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Open data and PSI in the Czech Republic

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Abstract/ Executive Summary:

In this report we provide an overview of the Open Government Data (OGD) initiatives and activities in the Czech Republic. Czech OGD activities are described and examples of the important open datasets are provided. This report also discusses the current challenges faced by the Czech Republic.

In the Czech Republic number of Open Government Data activities has been started in public sector, in academia and in other domains as well. By joining the Open Government Partnership in 2011 the Czech Republic showed its commitment to OGD. Some of the Czech public sector bodies ranging from ministries to local governments and municipalities have started to publish Open Government Data. Other public sector bodies are going to publish OGD in the near future.

However there are still some challenges that the Czech Republic needs to face. These challenges involve publication of the high priority datasets, standardization across public sector bodies, development of guidelines for identification of the suitable datasets for opening up, development of the OGD catalogue, implementation of the revised PSI Directive and the development of the communication strategy.

1 Introduction

Fostering transparency and effectiveness of government services and enabling innovation through opening up data held by governments and public sector bodies are often discussed today. According to Open Knowledge Foundation (2012) Open Data is data that *“can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike.”* If government data is published according to the Open Data principles, we talk about Open Government Data (OGD). Free access to information and possibility to freely re-use it is seen as an important aspect of the Open Government initiatives, therefore OGD is seen as one of the enablers of Open Government (Bauer & Kaltenböck, 2011).

According to Vickery (2011) re-use of the public sector information (PSI) might bring significant economic benefits to the economies of the EU member states. Even though Ubaldi (2013) states that there is still too little empirical data to prove the economic impact of OGD, she says that *“much untapped potential could be unleashed if government data are turned into OGD.”*

In this report we focus on OGD and PSI in the Czech Republic. Even though Open Government Data and re-use of the public sector information under the regime of the Directive 2003/98/EC (PSI Directive, see (European Commission, 2003; European Union, 2013)) have many common aspects, some authors view these as two different phenomena (Ubaldi, 2013). However we see OGD as a way how the government data can be published for re-use in line with the requirement of the PSI Directive. Therefore we are using terms OGD and PSI (re-use) interchangeably in this report unless explicitly stated otherwise.

The goal of this report is to provide an overview of the former and current OGD initiatives in the Czech Republic and to discuss challenges of OGD in this country. This report complements ePSI Platform Topic Report No. 2013/12 and adds more information about one of the countries assessed in (Inglesias, 2013).

This report is structured as follows. First, evolution of the OGD activities in the Czech Republic is described. In the next section examples of the important datasets published as OGD are discussed. Challenges and opportunities of OGD in the Czech Republic are discussed in the following section. Concluding remarks are provided at the end of this report.

2 OGD activities in the Czech Republic

Several initiatives aimed at assessment of the impact of the OGD initiatives or of the current state of PSI re-use has been conducted. In the table 1 overview of ranking achieved by the Czech Republic in the Open Data Barometer (Davies, 2013), the Open Data Index (Open Knowledge Foundation, 2013) and the PSI Scoreboard (ePSI Platform, 2014) is presented.

Table 1: OGD and PSI ranking of the Czech Republic, source: (Davies, 2013; Open Knowledge Foundation, 2013); ePSI Platform, n.d.)

Country	Open Data Barometer		Open Data Index		PSI Scoreboard	
	ODB Overall / highest score	Position / # countries	Total score / highest score	Position / # countries	Overall Score / highest score	Position / # countries
Czech Republic	43.18 / 100	22 / 77	465 / 940	22 / 70	290 / 585	14 / 35

Different criteria were applied in the Open Data Barometer, the Open Data Index and the PSI Scoreboard. The PSI Scoreboard assesses only the European countries, but the Open Data Barometer and the Open Data Index include countries from other parts of the world as well. Therefore scores from different indexes cannot be easily compared. It is also necessary to mention that all of the indexes mentioned above use “crowdsourcing” for gathering the data on the individual countries (Davies, 2013; Open Knowledge Foundation, 2013; ePSI Platform, 2014). I.e. people from the assessed countries usually helped the authors of the indexes to perform the assessment of the indicators in the respective countries.

The United Kingdom topped all of the three indexes followed by the USA in the Open Data Barometer (Davies, 2013) and the Open Data Index (Open Knowledge Foundation, 2013). Spain received the second highest ranking in the PSI Scoreboard (ePSI Platform, n.d.). Czech Republic is positioned in the first half of the assessed countries. However it does not belong the top ten OGD countries.

