# GOVERNMENT TRANSPARENCY THROUGH TECHNOLOGY

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#### ABSTRACT

This paper presents usage of Supervizor, an online application that provides information on financial transactions of the public sector bodies. Supervizor contains by now 50 mio. transactions from both government and local agencies to government contractors from 2003 to 2014 and matches such transactions to company records from the Business Register including director lists and corporate leadership. The application, which has been designed and developed by the Commission for the Prevention of Corruption, won the UN Public Service Award in 2013, an important recognition of excellence in public service. The data on transactions from Supervizor are also provided in machine readable form.

## **1 INTRODUCTON**

Government transparency has been recognized as an important tool empowering citizens, limiting risks for illicit management and corruption and increasing the level of responsibilities of public office holders for effective and efficient use of public finance. This paper presents possible findings of using technology as a tool to increase transparency of public spending and to detect misuse of public funds.

The application called Supervizor [1] is a web application that shows financial transactions of the public sector bodies (direct and indirect budget users, including state and a local level) with legal entities registered in Republic of Slovenia. It has been designed and developed by the Slovenian Commission for the Prevention of Corruption. It received international recognition and won the UN Public Service Award in 2013.

The rest of this paper is structured as follows. Section 2 describes the various data sources for Supervizor, Section 3 briefly comments of legal questions, especially regarding

protection of personal data, while examples of usage and comments on the potential impact are given in Section 4. Section 5 gives conclusions.

## 2 SUPERVIZOR AND ITS DATASETS

Supervizor combines a large amount of data from the following sources:

- data about financial transactions of budget users from January 2003 onwards provided by Public Payments Administration;
- Slovenian Business Register, Register of legal entity's bank accounts and the public posting of company's annual reports;
- database of securities and their owners from Central Securities Clearing Corporation;
- registry of taxpayers;
- registry of direct and indirect budget users, which includes the bodies of all three branches of power, independent judicial and state bodies, local communities and their parts with legal personality, public institutes, public funds, public agencies etc.;
- database of public procurements including small value procurement;
- accounting entries of payments for direct budget users from January 2003;
- data about tax debtors;
- data about financial transfers to the so-called favorable tax environments ("tax havens").

Public Payments Administration is providing payment services for direct and indirect users of central and local government budgets. It manages all the financial transaction's flows of public finance within the single treasury system, so Public Payments Administration keeps all data about financial transactions from budget users to private companies in one central database. This database is

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in fact the most important source of data for Supervizor application and is updated daily.

The AJPES (Agency of the Republic of Slovenia for Public Legal Records and Related Services) is keeping records on business entities in Slovenia and manages ePRS Slovenian Business Register as a central public database on all business entities, their subsidiaries and other organization segments located in Slovenia which perform profitable or non-profitable activities. AJPES is also maintaining eRTR -Register of legal entity's bank accounts, including the information about the type of the account. AJPES is also managing annual reports of Slovenian business entities. In Slovenia companies (including banks, insurance companies, investment funds and co-operatives), sole proprietors, legal entities governed by public law, nonprofit organizations and associations have to present their annual reports to AJPES. These data are published on the Internet and also used for tax and statistical purposes. For companies with a mandated statutory audit, AJPES publishes audited annual reports. Data from Slovenian Business Register and Register of legal entity's bank accounts are also updated on a daily basis.

The third main source of data is Database of public procurements in Slovenia. This database is maintained by the public company Official Gazette and Ministry of Finance and contains information about all public procurements, procurements of a small value and notices of awards of the contracts under a framework agreements. Data also includes information of which company received public procurement and the financial value of certain business. This data is also updated daily.

Next important source is MFERAC database, which contains accounting entries of payments for direct budget users. MFERAC is unified application for accounting management and is used by all direct budget users in Slovenia. It is maintained by the Slovenian Ministry of Finance. This data is updated on a daily basis too.

Data about tax debtors is published monthly on the Internet by the Tax administration of the Republic of Slovenia. Published are companies which have their payments delayed for 90 days. Supervizor application scrawles this data from the Tax administration's list, OCR's it and imports it into the Supervizor's database. Then it analyses it to identify those tax debtors which were receiving funds from the public sector at the time they have an outstanding tax debt (90 days before they were published on Tax administration's list). This list of tax debtors is then published.

Data about financial transfers to the so-called favorable tax environments (,,tax havens") are published on the Internet by the Office for Money Laundering Prevention. Supervizor application transfers this data into it's database and shows the transactions on it's website.

#### **3 LEGAL QUESTIONS RELATED TO DATA**

It is important to note, that almost all of the data is public and therefore accessible on the basis of the Slovenian Access to Public Information Act or commercially available, so there was no need for any legislative changes regarding Supervizor. Records on business entities, annual reports and information about public procurements are been completely public, however data about financial transactions contain personal and classified data (for instance some data related to salaries, transactions to intelligence and security services, returns of taxes, etc.). These data were requested by the Commission for the Prevention of Corruption on the basis of the Integrity and Corruption Prevention Act, which gives the Commission powers for acquisition of data and documents. Commission then developed algorithms for detection and elimination of those protected data.

