



#### *The context*

Transportation is an important contemporary issue, which has a direct impact on economic strength, environmental sustainability and social equity. Accordingly, transport data – largely produced or gathered by public sector organisations or semi-private entities, quite often locally – represents one of the most valuable sources of public sector information (PSI, also called 'Open Data'), a key policy area for many, including the European Commission.

#### *The challenge*

Combined with the advancement of Web 2.0 technologies and the increasing use of smart phones, the demand for high quality machine-readable and openly licensed transport data, allowing for re-use in commercial and non-commercial products and services, is rising rapidly. Unfortunately this demand is not met by current supply: many transport data producers and holders (from the public and private sectors) have not yet managed to respond adequately to these new challenges set by society and technology.

#### *The mission*

On 17 September 2012 the ePSI Platform organized an Open Transport Data workshop, bringing together, from over 15 countries, an informal group of 30 policy makers, experts, opinion leaders and other stakeholders within the transport data community (see [Annex](#) for an overview of those present). Sharing a mission to maximize the benefits of opening up this domain, they contributed to the establishment of this 2012 ePSI Open Transport Data Manifesto, which captures and highlights the potential, the obstacles and the solutions at hand and, accordingly, allocates the responsibilities to meet these challenges to the appropriate stakeholders.

As such, the Open Transport Data Manifesto seeks to stimulate dialogue among stakeholders by identifying transport data specific issues that are hampering the free flow of Open Data across Europe and to convince and support (semi) public sector transport data holders, demonstrating the richness of sources and the impact Open Data may have on their organisations and the subsequent value chain.

#### *The message*

Therefore, this Manifesto calls upon policy makers (at the EU, national, local and sectoral levels), transport operators (from the public and private sectors) and data users to seize the opportunities and reap the benefits, by opening up and sharing data resources, cashing in on the enormous potential to be exploited.

#### *The network effects*

Capitalizing on the networked capabilities of our society, anyone with an interest in opening up transport data is invited to refer to, to share and to disseminate this Manifesto, which is aimed at being a point of reference for current actions and a benchmark for progress to be made.



# 2012 ePSI – Open Transport Data Manifesto

## The potential is rich

- Transport data represent one of the most valuable sources of information impacting economic strength, environmental sustainability and social equity.
- Mobile technology and social media allow for an unprecedented re-use, including the processing and sharing of data and the adding of value to data.
- Transport data are largely produced or gathered by public sector organisations or semi-private entities (at the European, national, local or even sectoral level), accordingly qualifying as public sector information (PSI), also called 'Open Data', and thus are regulated by the PSI Directive, which advocates a liberal re-use regime across Europe.
- Private sector transport data holders and operators (should) have a clear common interest in sharing their data, provided they can reap the benefits on a level playing field.
- Key policy makers in Brussels and around Europe have expressed firm commitments in opening up their data, including transport data, and they accordingly seek to create the best framework conditions to allow for the free flow of such data through digital networks.
- Transport data is one of the acknowledged 'high potentials' within the open data domain, featuring low public investment, high public returns, where users, policy makers, data holders and operators have a reciprocal interest to open up and share information resources.

## Just imagine

- A real-time travel planner that is truly seamless and multi modal, integrating any means of transport and taking on board associated data, such as parking space, bike repair stations and car rental tariffs at airports, allowing for personal customization and data that feeds directly into one's daily life needs.
- Crowdsourcing citizens providing real-time feedback to operators and other providers, allowing them to enhance their service delivery parameters and enrich the user experience, including that of the differently abled.
- Transport data that essentially serves the general public needs, flowing to those who require such data.

## So what do we need?

- Access to any transport data of any operator, of high quality, in real time, against free or at least fair standard conditions.
- An inclusive infrastructure, based on common open, non-discriminatory and interoperable standards and APIs, to which operators, service providers, developers and users can connect.
- An ecosystem wherein universal access and re-usability of transport data is the rule, not the exception.

## Why is this not happening?

- Data that is necessary for integrated personal transportation solutions is rich and encompasses several domains (geospatial data, environmental data, private service provider data), involving a wide array of data holders from the public and private sectors. Because of

its very nature, transport data is often held locally, thus creating a patchwork of data repositories and isolated standards.