Open Data Barometer (Davies, 2013) shows that the government, business and citizens in the Czech Republic start to be aware of OGD and its potential benefits. However political, social and economic impacts are not as evident as in the leading OGD countries.

In the Czech Republic access to information is guaranteed by the Charter of fundamental rights and freedoms (Act No. 2/1993 Coll.). Czech Republic is an EU member state with the Free Access to Information Act No. 106/1999 Coll., which also implements the requirements of the

PSI Directive. In response to the OGD movement and to the new requirements set by the revised PSI Directive changes to the relevant Czech legislation are being proposed.

In the following sections we describe the current Czech OGD initiatives in details.

1.1 Open Government Partnership in the Czech Republic

Czech Republic joined the international Open Government Partnership (OGP) initiative in September 2011 (Government of the Czech Republic, 2012). Czech OGP Action plan was introduced in April 2012 (Government of the Czech Republic, 2012). The following commitments of the Czech Republic were set by the OGP Action plan (Government of the Czech Republic, 2012):”

1. *the adoption of an Act on Civil Servants, to ensure the depoliticisation, professionalisation and stabilisation of the public administration sector,*
2. *streamlining the system allowing free access to information,*
3. *improving access to data and information.”*

Open Government Data was selected as an implementation tool for the third commitment of the Czech OGP Action plan. The Action plan proposed the following steps to improve the access to data and information (Government of the Czech Republic, 2012):

- identification and overcoming of technical and legal obstacles – selection of the suitable license for OGD in the Czech Republic and setting of technical standards for OGD,
- creation of an open data infrastructure in the Czech Republic and establishment of rules for the public procurement sector – infrastructure enabling sharing and linking of public procurement data should have been established,
- opening up the most important sources of data – 10 datasets were selected for opening up based on the public discussion (see table 2),
- development of a catalogue of the public administration data.

Table 2: Datasets planned to be published as OGD, source: (Government of the Czech Republic, 2012)

Database/dataset	Responsible public sector body
The Commercial Register	Ministry of Justice
The Insolvency Register	Ministry of Justice
Public tenders information system	Ministry of Local Development
Election results	Czech Statistical Office
Register of Active Legislative Tasks – RALP (departmental tools supporting the transparency of state administration and the participation of the public)	Ministry of Transport

Database/dataset	Responsible public sector body
Financial statistics – government debt	Ministry of Finance
Financial statistics – government financial statistics	Ministry of Finance
ÚFIS – accounting records and financial data from the CSÚIS (Central System of State Accounting Information)	Ministry of Finance
Online access to data regarding the funding of political parties	Ministry of Interior
Central register of grants	Ministry of Finance

In June 2013 implementation of the Czech OGP Action plan was assessed and the plan was updated (Government of the Czech Republic, 2013a). Most of the commitments were not implemented even though actions to implement them were taken (Government of the Czech Republic, 2013a). New or revised Acts that were supposed to implement the commitments 1 and 2 were prepared but due to the significant number of serious comments they were returned to responsible ministries for revision.

Only the election results and partially the data on public tenders were published as Open Government Data (Government of the Czech Republic, 2013a) in line with the OGP Action Plan schedule. Remaining datasets selected for opening up were not published as OGD before the deadline set by the Czech OGP Action plan. However the Ministry of Finance has already published the budgetary data and accounting records as OGD on the Monitor portal. More information is provided in the separate section below.

National OGD catalogue was planned to be launched before 31st March 2013 (Government of the Czech Republic, 2012). Deadline for this commitment was not met and there is still no national OGD catalogue maintained by the government in the Czech Republic as of time of writing this report. However Open Data cataloguing strategy of the Czech public administration (Chlapek et al., 2012b) was prepared in 2012. This OGD cataloguing strategy describes the concept of the Czech national OGD catalogue, roles responsible for cataloguing and maintenance of the catalogue as well as cataloguing workflow and requirements for the data cataloguing software. In order to help the public sector bodies to publish OGD the Open Government Data publication methodology of the Czech public administration was also introduced at the end of 2012 (Chlapek et al., 2012a).

Unimplemented commitments of the Czech Republic set by the Czech OGP Action remained as active commitment in the revised OGP Action Plan in 2013 (Government of the Czech Republic, 2013a).

