Best Practice: Open Up Public Transport Data

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http://www.w3.org/2013/share-psi/bp/ptd-20160725/
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http://www.w3.org/2013/share-psi/bp/ptd/
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This is one of a set of Best Practices for implementing the (Revised) PSI Directive developed by the Share-PSI 2.0 Thematic Network.

Outline

One of the EU's top priorities is promoting **smart, green and integrated transport** for the benefit of all citizens, the economy and society. In fact of that, under the Horizon 2020 research and innovation scheme, the European Commission allocated €756 million for transport-related activities within the 2016-2017 Work Programme. This work programme includes activities aiming at increasing the take up and scale-up of innovative solutions to achieve sustainable mobility in urban areas, increasing the attractiveness of public transport, creating new coordination and service concepts. One of the expected outputs is the elaboration of new business models for public transport through technological (such as IT and app-oriented services) and social innovations, taking into account possible social and demographic barriers.

In this sense, public transport information –i.e. timetables, service disruptions, stops, accessibility, etc.—, is considered as high-value data, essential piece to enable this innovation, guaranteeing services more efficient, reliable and attractive both for operators and customers. Usually this information is shown at stops (on noticeboards or electronic displays) so the information is considered non-sensitive and public, so the evolution to open the information through the Web should be only a technical issue —no legal or strategic constrains must be applied. Thus, the high value of this dataset for the whole society in contrast with the minimum effort to open the already existing information makes public transport data a top priority for open data and PSI re-use initiatives.

Although transport services may be run by private companies, governments should guarantee the oppenness of this information. This can be done through advocacy or legal actions like issuing specific policies or adding clauses in public procurement.

All stakeholders will benefit: a better user experience for users; greener cities by using collective transport; more efficient company without noteworthy additional costs.

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Links to the Revised PSI Directive

Policies and Legislation

Challenge

Although most of this information is non-sensitive, and considered as of high potential for reuse, is not always publicly exposed. Most of the transport companies already manage the operating information (timetables, status of the service, etc.) by electronic means. So, the cost of releasing the information openly should not be too high. Although the potential benefit is for all the society (including the government and the transport company), many of these companies are reluctant to open the data up —even having direct requests from the local/regional/national governments.

Cities tend to foster the use of smarter and greener public transport in order to reduce traffic, the subsequent air pollution, making it efficient and easy to use. More information will enable better user applications and services that will enhance citizens experiences (e.g., journey plans, real-time waiting times, disruption alerts, etc.). This is not always possible due to the lack of open data, data already held by the companies running the service.

Solution

Local governments should make an effort opening the public transport information in machine-readable and easy to use formats –mainly addressed to companies and developers that will be able to create new services or products on top of it. If the government does not have either full access or control of the information, it should get it published, convincing the transport company by all possible means (e.g., issuing a local mandate, adding specific open data clauses in public contracts, etc.).

This would benefit many stakeholders:

- municipalities and governments following 'Smart City' strategies are interested in reducing traffic in the city, enhancing public transport and encouraging its use;
- current public transport users would experience a better service; and newcomers will be attracted only if they see a real value in the service;
- private companies that would be able to produce new products and services for travellers.

Why is this a Best Practice?

Public transport information already exists within transport companies. The service information usually has no legal restrictions, so its publication should not be rejected based on these kind of issues. Also, the release cost should not be too high due to the existing management information systems of the transport companies. Encouraging this openness, all the parties will experience benefits.

How do I implement this Best Practice?

The first step is having government's **political commitment**. This engagement must be included into official digital agendas, stating clear roadmaps and plans for implementation. Specific clauses that guarantee the public access and publication of the transport data must be included explicitly in the agreements between public administrations and public transport companies.

In order to motivate openness and re-use of the information, the municipality must plan and perform actions to raise the awareness among stakeholders (publishers, private companies and citizens).

Where has this best practice been implemented?

Country	Implementation	Contact Point
Spain	Local open data initiatives: • Barcelona • Bilbao • Gijón • Cáceres • Madrid • Gipuzkoa • Granollers • La Palma (Island) • Las Palmas de Gran Canaria • Málaga • Sabadell • Santander • Terrasa • Tenerife • Valencia • Zaragoza	Martin Alvarez-Espinar, CTIC.
Finland	HSL Reittiopas API	Page includes contact form

References

- Samos Workshop Talk: Open Traffic Information Standard & Experimentation for Enhanced Services (PDF)
- Samos Workshop Talk: Public Transport Data in the City of Gijon (PDF)
- Krems Workshop Session: OpenMove: How Trentino opened public transportation data and benefitted of a mobile ticketing solution for free (PDF)

Local Guidance

This Best Practice is cited by, or is consistent with, the advice given within the following guides:

- (Austria) Framework for Open Government Data Platforms
- (Belgium) Open Data Handleiding Open Data Handbook
- (CzechRepublic) Standardy publikace a katalogizace otevřených dat veřejné správy ČR Open Data Standards
- (Finland) Helsinki Region Infoshare
- (Greece) Εφαρμογή των διατάξεων του Κεφαλαίου Α' του ν. 4305/2014 (ΦΕΚ 237/Α΄) Guidelines on the implementation of open data policy and l. 4305/2014
- (International) Open Data Handbook, Solutions Bank
- (Lithuania) Viešojo Sektoriaus Informacijos platinimo gerosios praktikos Best Practices for Sharing Public Sector Information

- (Luxembourg) Recommandations pour l'ouverture des données publiques Recommendations for opening data
- (Portugal) Guia Dados Abertos - AMA | Dados.gov Open Data Guide
- (Serbia) Open Data Handbook
- (Slovenia) Priročnik za odpiranje podatkov javnega sektorja Manual for the opening of public sector information
- (Spain) Guía de aplicación de la Norma Técnica de Interoperabilidad de reutilización de recursos de información Application Guide for Technical Interoperability Standard on PSI re-use
- (Spain) Government Data Openness and Re-use
- (UK) Open Data Resource Pack
- (UK) Birmingham and West Midlands Localised Guide for Open Data

Contact Info

Martin Alvarez-Espinar (CTIC).

Related Best Practices

- Develop an Open Data Publication Plan
- Establish an Open Data Ecosystem
- Establish Open Government Portal for data sharing
- Use machine-readable standardized data formats
- Provide real-time access
- Identify what you already publish
- Standards for Geospatial Data
- Provide metadata
- Dataset Criteria

Issue Tracker

Any matters arising from this BP, including implementation experience, lessons learnt, places where it has been implemented or guides that cite this BP can be recorded and discussed on the project's GitHub repository