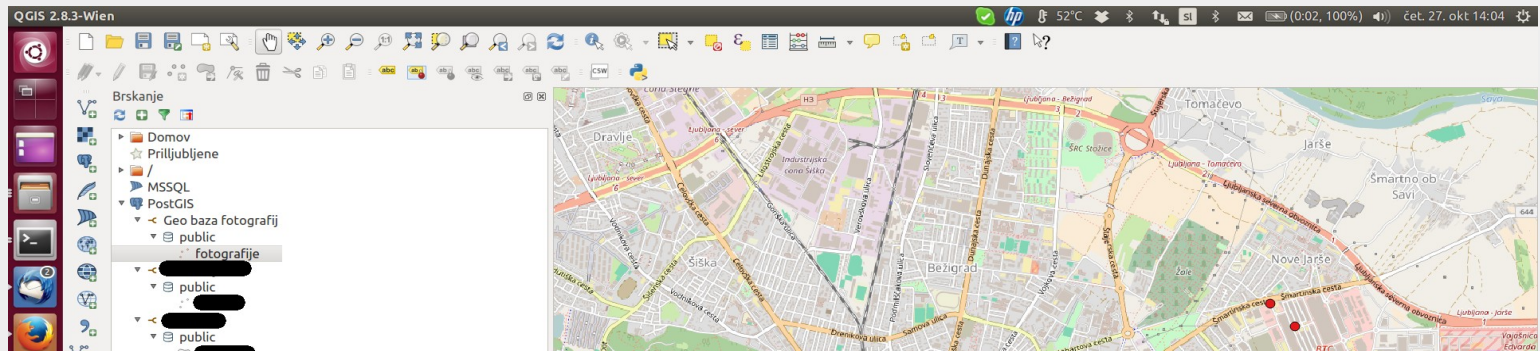
```
for file in *.jpg; do exiftool -c "%.6f" $file | grep "GPS  
Position" | awk -v filename="$file" '{print filename, $4, $6}' | tr  
[:blank:] \\t >> fotografije.csv; done;
```
- ... import it into a PostgreSQL database:

```
create table fotografije (filename text, latitude numeric,  
longitude numeric);  
\COPY fotografije from 'fotografije.csv' delimiter E'\t';
```
- ...and add geolocation (postGIS) info:

```
select AddGeometryColumn('fotografije', 'geolokacija', 4326,  
'POINT', 2);  
update fotografije set geolokacija =  
ST_SetSrid(ST_GeomFromText('POINT(' || longitude || ' ' || latitude  
|| ')'), 4326);
```

# Geolocation of photographs

...and visualise data with opensource QGIS!



With PostGIS we can also do some nice locational analysis:

```
select ime_obcine, count(*) as num_of_photos from fotografije, obcine where (geolokacija_slo && geom) and {ST_Contains(geom, geolokacija_slo)} group by ime_obcine;
```

| ime_obcine | num_of_photos |
|------------|---------------|
| LJUBLJANA  | 86            |
| KRANJ      | 5             |

Example: Data from technical  
inspection of vehicles



# MOT data

- Technical inspection of the car data are publicly available on OPSI portal.
- A group of enthusiasts created visualisations of data and added some analysis.
- Few months after launch they added data from police database of stolen vehicles...

**POZOR: VOZILO JE V BAZI UKRADENIH VOZIL!**

Vozilo z identifikacijsko številko (VIN) **WVWZZZ7MZ5V019268** in registrsko številko **CETV705** je bilo ukradeno **08. 04. 2019**. [Baza ukradenih vozil](#)

## VOLKSWAGEN SHARAN / 1.9 / TDI

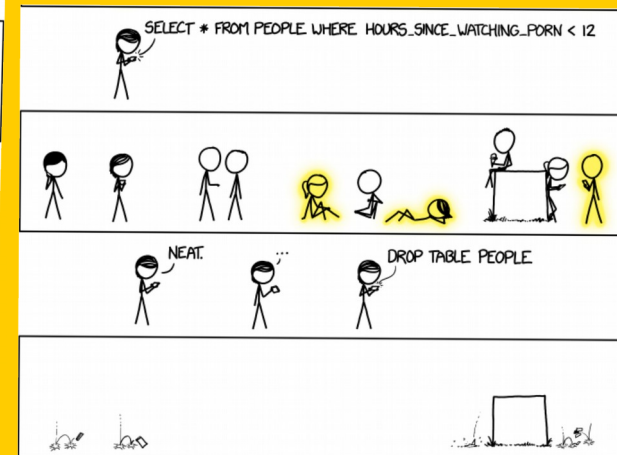
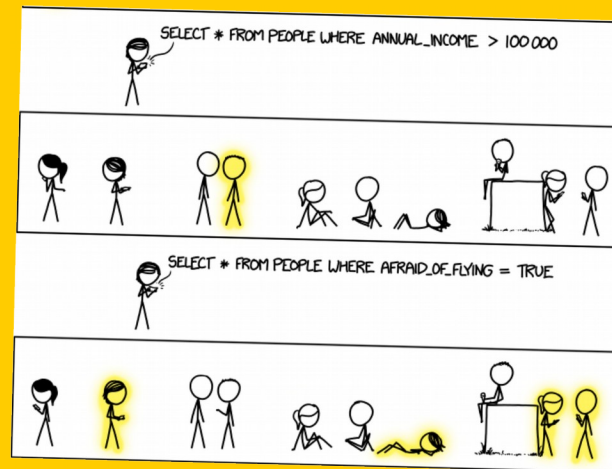
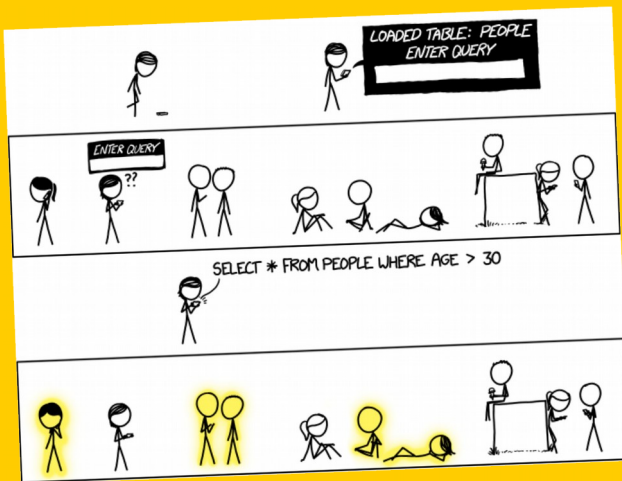


### Podatki o vozilu

|                                     |                               |
|-------------------------------------|-------------------------------|
| znamka vozila                       | VOLKSWAGEN SHARAN / 1.9 / TDI |
| leto izdelave                       | 2004                          |
| barva                               | kovinski - SIVA - TEMNA       |
| vrsta goriva                        | Dizel                         |
| oznaka motorja                      | ASZ                           |
| moč motorja                         | 96.0 kW                       |
| prostornina motorja                 | 1896.0 ccm                    |
| EURO                                | EURO 3                        |
| datum prve registracije             | 2004-12-14                    |
| datum prve registracije v Sloveniji | 2008-10-17                    |

UVOŽEN

# SELECT *questions* FROM *audience*;



Cartoon: (CC) xkcd.com

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