1.2 OGD activities of the Czech government

Open Government Data has been mentioned in some strategic documents of the Czech government. One of them is the Government anti-corruption strategy for the years 2013-2014 (Government of the Czech Republic, 2013b). In this strategy OGD is one of the tools that should help increase availability of the data and information held by the public sector bodies in the Czech Republic.

Free access to information held by the public sector bodies is seen as a prerequisite for development of the information society in the Czech Republic according to the strategy called “Digital Czech Republic 2.0 - A way to the digital economy” (Ministry of Industry and Trade of the Czech Republic, 2013). This strategy also mentions OGD as one of the tools that should help to reach this goal. Ensuring that the published datasets are easily discovered by setting up the Open Government Data catalogue is mentioned as one of the steps in this strategy (Ministry of Industry and Trade of the Czech Republic, 2013) as well as in the Government anti-corruption strategy for the years 2013-2014 (Government of the Czech Republic, 2013b).

There are also OGD activities lead by the Ministry of Interior of the Czech Republic. As it was mentioned above one of these activities is a revision of the relevant Czech legislation which should strengthen openness of the government data and which should also reflect the requirements of the revised PSI Directive. Extending the Portal of the public administration¹ with the Open Government Data section and OGD cataloguing features is being discussed as well. In order to promote OGD within the Czech public sector, one of the largest Czech eGovernment conferences ISSS is hosting Open Government Data track this year (Triada, 2014).

1.3 Open Data Forum

Otakar Motejl Fund, Faculty of Informatics and Statistics of the University of Economics, Prague and the Faculty of Mathematics and Physics of the Charles University in Prague established the Open Data Forum in 2013 (Otakar Motejl Fund, 2014b; University of Economics, Prague, 2013). Goal of the Open Data Forum is to foster adoption of the Open Data principles, especially in the government domain, to coordinate activities of the OGD experts and to collaborate on OGD related research. Open Data Forum also performs the Open Data evangelization.

¹ <http://portal.gov.cz/>

In 2013 the Open Data Forum organized the first Czech Open Data challenge in which 25 applications re-using or providing Open Data were awarded (Otakar Motejl Fund, 2013a). Second Open Data challenge is currently being prepared (Otakar Motejl Fund, 2014c).

1.4 OGD activities at the local and regional level

Open Data Forum also established a partnership with several Czech municipalities willing to open up their data in 2013 (Otakar Motejl Fund, 2013b). Members of the Open Data Forum and the representatives of the municipalities exchange their experience with OGD and they work together to standardize the OGD publication process as well as schemas and formats of the selected datasets. Thanks to this activity datasets with the same or similar topic (like grants for cultural events) published by different cities around the Czech Republic should be compatible.

Following topics were discussed at workshops:

- definition of OGD and attributes of OGD,
- reasons for opening up data,
- potential OGD benefits,
- possible approaches to implementation of OGD publication into practices of the cities and municipalities,
- OGD publication process and recommendations,
- recommended metadata scheme,
- discussion about particular datasets.

The following datasets were discussed at the workshops:

- grants awarded by cities and municipalities - grants for cultural or sport event,
- contracts,
- offenses according to the Act No. 200/1990 Coll.,
- budgets.

Structure and data formats of the above mentioned datasets were discussed at the workshops. However in case of the budgetary data it was recommended that the Open Data published by the Ministry of Finance of the Czech Republic at Monitor portal should be re-used because this data already contains budgetary data provided by the cities and municipalities.

However not only the cities and municipalities has started their OGD activities at the local level. Regional government of the Vysočina Region has decided to join the OGD movement and the Vysočina Region has already published some of its datasets as OGD (Vysočina Region, n.d.).

1.5 Activities of the NGOs

Otakar Motejl Fund is a long-term advocate of publishing government data and coordinates activities of the Czech NGOs and as well as the Czech Open Data community. OGD community is also steered by the project [NášStat.cz](http://www.nasstat.cz)² (OurState) which is a platform joining more than thirty online tools which help citizens to follow the work of politicians and officials, improve their neighbourhoods and take an active part in public affairs. Some of the online applications are based on Open Data. The web directory [NášStat.cz](http://www.nasstat.cz) is administrated by Otakar Motejl Fund. Otakar Motejl Fund also supported the creation of a Czech version of the Data Journalism Handbook which is intended for journalists (Znamenáček ed., 2013), students and all the people interested in Open Data as well as for watchdog organizations. In February 2013, Otakar Motejl Fund together with more than 50 companies called for on the government to meet its commitments and to open up the remaining nine datasets stated in Czech OGP Action Plan.