Technically, the main challenge was to clean the protected data, link all the data, especially accounting entries and cash flow (financial transactions going through Public Payment Administration) and to optimize the database management and create a web application which is working fast (Supervizor has around 100.000 users per day and contains about 50 mio. of financial transactions).

## 4 APPLICATION'S USE AND IMPACT

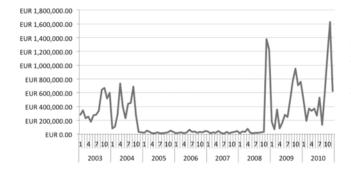
Supervizor was launched on 23rd of August 2011. There was a significant interest by the general public, journalists, researchers and mostly positive response from other budget users, local level and abroad. Public and government bodies are recognizing it as an important tool for transparency, mitigation of corruption risks, tool which decreases risks for illicit management, abuse of functions and unfair competitiveness and clientelism in public procurement procedures. Since financial transactions and financial flow analyses are a vital part of the evidence-gathering process when investigating economic crime, public finance crime and corruption, Supervizor is also used by Police, Court of Audit, Commisiion for the Prevention of Corruption, Tax Administration, Office for Money Laundering Prevention, etc.

Supervizor allows oversight and visualization of all financial transactions of Slovenian public sector in a simple and understandable way, including date and amount of transactions and for the payments over 2000 EUR also the purpose of money transfers. Application also shows also ownership and management structure of the Slovenian companies and some data from their annual reports, granted public procurements and all other relevant information from the used data sources. The application provides simple user interface for searching information about public expenditures and companies/recipients of public funds.

Since 2014, the data on transactions from Supervizor are being provided as open data in machine-readable form, in order to encourage researchers and interested public to perform their own analysis.

Commission already performed some interesting analysis of financial transactions which aim was to detect if there is a link between individual governments and disbursement of funds to particular companies.

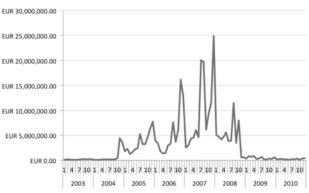
Graph 1: Payments to a selected subset of 65 companies between 2003 and 2010 [2]



Graph 1 shows the payments to a selected subset of 65 companies between 2003 and 2010. We can clearly see drop in payments from November 2004 till November 2008, which time wise corresponds to government's change in that period.

The analysis [2] has shown high correlation between the change of government in power and money disbursements from budget users to a limited number of companies, high inflexibility of the market for certain services (namely IT services, pharmaceutical products, construction works, etc.) and the existence of a group of companies which are highly dependent on the financial transfers from direct budget users (they receive a great amount of their income from budget users only), which constitutes a noticeable risk of corruption.

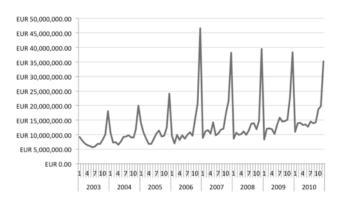
The key benefit of the project is that money flows from the public to private sector are accessible to the public quickly and in a simple way. Also, the use of application is completely free and requires no user registration. Supervizor's proactive approach to transparency of public finances is making both government expenditure and business environment more transparent. The project has proved that it is possible to increase the transparency with a minimal financial input and in accordance with the existing legislation. Graph 2: Payments to a selected subset of 252 companies between 2003 and 2010 [2]



Graph 2 shows the payments to a selected subset of 252 companies between 2003 and 2010. We can clearly see increase in payments from November 2004 till November 2008, which time wise corresponds to government's change in that period.

In 2013, the online application received the United Nations award for the excellence in public administration. With the amendments to the Slovenian Access to Public Information Act in 2014, the application Supervizor will be able to also include the transactions of the enterprises wholly owned by the state or local authorities.

Graph 3: Payments (between 2003 and 2010) to all companies registered for IT related activities [2]



Graph 3 shows dynamics of payments to all companies, registered for IT related activities between 2003 and 2010. Graph clearly shows increase of received payments at each December, which corresponds to end of a tax year when budget users should refund unused funds to a central budget.

# **5** CONCLUSION

The data used in Supervizor application is highly structured and therefore quite simple to analyze and link together. However, the main challenge was to obtain the data, to clean personal and other protected data and to open it, and to create an application with necessary database optimizations which visualizes money flows from the public to private sector quickly and in a simple way.

However, the project has shown that it is possible to increase the transparency with a minimal financial input

and in accordance with the existing legislation, only with a good idea and devotion to the ideal of transparency.

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