

Open Data Strategy

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Executive summary

1. Transparency is already radically changing the way people live their lives and run their businesses in the UK. In the last two years, the UK has released the largest amount of government data of any country in the world, enabling people to make better choices about the public services they use and to hold the government to account on spending and outcomes. Transparency has also provided the raw material for innovative new business ventures and for public service professionals to improve their performance.
2. An Open Government White Paper¹ is being published today and in conjunction with this each government department has produced its first Open Data Strategy. This strategy sets out the release on new data over the next two years and also how we will stimulate a market for its use.
3. Transport is a 'data-rich' area where there is huge public appetite for information that can be used to inform travel choices, to improve performance and to hold operators and Government to account. In the first instance, it is often application developers and the wider open data community who use the data released, and we recognise that supporting this work is also good for economic and social growth. Transport data is created and owned by a variety of bodies across central Government, the wider public sector and the private sector, and all of these parties need to come together to support this agenda.
4. In March 2012 DfT published a Rail Command Paper² that included a chapter on Transparency setting out how we will show what is funded by the public purse, how we will demonstrate value for money, how we will enable service users to assess their train performance at a level below the full franchise and how we intend to widen the scope of Open Data release, including consulting about more open fares data.
5. The transport sector has already released significant amounts of data, which has been amongst the most successful in terms of re-use by developers. This includes the NaPTAN database of all 350,000 bus stops, railways stations and other public transport access points as well

¹ White Paper Hyperlink

² <http://www.dft.gov.uk/publications/reforming-our-railways>

as rail timetables, roadworks and real-time information on the strategic road network.

6. Over the next two years the Department for Transport will work with partners and the open data community to release a wide range of transport data for use and re-use. The Department will engage with developers and data owners to ensure a broad take-up of the data released and to identify ways in which the data can be made more useful and usable by improving its quality and standardising its formats.
7. This strategy encompasses:
 - Big Data – working with transport providers to release core reference datasets that cover definitions of transport networks, timetables and traffic figures, planned and unplanned disruptions and speed/performance figures;
 - My Data – the ability of individuals to access information held about them by organisations such as motoring agencies and public service operators;
 - Satisfaction and Experience Data – the levels of satisfaction from public service users such as the Rail National Passenger Survey and the Bus Passenger Survey as well as extending the powers of the Civil Aviation Authority to include collection of data relevant to service quality and the passenger experience at airports. We will also encourage the creation of user generated sites similar to Fix My Transport and Fix My Streets;
 - Creation of Dynamic Information Markets – transport already has an active cadre of developers and service providers that re-use transport data and create valuable and popular new applications. We will work with this community, the Technology Strategy Board and the data owners to grow the market and to increase its value to the economy and to users of the new services provided. This will utilise new media channels, forums and existing relationship such as the Transport Transparency Board;
 - Continuously Improving the Quality – data needs to be useful, usable and used and we will continuously review the quality, format and accuracy of transport data. This will be through a number of measures including feedback from developers and end users, provision of meaningful metadata describing the characteristics of the data, including the strengths and limitations, and the adoption of enhanced formats over time, notably at the point of re-use and re-specification. We will also utilise the feedback and advice from data.gov, the Transport Transparency Board and other forums across the public and new media sectors.

1. Introduction

- 1.2** This Open Data Strategy sets out how the Department for Transport is meeting the Open Data aspects of the Transparency agenda across the transport sector. In addition to the release of datasets and provision of access to citizens' personal data, it sets out how we will move towards a more open and transparent culture and work to embed best practice across the transport domain.
- 1.3** The strategy considers open data under the following categories:
- Big Data – the capture and release of large routine datasets;
 - My Data – provision of access for service users to their own identifiable data;
 - Satisfaction and Experience Data – how data will be gathered around customer insight and on service user feedback and how this data will be used;
 - Creation of Dynamic Information Markets – public strategies for engagement with data users to drive social and economic growth;
 - Continuously Improving the Quality – moving the quality of the data gathered and published up the data value chain.
- 1.4** In developing this strategy the Information Principles for the Public Sector have been used to underpin the manner in which data is gathered, managed and published. In general terms these principles are:
- Information is a Valued Asset;
 - Information is Managed;
 - Information is Fit for Purpose;
 - Information is Standardised and Linkable;
 - Information is Re-used;
 - Public Information is Published;
 - Citizens can Access Information about Themselves.
 - Annex B sets out in detail how these principles have been applied across DfT.