In order to foster exchange of the OGD best practices between the United Kingdom and the Czech Republic, Otakar Motejl Fund together with the British Embassy Prague and the deputy of the Parliament of the Czech Republic Jan Farský and in partnership with the European Commission and the Estonian Embassy in Prague organized a conference called “Open Data: smarter state and better services” (Otakar Motejl Fund, 2014a). This conference gave the representatives of the Czech public sector, businesses, academic institutions and NGOs a unique opportunity to share experience with OGD experts from the United Kingdom, Estonia and the European Commission as well as with representatives of the Open Data Institute and the OpenCorporates.

1.6 Notable research projects

Czech universities and research institutions are participating in several international and national (Linked) Open Data research projects. Examples of such projects are described below.

1.6.1 LOD2

Creating Knowledge out of Interlinked Data (LOD2)³ is an EU FP7 funded research project. The goal of this project is to develop technologies that will enable scalable management of large

² <http://www.nasstat.cz/>

³ <http://lod2.eu/>

Linked Data collections and to provide high-quality interlinked datasets (LOD2, n.d.). Developed tools and datasets are assessed in a set of use cases in different domain including enterprise search, classification and interlinking of different data sources or publication of the Linked Open Government Data.

1.6.2 COMSODE

COMSODE⁴ is an EU FP7 funded research project. The project consortium consists of partners from the Czech Republic (Charles University in Prague, EEA), Slovak Republic (ADDSEN, the Ministry of Interior of the Slovak Republic), Italy (University Milano-Bicocca) and Netherland (SPINQUE). The goal of this project is to develop a software tool and a methodology that will help organizations to publish their data in an open way. The developed tool shall automate some steps of the data publication workflow (e.g. transformation of the data into various open formats including Linked Open Data, cleansing and anonymization of the data, interlinking of the data and last, but not least, cataloguing of the data). This tool shall also be able to perform regular updates to the published datasets. This tool will integrate various existing tools (data cataloguing tools, data transformation and linking tools etc.).

Alongside the development of the tool and the methodology it is a goal of this project to do the pilot implementations of the tool and the methodology at several organizations in the Czech Republic and other countries. Government bodies as well as cities and regional authorities are amongst the candidate institutions for pilot implementations. Besides this the project will help to publish open datasets. The project is still open to new organizations interested in performing the pilot implementations, however the remaining capacity of the project is limited. The project also offers consultations and support during implementation of the tool and the methodology. Anyone interested in collaboration with the project should visit the <http://www.youropendata.eu/> website and fill in the prepared questionnaire.

1.6.3 Share-PSI 2.0

Share-PSI 2.0⁵ is the European network which aim is to exchange ideas and experience around Open Government Data and implementation of the policies in this area (Share-PSI 2.0, 2014). This network is formed by 46 partners of different categories including public sector bodies, academic institutions, standards bodies and commercial and non-commercial organizations.

⁴ <http://comsode.eu>

⁵ <https://www.w3.org/2013/share-psi/>

This project is co-funded by the European Commission under the ICT Policy Support Programme (ICT PSP) as part of the Competitiveness and Innovation Framework Programme.

1.6.4 LAPSI 2.0

Czech Republic has its representative also in another EU funded thematic network – LAPSI 2.0⁶. The aim of this project is to *“identify the remaining legal barriers and obstacles to access and re-use of public sector information (PSI) on the European content market, and to propose measures and tools to stimulate the progress of the European market towards open data”* (KU Leuven, 2010). This project is funded by the European Commission under the 2007-2013 Competitiveness and Innovation Framework Programme 2007-2013.

1.6.5 SmartOpenData

SmartOpenData⁷ is an EU FP7 funded project which aims at creating a Linked Open Data sources and related software tools in the domain of the environmental protection (SmartOpenData, 2013). Use of the Linked Open Data principles should help to better utilize geodata created and managed under the regime of the INSPIRE Directive. It is an international project with participants from several countries including the Czech Republic.

1.6.6 Publication of statistical yearbook data as Open Data

The goal of this project is to develop a methodology and reference architecture for publishing of the statistical data in the form of Linked Open Data and to evaluate the methodology and the architecture by publishing the data of the pension statistics. Internet application for presentation of this data will be developed as well. This project is funded by the Technology Agency of the Czech Republic.

