

3.2. Applied research projects

The five most significant research projects at FIS for the period 2014 - 2018:

Financial Transparency Platform for the Public Sector (OpenBudgets.eu)

Development of software platform supporting effective access of various stakeholders to open data on public administration budgets. This project allowed comparison of data on public budgets in different EU countries. The project was supported by EU Horizon 2020.

Shared Standards for Open Data and Public Sector Information (Share-PSI 2.0)

SharePSI 2.0 is a European thematic network bringing together more than 40 stakeholders and experts from public authorities, standardisations institutions, academic institutions, businesses, sector associations and other stakeholder groups. The Czech Republic is represented in the network by FIS. The network focuses on the issues of publishing and using open data and public sector information. The aim of this network is to bring together experts in respective fields, to exchange experiences and to seek solutions to current problems concerning publishing and using public sector information and open data. Network members participated in joint workshops, the outcomes of which were, in the form of practices, forwarded to the W3C Data on the Web Best Practices Working Group. The Share-PSI 2.0 project (project No. 621012) was co-financed by the European Commission under the ICT Policy Support Programme, which is part of the Competitiveness and Innovation Framework Programme (CIP).

Public Sector Budgetary Data in the Form of Open Data

The aim of the project was to propose a new way of publishing data by public administration in the Czech Republic so that interested parties (both private and non-profit sector, academic sector, etc.) can reuse them for their own use (analyses, production of commercial and non-commercial software Internet applications, etc.). The project developed a new way of publishing public administration data based on new findings of information research in the field of data publishing on the web. The principles and technologies of Open Data and Linked Data have been applied to eliminate the aforementioned complications. The proposed method of data publishing was applied to the data of the Ministry of Finance of the Czech Republic on the budgets of different components of public administration published on the Monitor portal and in the context of this data with data on public procurement (the Ministry of Regional Development of the Czech Republic) and demographic indicators (the Czech Statistical Office). The project also included the design and implementation of software for data publishing with an accompanying certified methodology to allow for the transfer of experience to other areas of public administration. The project was implemented in cooperation with the Faculty of Mathematics and Physics, Charles University and was supported by the TACR agency and Open Society Fund Prague.

Publication of Statistical Yearbook Data as Open Data

The main objective of the project was to create a type procedure and IT architecture for publishing statistical data in the form of Linked Open Data and to verify this procedure and architecture through the project on publication of statistical yearbook data in the area of pension insurance (pension statistics) for the Czech Social Security Administration. An Internet presentation application was created over the data of pension statistics in the form

of Linked Open Data. The novelty of the project consisted in the development of domain-specific ontologies for retirement statistics data and their internet presentation in the form of Linked Open Data. The project was implemented in cooperation with a commercial company and was supported by the TACR agency.

Automated Business Rules Extraction with Feedback Loop

The aim of the project was to extend the ERIAN information system, which is currently successfully deployed in the field of operational risk assessment using manually inserted business rules with the following functionality:

- automated extraction and validation of new business rules from real operating system data,
- regular monitoring of validity of all inserted business rules,
- interfaces to the CRM space.

The project results were applied allowing to extend the application area of the ERIAN system especially to the domain of marketing campaign management. The project was implemented in cooperation with a commercial company and was supported by the TACR agency.

HTML links to additional documentation:

<http://openbudgets.eu/>

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