1.5 Finally the strategy seeks to achieve the six overarching benefits of Open Data:

- Accountability - of government and public service providers;
- Choice - for consumers of public services, enabling them to switch;
- Public Service Productivity - by benchmarking and eliminating waste;
- Public Service Quality - empowering public service professionals;
- Social Growth - creating mobility and empowering communities;
- Economic Growth - fostering new businesses to create growth.

1.6 In formulating this strategy and in the Open Data programme to date we have sought to ensure that the Department for Transport and its agency family are compliant with the Government's Transparency agenda. We have also been cognisant of the wider agenda, as set out in the Open Public Services White Paper and the Better Choices: Better Deals Strategy, which sets service users at the heart of service design, assessment and consumption.

1.7 This strategy therefore considers a wide range of transport data, gathered by central government, local government and transport operators, and also data created by transport users and their representatives. This broad scope of data coverage means that the levers and mechanisms for enacting the strategy are varied and this especially places a premium on clear articulation of the benefits of open data and the establishing of effective communication and governance mechanisms.

1.8 Finally, this strategy forms part of the departmental business plan for DfT and should be read in conjunction with that plan. A summary of this strategy is included in the DfT Business Plan for 2012 – 2015³.

³ <http://www.number10.gov.uk/wp-content/uploads/2011/01/DFT-Business-Plan.pdf>

2. Big Data

- 2.1** Transport is an industry that relies on data and information to function, transport needs data to run, creates data as it operates and retains data about its activities after it has performed its tasks. Transport data and information can be categorised many ways but for the purpose of this strategy it is considered as:
- data about transport networks such as roads and railways,
 - data about things that move on the network such as traffic counts and railway timetables and
 - data about things that move in the vehicles on the network such as passengers and freight.
- 2.2** Transport data and information has always been prevalent in the public domain and has also been in great demand via timetables, traffic news and air schedules. This has traditionally been via suppliers of the services and many of these services such as BBC traffic news, National Rail Enquiries, the AA, and Transport for London have been amongst the most used and well regarded services across traditional and new media.
- 2.3** It is also important to recognise that the transport data generally considered to be in scope in this strategy covers that gathered by many agencies including Government, local government, transport operators and other interested parties. For the purposes of this strategy we will consider the data chiefly on the basis of the end user and the potential for the data to achieve the desired benefits. However it should be noted that the means and levers for achieving data release will vary according to the data ownership and its governance. A one-size-fits-all approach would be impractical for transport data, given the different bodies which collect and own it across both the public and private sector. The costs and benefits associated with data release will need to be considered in each individual case.
- 2.4** The release of transport datasets can be directly linked to the achievement of benefits as follows:
- Accountability – data on public spending, subsidy, cost of different modes by unit costs and value for money from investment schemes

- Choice – data on the performance of different modes and different providers within the same mode can influence choice where transport options exist or can influence issues such as choice of residential location
- Public Service Productivity – this could be achieved by the release of comparative performance data, by establishing trend data over time period or unit costs between operators and modes
- Public Service Quality – this could include satisfaction data within modes, between modes and between operators, also in scope would be asset condition, performance data and measuring the trend of data over time
- Social Growth – transport is an important enabler of or barrier to social mobility and social growth and the release of transport data, leading to the creation of new services and opportunities will assist in increased mobility and greater accessibility.
- Economic Growth – this could be direct in improving connectivity and enabling the better use of business and personal time and also increased efficiency in the transportation of goods and services. It could also be indirect in enabling new services to be developed by third parties including new media developers, creating value in the economy.