1.6.7 Public sector budgetary data as Linked Open Data

The goal of this project is to develop a new method for publishing selected subset of the Integrated Information System of the State Treasury data as Linked Open Data. The data will be transformed to Linked Open Data according to the developed method. It will be further linked to other related public sector data in the Czech Republic. The developed method will be generalized to a form of a certified methodology so that it will be possible to apply the method in other public sector domains. This project is funded by the Technology Agency of the Czech

⁶ <http://www.lapsi-project.eu/>

⁷ <http://www.smartopendata.eu/>

Republic and the Otakar Motejl Fund.

2 Availability of Open Government Data in the Czech Republic

As it was mentioned above, no official OGD catalogue in the Czech Republic has been launched yet. Therefore in these sections we provide examples of the Czech public sector bodies that publish some of their datasets as OGD.

2.1 Czech Statistical Office

Opening up of the election results data was one of the commitments of the Czech Republic in the OGP Action plan (Government of the Czech Republic, 2012). Czech Statistical Office was able to fulfil this commitment in time. Czech Statistical Office now provides the Data of the 2011 census as OGD as well (Czech Statistical Office, 2012).

2.2 Czech Trade Inspection Authority

Czech Trade Inspection Authority (2013) published OGD about inspections, sanctions and bans in September 2013. Data about inspections, sanctions and bans are provided as three separate datasets in CSV, XLSX and ODS (Open Document Spreadsheet) formats.

Provided data are partially anonymised – data about individual entrepreneurs are provided only as aggregated data with no personal information included (Czech Trade Inspection Authority, 2013). Complete records are available only in cases where some legal entity is the subject of inspections. This approach was taken after consultation of this issue with the Office for personal data protection (Czech Trade Inspection Authority, 2013).

2.3 Czech Telecommunication Office

Czech Telecommunication Office (hereinafter "*the Office*") has decided to increase its transparency by opening up its data (Czech Telecommunication Office, 2013). Because of the large number of datasets that the Office collects and manages a project was conducted which aimed at identification of the suitable datasets for opening up. This project involved the following steps:

- definition of the openness criteria for the data of the Office and how these criteria should be satisfied,
- identification of benefits and risks of opening up of the data of the Office,

- identification of the candidate datasets that should be published as Open Data,
- estimation of the amount of work needed to open up the identified datasets,
- setting up the dataset priorities,
- definition of the terms of use for the Open Data of the Office,
- definition of the relevant parts of the newly proposed internal guidelines related the Open Data of the Office,
- recommendations on how the Open Data of the Office should be catalogued and what attributes should be included in the catalogue record,
- identification of applications that might help to increase the openness of the Office,
- specification of projects required to put the recommendations into practice.

Based on the effort estimates and the risk analysis 50 datasets were selected for opening up (Czech Telecommunication Office, 2013). According to the priorities of these datasets a roadmap for their publication was set for the years 2014 and 2015.

2.4 Ministry of Finance of the Czech Republic

In 2013 Ministry of Finance of the Czech Republic published subset of the State treasury data as OGD (Ministry of Finance of the Czech Republic, 2013) on the Monitor portal⁸. This dataset contains financial data and data from accounting reports provided by all Czech public sector bodies to Ministry of Finance of the Czech Republic. Data is available for bulk download, however a set of SOAP web services is also available. These services allow downloading data on individual public sector bodies. Alongside the web services the Monitor portal also allows users to visualize the data and to analyze it using the web based analytical tool.

2.5 Vysočina Region

At the local level Vysočina Region is one of the Czech regions that has started to publish Open Government Data (Vysočina Region, n.d.). Vysočina Region currently publishes various geo-datasets about environment, cultural heritage or metropolitan telecommunication networks as well as other datasets, for example public contracts or data about cultural events.

⁸ <http://monitor.statnipokladna.cz/>

2.6 City of Děčín

Even though the City of Děčín is not the only city in the Czech Republic that publishes OGD or that is at least planning to launch its OGD initiative, the City of Děčín can be named as an example that shows that OGD has already reached the local administration as well. City of Děčín provides open datasets about its SWOT analyses, public contracts, properties owned by the city, budget, accounting statements and several geo-datasets (City of Děčín, n.d.).