- Legacies create lock-ins that prevent adoption of open standards and hamper interoperability.
- Many operators and incumbent service providers, in particular those relying on income from sales of data, still regard selective and exclusive access to transport data as a competitive advantage, restricting access and re-use through the exercise of intellectual property rights.
- Perceived liability risks, often associated with data quality issues, prevent operators from opening up their data.
- Significant differences between countries, regions and transport modalities in terms of level of development, market maturity and associated business models prevent a 'one size fits all' solution.
- A lack of leadership in the value chain – either by the industry or from the authorities (whatever the level) – limits governance capabilities as to establishment of access, accessibility and other framework conditions, creating a need for a subtle mix of mostly bottom-up instruments and a dash of top-down measures.
- Existing market players with associated interests turn governmental actions into a delicate matter, in particular as to the question of where the role of the government should start and end within the value chain and where the market parties should take over and become the driving factor.
- Where market parties need to step in, the lack of a clear and predictable environment prevents businesses from establishing a long-term perspective, whereby fair competition needs to be safeguarded.

## So who should do what?

Within the context of these challenges and circumstances and given the potential at hand, stakeholders should each take the following responsibilities:

**Public sector operators and data holders** are called upon to:

1. adhere to the regulatory framework, in particular the rules and spirit of the PSI Directive, advocating liberal re-use regimes, including fair and transparent licencing conditions and, where applicable, competition law and the INSPIRE Directive;
2. put user needs in a broader perspective and accordingly apply an open data policy to allow for access and re-use, maximizing societal benefits;
3. refrain from pursuing their own downstream market activities, in particular value-adding activities, and from imposing charges and other limitations on re-users;
4. adopt and implement open standards both internally and externally, under the motto: "use what you publish and publish what you use" and thereby lower transaction costs;
5. provide data using beta labels, where fear of potential liability exists, alternatively relying on (or complemented by) a straightforward disclaimer and very basic meta data sets;
6. use their buying power towards software vendors, forcing them to rely on open standards, opening up applications to others and interconnection with other data sets;
7. explore potential shared interests and start collaborating with data holders of other means of transport (public and private) and with users, creating feedback loops.

**Private sector operators and data holders** are called upon to:

8. realize that opening up data will benefit all, including themselves, where they would acquire better service parameters, allowing them to deliver their services more effectively and efficiently;

9. put user needs in a broader perspective and accordingly apply an open data policy to allow for access and re-use, maximizing societal benefits;
10. use their buying power towards software vendors, forcing them to rely on open standards, opening up applications to others and interconnection with other data sets;
11. create intermediate solutions in the form of inter-regional portability, until global portability is not yet realized;
12. explore potential shared interests and start collaborating with data holders of other means of transport (public and private) as well as with users, creating feedback loops.

**Developers** are called upon to:

13. create such attractive and powerful apps that data holders cannot bypass them;
14. rely on open standards, opening up their applications to others and interconnection with other data sets.

**National, regional and sectoral policy makers** are called upon to:

15. ensure that the public sector operators under their control adhere to the regulatory framework, in particular the rules and spirit of the PSI Directive, advocating liberal re-use regimes, including fair and transparent licencing conditions and, where applicable, the rules of competition law and the INSPIRE Directive;
16. learn to understand society's needs for raw data and accordingly ensure that the fair and transparent provision of real-time transport data by the public sector operators under their control is part of their public task, embedding this in relevant statutory frameworks;
17. ensure that tender specifications in public procurement schemes related to public transport hold clear contractual obligations to open up transport data generated and to rely upon open standards, creating critical mass supporting the open standards;
18. address any liability concerns of data holders, by providing clear guidance, inter alia, through the use of proclaimers and basic meta data schemes;
19. minimize charges for roaming services (and where possible make them free), when such charges relate to the provision of transport information services.

**The European Commission and other relevant European institutions** are called upon to:

20. politically acknowledge the potential societal benefits for Europe of transport data, raise awareness across Europe and allocate supporting funds corresponding to this potential;
21. seek and accommodate dialogue with stakeholders working towards unified and accepted open standards, promoting inclusion and interoperability;
22. promote and establish fair and transparent and, where appropriate, single, licensing schemes, in line with the (new) PSI Directive, for the re-use of transport data, taking on board existing good practices (e.g. AusGOAL, the Australian Government's open access and licencing framework);
23. explore the need for potential sectoral legislation for accessibility to transport data, comparable to the INSPIRE Directive;
24. (help member states to) push telecom operators to reduce (to zero) roaming costs Europe-wide.