2.5 There are potentially many beneficiaries of the release of transport big data, which could be broadly grouped as follows:

- Transport Service Users – by achieving greater Transparency and increasing the range of sources to obtain information, it should increase choice and the ability for users to assess and evaluate value for money
- Application developers and the Open Data Community - by re-using transport data to create useful new services and generating revenues, wealth and employment
- Transport Operators – in widening the scope and reach of information potential markets should increase and the opportunity to bundle products will be enhanced. It should also be possible for good service providers to differentiate themselves from poor providers to whom they are perceived as competitors or alternatives
- Transport Funders – can more clearly identify and influence comparative performance and enhance value for money leading to better use of public funds and greater efficiency in the provision of public services
- Citizens – can clearly see how public funds are spent, how the public services that they contribute to and consume are delivered and

perform and can influence their representatives to affect provision of transport services

2.6 The datasets in scope for release, when considered in the three broad categories set out earlier are:

- Transport Networks – most data about transport networks should be considered to be in scope, including the road network, the rail network, light rail, tram and underground lines, navigable waterways, ports and commercial airspace. There are two prime considerations to be tackled in this area, the linkage with geospatial data and the OS derived data, which may limit the availability of free to use data, and the requirements of the EU INSPIRE Directive, that sets out some detailed requirements for the availability and harmonisation of this data.
- Movements on the Networks - all planned movements and increasingly real-time information should be considered to be in scope such as traffic counts, average speeds, rail and bus timetables, train and bus real-time running, air schedules and flight performance. These should be broken down to be as realistic to the experience of users as possible, such as train services below franchise level, motorway sections and station/bus stop level.
- Movement of Goods and Passengers – these will probably be aggregated at modal and generic flow level rather than at individual and cargo level. It will be important to identify areas of commercial confidentiality and/or personal detail, however general trend detail and relative patterns may have value to release as Open Data.

2.7 The key data releases are set out in Annex A to this strategy

Case study

Accident Data Map

The Department for Transport collects detailed data on reported personal injury road accidents from all police forces in Britain. This data forms the basis of most official statistics on road safety and is released - at individual accident level - via www.data.gov.uk shortly after the publication of each annual set of figures. Several organisations - including businesses, campaign groups and the BBC - have used this data to create interactive maps and mobile applications related to road safety.

3. My Data

- 3.1** The ability of individuals to discover the information held about them and their purchasing and choice decisions enables them directly, or via intermediaries, to select the optimum product or service. In the transport sector this may be their travel patterns, the cars that they purchase and their subsequent operating costs or the data and services provided by or via motoring agencies such as licensing, testing and certification.
- 3.2** This strategy supports the transfer of significant power from the supplier of services to the consumer of the services. As set out in Better Choices, Better Deals, the well informed customer gets better value, better customer service and better support and can be an important factor in creating growth through innovative and dynamic businesses
- 3.3** In the development of the Better Choices, Better Deals initiative, the Department and the Behavioural Insights Team worked on car labelling, with the aim of making car running costs much clearer to consumers.
- 3.4** We will work with our agencies to ensure that they are ready to supply users with the data that is held about them and to provide this in a helpful, accessible manner. The current ability to perform this will vary across the agencies and it will also be an important factor in future information and transactional system procurement. Subject to value for money evaluation we will seek to ensure that this is possible in a simple and user-friendly manner.
- 3.5** In the wider public services field we will encourage the suppliers of key public transport services to align themselves with the My Data agenda and consider which data could be most useful to users and how this could be made available. An early potential candidate is the data available about individual travel patterns via smart devices, which could be an important source of travel cost information.
- 3.6** Further development could feasibly include the ability of users and suppliers to design travel tariffs and ticketing options based on historic and emerging smart travel patterns. This could replace much of the existing season ticket product range and also lead to a reward culture for regular travellers. It would also enable the potential for third parties to

develop transport price comparison services based on travel patterns as well as individual journeys.

- 3.7** In making data available and especially in access to personal data it is vital that we strike the right balance between access and the maintenance of privacy and the protection of personal data. Our transparency and open data plans will ensure that individuals' privacy is respected and we will ensure that a suitably qualified representative is present at the sector Transparency Board.