3 Current OGD Challenges

According to (Chlapek et al., 2013) there are 6 challenges that the Czech Republic currently needs to face in the OGD domain or open tasks that might help the Czech Republic to reap the potential OGD benefits:

1. publication of the high priority datasets,
2. standardization across public sector bodies,
3. development of guidelines for identification of the suitable datasets for opening up,
4. development of the OGD catalogue,
5. implementation of the revised PSI Directive,
6. development of the communication strategy.

3.1 Publication of the high priority datasets

According to (Chlapek et al., 2013) a relatively small set of high priority datasets should be identified and subsequently published as OGD. This set of datasets should be continuously revised and extended according to demand. This approach to OGD publication should be preferred over the approach in which all government datasets should be published as OGD except those that are specifically classified as non-open. The latter approach might lead to publication of datasets with no potential consumers, which is considered ineffective (Chlapek et al., 2013).

3.2 Standardization across public sector bodies

Although the public sector bodies differ from each other, some of them hold and maintain similar datasets. According to (Chlapek et al., 2013) publication of the same or similar datasets should be standardized across the public sector bodies. Standardization should bring easier integration of similar datasets held by different public sector bodies.

3.3 Development of guidelines for identification of datasets

Because identification of the right datasets for opening up might be a nontrivial task, knowledge sharing in this area should be supported. According to (Chlapek et al., 2013) guidelines should be developed that would help public sector bodies in identification of the datasets for opening up.

3.4 Development of the OGD catalogue

There is currently no official OGD catalogue in the Czech Republic. In order to make published open datasets easily discoverable, such catalogue should be established (Chlapek et al., 2013). However it does not necessarily have to be single central OGD catalogue. National OGD catalogue might have a distributed architecture utilizing standard metadata schema of the catalogue record with centralized search features that would allow search for open datasets across the public sector bodies and their data catalogues.

3.5 Implementation of the revised PSI Directive

As an EU member state the Czech Republic must implement Directive 2013/37/EU which amends the PSI Directive by 18th July 2015. According to (Chlapek et al., 2013) specific attention should be paid to the following issues:

- specify in which situations data should be published in open and machine-readable format together with their metadata, i.e. clarify application of the Article 5 of the Directive 2013/37/EU (see (European Union, 2013));
- specify what license or what terms of use should be applied to the published government data in order to ensure compliance with the General principle of the Directive 2013/37/EU (Article 3);
- develop the OGD catalog in order to facilitate search for the available data and to implement the Article 9 the Directive 2013/37/EU.

3.6 Development of the communication strategy

According to (Chlapek et al., 2013) there is not always a common understanding of the concept of Open Government Data. A communication strategy should be developed in order to effectively disseminate information about OGD and to coordinate OGD activities in the Czech Republic. Re-use potential of OGD should be also promoted within the public sector in order to avoid ineffective and uncoordinated publication of the same datasets by different public sector bodies.

3 Conclusions and recommendations

Although the Czech Republic does not belong to world's leading countries in Open Government Data (Davies, 2013; Open Knowledge Foundation, 2013; ePSI Platform, 2014) number of OGD activities has been started at different levels of public sector, in academia and in other domains as well. By joining the Open Government Partnership (OGP) the Czech Republic showed its commitment to OGD. In 2012 the Open Data cataloguing strategy of the Czech public administration (Chlapek et al., 2012b) and the Open Government Data publication methodology of the Czech public administration (Chlapek et al., 2012a) was developed which shows the top-down approach of the Czech Republic to OGD.

However no official OGD catalogue has been established and from the datasets that should have been opened up as one of the Czech OGP commitments, only the election results was published within the timeframe set by the OGP Action Plan by the Czech Statistical Office. This might indicate that the implementation of OGD practices into the day-to-day operations of the Czech public sector bodies is slower than expected.

Nowadays there are more public sector bodies that publish some of its data as Open Government Data. Czech Trade Inspection Authority, the Ministry of Finance of the Czech Republic, the Vysočina Region or the City of Děčín can be named as examples. These examples also show that there are OGD activities at both national and local level. Other public sector bodies like the Czech Telecommunication Office are planning to publish OGD in the near future.

Some of the Czech universities and academic institutions also participate in international and national research project aimed at (Linked) Open Data. Open Data Forum has been established in 2013 and in the same year the first Czech Open Data Challenge was organized (Otakar Motejl Fund, 2013a). Open Data Forum has also established a partnership with several Czech cities and municipalities in order to foster exchange of knowledge and experience about the OGD publication and to standardize the publication process, formats and schemas of the selected datasets.