**End-users, and in particular the open data community,** are called upon to:

25. further spread and intensify their legitimate claims for Open Transport Data towards operators and data holders (in their capacity as clients) and towards policy makers (in their capacity as voters and tax payers);
26. offer assistance to and engage in crowdsourcing experiments, working together with operators and developers, improving data and service quality.

## Annex: List of the workshop participants

On 17 September 2012 an informal group of 30 policy makers, experts, opinion leaders and other stakeholders within the transport data community contributed to the establishment of this 2012 ePSI Open Transport Data Manifesto.

Since the Manifesto has sought to capture and summarize all views expressed, it does not necessarily represent the opinions and positions of the individual participants. Rather, it is a structured mash-up, demonstrating the richness of the debate, mirroring the various interests and associated perspectives.

For some nice impressions of the workshop, please have a look at the [footage!](#)

Name	Organisation/background	Organisation's country
Alf Petersson	Senior Advisor ITS Swedish Transport Administration	Sweden
Anders Hjalmarsson	General of West Coast Travelhack 2011 and member of the Sustainable Transports group at Viktoria Institute	Sweden
Baden Appleyard	National Programme Director – AusGOAL (Australian Government's open access and licencing framework)	Australia
Bent Flyen	Independent Consultant, currently working on <a href="http://www.travelhack.no">www.travelhack.no</a>	Norway
Brian Ferris	Transit Hacker and Software Engineer at Google Transit (Zurich)	United States
Daniel Dietrich	OKF chapter Germany and ePSI team member	Germany
Daniel Rudmark	Founder and Research Partner trafiklab.se and member of the Sustainable Transports group at Viktoria Institute (moderator)	Sweden
Elias Arnestrand	Founder and Project Manager trafiklab.se and Business Developer at the Swedish Association of Public Transport Companies	Sweden
Frank Verschoor	Co-founder, The Greenland Open Data Consultancy	Netherlands
Gzim Ocakoglu	Team Leader, Unit C3 Intelligent Transport Systems Directorate-General for Mobility and Transport (DG MOVE) European Commission	European Union
Kerkko Vanhanen	HSL Helsinki Region Transport	Finland
Javi Creus	Founder of Ideas for Change	Spain
Julian Tait	Open Data community leader, Manchester	United Kingdom
Sami Sahala	Logica Finland	Finland
Katleen Janssen	ePSI team member	Belgium
Marc de Vries	ePSI team member (moderator)	Netherlands
Paul Suijkerbuijk	Director Data.Overheid.nl, the Dutch Open Data Portal	Netherlands
Pekka Koponen	Development Director Forum Virium Helsinki	Finland
Pieter Colpaert	Founder of iRail and OKF chapter Belgium (moderator)	Belgium
Stefan de Konink	Founder Open OV	Netherlands
Tom Kronenburg	ePSI team member (moderator)	Netherlands
Ton Zijlstra	ePSI team member (moderator)	Netherlands
Varvara Guljajeva	Estonian Art Academy, artist/researcher	Estonia
Dobos Maria	Development Adviser, Csepel Island, Hungary	Hungary
Tero Piirainen	ITS factory, Tampere	Finland
Deirdre Ni Raghallaigh	Dublin City Council	Ireland
Hanna Niemi-Hugaerts	Forum Virium	Finland
Jyrki Kuoppala	Finnish Open Street Map	Finland

Adrian Slatcher	MDDA Manchester Digital Development Agency	United Kingdom
Jaakko Rajaniemi	City of Helsinki, CitySDK project	Finland
Marko Forsblom	Finnish Ministry of Transport	Finland
Taru Rastas	Finnish Ministry of Transport	Finland

### **About the ePSI Platform**

The ePSI Platform aims to stimulate European-wide re-use of public sector information and is funded under the [European Commission eContent plus programme](#). It is run by a [consortium](#) consisting of Ton Zijlstra (Interdependent Thoughts), Marc de Vries (Citadel Consulting), Tom Kronenburg (ZENC), Katleen Janssen and Hans Graux (Time.lex), and Daniel Dietrich and Antti Poikola (OKF).