Case Study

Car Labelling

The Department for Transport and the Behavioural Insights Team worked on car labelling with the aim of making the cost of running a vehicle much clearer to consumers. DfT asked the Low Carbon Vehicle Partnership to bring forward proposals aimed at helping to give consumers much clearer information on how much it will cost them to run a particular car. This is aimed at making improvements to the voluntary A-G energy fuel economy and emissions label for new cars so that it gives people much clearer information about running costs and therefore helps them to make an informed choice.

4. Satisfaction and experience data

- 4.1 Transport is a subject on which many people are keen to express an opinion or to share an experience. Our intention is to gather and publish reliable and trustworthy data on performance, service quality and user satisfaction, as well as encouraging greater provision and use of user-generated data and opinion.
- 4.2 Most transport services operate either to a planned schedule or on infrastructure that has a maximum designed speed. Generally performance has been measured at a highly aggregated level, such as train operating company or over a long period of time such as a monthly or annual period. Increasingly we will work with delivery partners to provide users with performance data that is much more directly linked with their travel experience.
- 4.3 Therefore in the rail industry performance will be broken down to below full franchise level and data will also be available on the real-time running of individual services. On main roads data will be provided on traffic speeds, average journey times on key sections and also on planned roadworks and unplanned incidents. As well as improving the existing information systems provided by operators it will enable new services to be provided by third parties to either give information to users or to enable service providers to be held to account by users and their representatives.
- 4.4 In the air industry, the Civil Aviation Bill is current passing through Parliament which, amongst other things, proposes to increase the powers of the Civil Aviation Authority to provide more information for the benefit of users of air transport services.
- 4.5 In relation to driving, the Secretary of State for Transport has recently announced a review of the customer experience that drivers receive when their cars are subject to MOT testing. This will include greater transparency on the testing results, customer experience via mystery shopping and a customer feedback regime that can be viewed by other potential users of the service.

- 4.6** Pure performance data, although a useful indicator of experience, is most powerful when considered in tandem with user satisfaction data and also when benchmarked against other operators and other modes. Collectively this gives services users the ability to make informed choices and also to judge value for money and to help identify the priority areas for improvement.
- 4.7** Transport services have many established high-level user satisfaction studies that are published, provide comparative data between operators and allow trend analysis over a period of time. These include the Rail National Passenger Survey and the Bus Passenger Survey that show user satisfaction across a range of measures such as service performance, information and value for money on an annual basis.
- 4.8** It is also common to publish details of complaints about public transport services, showing the most frequent categories for complaints and also by Operating Company.
- 4.9** Research by Passenger Focus and ORR showed some reluctance to use traditional feedback channels due to the perception that operators would not take action as a result of the feedback.
- 4.10** We would therefore welcome and encourage use of new media and user generated feedback mechanism such as Twitter, Facebook, common comments areas and trusted third parties, such as Fix My Streets, to remove the feedback barriers and to encourage user participation in service improvement.

Case Study

Fix my Streets/Fix my Transport

FixMyStreet is an independent site launched in 2007 that allows people to report street problems such as potholes, graffiti and flytipping to the relevant council. To date over 200,000 problems have been reported and almost 100,000 are shown as being 'fixed'. Over half of people surveyed said that they had never reported an issue to their council previously.

FixMyTransport follows the same model and allows public transport service users to report issues with their service. Launched in 2010 to date almost 5,000 users have reported issues or logged comments

5. Creating a dynamic information market

5.1 Thanks to the existing high profile nature of transport data and information services and the insatiable public appetite for transport information a vibrant and active cadre of developers and service providers already exists in this area. Transport information services have traditionally been at the high end of usage and awareness from the original paper rail timetable, through road atlases, telephone enquiry bureaux to new media services such as the Trainline, Easyjet and BBC Travel News. The on-going popularity of transport information amongst users is demonstrated by the enthusiasm of new media giants such as Google to provide car and public transport information offerings amongst its core services.