We hope that the steps already taken by some of the Czech public sector bodies show that OGD gains momentum in the Czech Republic. However there are still some challenges that the Czech Republic needs to face. These challenges involve publication of the high priority datasets, standardization across public sector bodies, development of guidelines for identification of the suitable datasets for opening up, development of the OGD catalogue, implementation of the

revised PSI Directive and the development of the communication strategy.

References

1. BAUER, Florian, KALTENBÖCK, Martin (2011). Linked Open Data: The Essentials. Vienna: edition mono/monochrom.
2. CHLAPEK, Dušan, KUČERA, Jan, NEČASKÝ, Martin (2013). Výzvy využívání otevřených dat v ČR [OGD Challenges in the Czech Republic], retrieved February 27, 2014 from http://www.cssi.cz/cssi/system/files/all/2013_11_08_Chlappek.pdf
3. CHLAPEK, Dušan, KUČERA, Jan, NEČASKÝ, Martin (2012a). Metodika publikace otevřených dat veřejné správy ČR [Open Data publication methodology of the Czech public administration], retrieved July 31, 2013 from http://www.korupce.cz/assets/partnerstvi-pro-otevrene-vladnuti/otevrena-data/Metodika_Publ_OpenData_verze_1_0.pdf
4. CHLAPEK, Dušan, KUČERA, Jan, NEČASKÝ, Martin (2012b). Koncepce katalogizace otevřených dat VS ČR (zkrácená verze) [Open data cataloguing strategy of the Czech public administration (abridged version)], retrieved July 31, 2013 from <http://www.vlada.cz/assets/ppov/boj-s-korupci/otevrene-vladnuti/aktuality/Koncepce-katalogizace-otevrenych-dat-VS-CR---zkracena-verze.pdf>
5. City of Děčín (n.d.). Otevřená data [Open Data], retrieved March 18, 2014 from http://www.mmdecin.cz/dokumenty/cat_view/238-otevrena-data
6. Czech Statistical Office (2012). Otevřená data [Open Data], retrieved February 23, 2013 from http://www.czso.cz/csu/redakce.nsf/i/otevrena_data
7. Czech Telecommunication Office (2013). Český telekomunikační úřad otevře svá data [Czech Telecommunication Office will open up its data], retrieved December 8, 2013 from <http://www.ctu.cz/aktuality/tiskove-zpravy.html?action=detail&ArticleId=10859>
8. Czech Trade Inspection Authority (2013). Open Data - Databáze kontrol, sankcí a zákazů [Open Data - Database of inspections, sanctions and bans], retrieved December 11, 2013 from <http://www.coi.cz/cz/spotrebitel/open-data-databaze-kontrol-sankci-a-zakazu/>
9. DAVIES, Tim (2013). Open Data Barometer: 2013 Global Report, retrieved February 26, 2014 from <http://www.opendataresearch.org/dl/odb2013/Open-Data-Barometer-2013-Global-Report.pdf>
10. ePSI Platform (n.d.). ePSI Scoreboard Official Source, retrieved February 26, 2014 from <http://goo.gl/3P40M>

11. ePSI Platform (2014). The PSI Scoreboard, retrieved February 26, 2014 from <http://www.epsiplatform.eu/european-psi-scoreboard>
12. European Commission (2003). Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information, retrieved February 26, 2014 from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:345:0090:0096:EN:PDF>
13. European Union (2013). Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information, retrieved February 26, 2014 from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:175:0001:0008:EN:PDF>
14. Government of the Czech Republic (2013a). Implementation Assessment of the Czech Republic Action Plan „Open Government Partnership“ in 2012 and its Update, retrieved July 16, 2013 from <http://www.korupce.cz/assets/partnerstvi-pro-otevrene-vladnuti/Zhodnoceni-AP-OGP---AJ.pdf>
15. Government of the Czech Republic (2013b). Strategie vlády v boji s korupcí na období let 2013 a 2014 [Government anti-corruption strategy 2013-2014], retrieved March 17, 2014 from http://www.korupce.cz/assets/protikorupcni-strategie-vlady/na-leta-2013-2014/Strategie-2013-a-2014---aktualni-verze_1.pdf
16. Government of the Czech Republic (2012). Action Plan of the Czech Republic "Open Government Partnership", retrieved August 28, 2013 from http://www.vlada.cz/assets/ppov/boj-s-korupci/otevrene-vladnuti/OGP_Action-plan_Czech-Republic_detailed.pdf
17. INGLESIAS, Carlos (2013). A year of Open Data in the EMEA region. European Public Sector Information Platform Topic Report No. 2013 / 12, retrieved February 25, 2014 from http://www.epsiplatform.eu/sites/default/files/A%20year%20of%20Open%20Data%20in%20the%20EMEA%20region_0.pdf
18. KU Leuven (2010). The LAPSI 2.0 project overview, retrieved March 17, 2014 from <http://lapsi-project.eu.halotest.cc.kuleuven.be/lapsi-20-project-overview>
19. LOD2 (n.d.). Project, retrieved March 11, 2013 from <http://lod2.eu/WikiArticle/Project.html>
20. Ministry of Finance of the Czech Republic (2013). Zdrojová data [Source data], retrieved January 26, 2014 from <http://monitor.statnipokladna.cz/2013/data/>
21. Ministry of Industry and Trade of the Czech Republic (2013). Digitální Česko v. 2.0 -

