# ROUTE-TO-PA H2020 Project: Raising Open and User-Friendly Transparency-Enabling Technologies for Public Administrations

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**Abstract.** In this short paper, we introduce ROUTE-TO-PA project, funded by European Union under the Horizon 2020 program, whose aim is to improve the transparency of Public Administration, by allowing citizens to make better use of Open Data, through collaboration and personalization.

© Springer International Publishing Switzerland 2015 S.K. Katsikas and A.B. Sideridis (Eds.): E-Democracy 2015, CCIS 570, pp. 219–222, 2015. DOI: 10.1007/978-3-319-27164-4\_19 Keywords: Open data · Transparency · Social network · Transparency-enhancing tools · Horizon 2020 project

#### 1 Main Motivations

ROUTE-TO-PA is a Horizon 2020 European funded innovation project that combines expertise in the fields of e-government, computer science, learning science and economy, to improve the impact of ICT-based technology platforms for transparency. As stated in the "Digital Agenda for Europe", in order to provide better public services to citizens and businesses, new opportunities for Public Administrations (PAs) to become more efficient and effective, provide user-friendly services, while reducing costs and administrative burden, are grounded on open government, i.e., increasing information and knowledge exchange, enhanced connectivity, openness and transparency.

In ROUTE-TO-PA we address the issue of transparency, i.e., opening up public data and services and facilitating citizen participation and engagement, with the result of making government processes and decision open. In terms of international practices in transparency, widespread access to the Internet has greatly reduced the cost of collecting, distributing, and accessing government information. But an important effect of the diffusion of networks in the population is that ICT, by promoting good governance, strengthening reform-oriented initiatives, reducing potential for corrupt behaviours, enhancing relationships between government employees and citizens, allowing for citizen tracking of activities, and by monitoring and controlling behaviours of government employees, is able to effectively reduce corruption [1].

Our focus is in contrasting the potential barriers to using ICT for transparency, that we identify in the complexity of the information provided, the lack of tools to facilitate the comprehension and the limited acceptance of ICTs for transparency among citizens.

The ROUTE-TO-PA team is strongly heterogeneous and multidisciplinary. It mixes up research, innovation and stakeholders, by encompassing research partners, small and large companies, pilot Public Administrations (from 4 different countries) and one non-profit foundation. Research is by itself multidisciplinary, as there are partners with expertise in e-government, computer science, psychology and economy. In a sense, our team has been designed to tackle the challenges of transparency with a trans-disciplinary approach.

## 2 ROUTE-TO-PA Vision and Objectives

ROUTE-TO-PA vision is to improve the engagement of citizens (a) by making them able to socially interact over open data, by forming or joining existing online communities that share common interest and discuss common issues of relevance to local policy, service delivery, and regulation; (b) by providing a robust and more holistic understanding of transparency, by underpinning the

next generation open-data based transparency initiatives, ensuring that published data are those of value to citizens, with a personalized view in different forms to different segments of the citizens and public based on their profiles for facilitate better understanding.

Our main purpose here is to engage citizens through a "purposeful and personalized relationship" between citizens and open data, not only on a personal basis, but between government and networks of citizens that collectively attribute meanings to this information. The information by ROUTE-TO-PA is shared, interpreted, personalized, made easier to understand and discussed, to assess its meanings.

Concretely, the project is aiming to (a) develop a Social Platform for Open Data (SPOD) enabling social interactions among open data users and between open data users and government data; (b) build Transparency-Enhancing Toolset (TET) as extensions for existing major Open Data Platforms; and (c) develop a set of recommendations (GUIDE) as good practice guide for open data publishers for achieving higher quality transparency through open data.

ROUTE-TO-PA objectives are concrete since we will experiment in practice the innovation proposed by conducting 5 pilot studies in Prato Town Council (Italy), The Hague Town Council and Groningen Town Council (The Netherlands), Dublin Town Council (Ireland) and Issy-les-Moulineaux (France).

Our project will produce software by using open-source licensing model, and the platform will be given to the community of PAs and developers that, after the end of the project, will ensure further development and widespread, sustainable and scalable exploitation of the results achieved. The results of the project (both software and guidelines) will allow PAs to follow the economic and budgetary pressures that force administration to be more efficient and to reduce cost [2] by adhering to the philosophy of "Doing more with less".

The software and the experiences will be highly reusable, given that they will be piloted in different contexts, in different countries, whose results will be elaborated in guidelines and recommendations at the end of the project. "Reuse rather than reinvent" is one of the guidelines to long-term success of ICTs in Transparency [1] that we adopt as project "mantra" both from technological point of view (i.e., integration of existing popular open source products) and from the PA point of view (plug ROUTE-TO-PA onto existing experiences and needs by involving the Pilots).

### 3 The Ongoing Work and Further Directions

The team is currently working toward the first prototypes of SPOD and TET. The first year, in fact, will terminate its activities, in January 2016, with the two alpha versions of the software, that will be tested (in a first round) in the 5 pilots for the year 2016. In 2017 a new version, beta, will be submitted to another round of testing from the pilots, leading to the release of a highly tested and jointly designed software.

In our project, we adopted a collective intelligence and scenario-based design approach. The initial scenarios developed for each Pilot (during the workshop

sessions and interviews on Open Data and transparency we conducted in the first 6 months of the project) highlighted information, social and collaborative, and understandability, usability and decision-making needs and requirements that are important for the development of the SPOD, TET and GUIDE. We, later, analysed the scenarios and mapped them into the most suitable user stories based on TET and SPOD objectives. Then we updated the user stories by incorporating contextual information delivered by project stakeholders and provided the analysis of the users stories, with use case models followed by detailed use case descriptions and requirements specification. Then we provided the breakdown of the specific and unique functionalities and capabilities that the system must provide to the user when engaged in various activities and exploring the enhanced platform.

From the technological point of view, the collective intelligence approach is followed by the application of agile methodologies, allowing citizens to participate already into the early development of the software: we strongly believe that our approach that involves stakeholders since the very beginning of the design and development will be one of the key factors to the success of our software.

The project will finish its activities on January 2018, with two rounds of pilot studies (February 2016 and February 2017) of SPOD and TET in the five pilots (see www.routetopa.eu for updates on the status of the activities).

Our team is strongly committed to ideate, design, develop, deploy and validate innovative and engaging ICT platforms to ensure citizen-friendly, conscious and effective access to open-data, by offering easy understanding of, and social collaboration on, open data offered by PAs.

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### References

- Bertot, J.C., Jaeger, P.T., Grimes, J.M.: Using ICTs to create a culture of transparency: e-government and social media as openness and anti-corruption tools for societies. Gov. Inf. Q. 27(3), 264–271 (2010)
- 2. EU DG-CONNECT.: A vision for public services. In: European Commission, "Public Services" Unit of Directorate-General for Communications Networks, Content and Technology (DG-CONNECT), 13 June 2013