- Cesta k digitální ekonomice [Digital Czech Republic 2.0 - A way to the digital economy], retrieved March 17, 2014 from http://www.mpo.cz/assets/cz/e-komunikace-a-posta/Internet/2013/4/Digi_esko_v.2.0.pdf
22. Open Knowledge Foundation (2013). Countries, retrieved February 26, 2014 from <https://index.okfn.org/country>
 23. Open Knowledge Foundation (2012). Open Data Handbook Documentation, retrieved January 15, 2014 from <http://opendatahandbook.org/pdf/OpenDataHandbook.pdf>
 24. Otakar Motejl Fund (2014a). Otevřená data: chytrější stát a lepší služby [Open Data: smarter state and better services], retrieved March 18, from <http://www.otevrenadata.cz/konference2014/>
 25. Otakar Motejl Fund (2014b). O nás [About us], retrieved February 27, 2014 from <http://www.otevrenadata.cz/o-nas/>
 26. Otakar Motejl Fund (2014c). Soutěž: Ročník 2014 [Contest: 2014], retrieved February 27, 2014 from <http://www.otevrenadata.cz/soutez/rocnik-2014/>
 27. Otakar Motejl Fund (2013a). Soutěž: Ročník 2013 [Contest: 2013], retrieved February 27, 2014 from <http://www.otevrenadata.cz/soutez/rocnik-2013/>
 28. Otakar Motejl Fund (2013b). Fond Otakara Motejla otevírá města [Otakar Motejl Fund opens up cities], retrieved February 27, 2014 from <http://www.otevrenadata.cz/aktualni-deni/fond-otakara-motejla-otevira-mesta/>
 29. Share-PSI 2.0 (2014). Share-PSI 2.0 Home, retrieved March 11, 2014 from <https://www.w3.org/2013/share-psi/>
 30. SmartOpenData (2013). Concept and objectives, retrieved March 17, 2014 from <http://www.smartopendata.eu/>
 31. Triada (2014). Předběžný program konference ISSS 2014 [ISSS 2014 Preliminary Programme], retrieved March 17, 2014 from <http://www.issc.cz/program.asp>
 32. UBALDI, Barbara (2013). Open Government Data: Towards Empirical Analysis of Open Government Data Initiatives. OECD Working Papers on Public Governance, No. 22.
 33. University of Economics, Prague (2013). Fórum pro otevřená data zahajuje svou činnost soutěží [Open Data Forum established and it organizes a contest], retrieved December 8, 2013 from http://www.vse.cz/media/TZ_VSE_otevrenadata_cz.pdf
 34. VICKERY, Graham (2011). Review of recent studies on PSI re-use and related market developments, retrieved December 29, 2012 from http://ec.europa.eu/information_society/policy/psi/docs/pdfs/report/psi_final_version_formatted.docx

35. Vysočina Region (n.d.). OpenData - Kraj Vysočina [OpenData - Vysočina region], retrieved March 18, 2014 from <http://opendata.kr-vysocina.cz/>
36. ZNAMENÁČEK, Tomáš (Ed.), BOČEK, Jan, CIBULKA, Jan, KOČÍ, Petr, RYBIČKOVÁ, Michaela (2013). Příručka datové žurnalistiky [Data Journalism Handbook], retrieved March 18, 2014 from http://www.osf.cz/media/com_form2content/documents/c5/a1069/f20/prirucka_dat_zurnalistiky.pdf

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