5.2 The developer community and the data owners in transport are however in reality a diverse group of communities and interests and it is useful to consider each separately as well as in common:

- Open data leaders – the main forum will be the Transport Sector Transparency Board that brings together policy makers across Government, data owners and representatives of data owners to identify candidate datasets, prioritise action and address complimentary and conflicting issues
- Major service providers – many of the major players are already existing users of transport data and have relationships with data owners and policy makers. It is important to understand how these relationships will be changed by the Open Data agenda, including business models and more flexible procurements and information architectures
- New media developers – often small companies or individuals where traditional direct contact channels may not be effective. We will work with the Transparency Board members, data.gov relationships, Technology Strategy Board and other intermediaries to liaise with this group
- Data owners – initially this is likely to be largely via the Transparency Board, however a welcome sign of maturity in this sphere would be

increasing amounts of direct contact between data owners and data users.

- Common measures – we propose to establish a Transport Open Data Forum that will meet at least twice a year to engage with active developer and to trail forthcoming releases and obtain feedback on practical use, future priorities and issues about existing data. In addition, subject to the views of the first forum, we will consider the creation of a virtual environment to bring together the communities set out above together with policy makers, to communicate and share useful information.

5.3 The measures set out above are in addition to the existing channels and forums set up by the central Open Data and Transparency groups such as data.gov and the other relevant topic areas such as local government and location data. It should also be noted that local and regional initiatives are also active in this area such as the very successful London Data Store and Data Greater Manchester.

5.4 Given the diverse nature of the data user and owner community and the variety of liaison channels already in existence, the effective provision and maintenance of search facilities, metadata registries and data repositories is also essential. Finally, the effective description of data via its associated metadata is foundational in the subsequent effective use of the data and where sensible this should include “how to use the published data” guides and/or Codes of Practice.

Case Study

London Data Store and Transport for London Data

The London Data Store was set up by the Greater London Authority in 2010 to free up London's data and to enable citizens and businesses to access data and to re-use it as they saw fit, free of charge.

Transport for London is a major contributor to the London Data Store and offers its data via a Developers' Area on the Transport for London website where a wide range of datasets and datastreams are available. These include live bus and tube departures, traffic disruptions and traffic cameras, cycle hire availability, journey planning and various statistics and static data.

These initiatives have resulted in numerous user-friendly applications and the creation of dynamic new businesses in the London new media industry.

6. Continuous improvement of data

- 6.1** To be of value data needs to be useful, usable and used, therefore we will continually review the quality format and accuracy of the transport data we hold. Traditionally data was gathered and consumed by a single body, usually for a single purpose. Thus the gatherer could reasonably assess the quality, scope and accuracy attributes that the data needed to meet.
- 6.2** In the emerging Open Data world it is a much more complex process to assess data quality, coverage and fitness for purpose, especially as in reality datasets may have been gathered, merged and disaggregated by a number of different parties. Research by University of Cambridge and Imperial College London for DfT⁴ suggested that the best way of describing data quality is in terms of an emerging narrative of the journey from real-life event to current database by those who have affected the journey and that assessment of fitness is a matter for the prospective data user.
- 6.3** To that end we will encourage data owners to accurately describe their data in terms of its origin, frequency, life expectancy, accuracy, format and any other relevant quality in the metadata that is lodged in the data.gov repository. We will also encourage the provision of user guides and Codes of Practice, where appropriate, regarding suggested use of the data, but we will be quite clear that the key responsibility for assessing suitability for re-use will lie with the data user.
- 6.4** Initially the clear priority is to publish data in its current existing format rather than to wait until data reaches an “acceptable” quality level. This will not however be allowed to be an excuse for the provision of poor quality data that will inevitably lead to poor quality derived services. Indeed it could be postulated that increasing the spread and usage of data will inevitably lead to the identification of weaknesses and areas for attention from the data creator or gatherer.

⁴ <http://www.dft.gov.uk/rmd/project.asp?intProjectID=12065>

- 6.5** We will therefore encourage the setting up of effective feedback processes by data publishers and where appropriate data quality evaluation regimes that gather and action reports of inaccuracy or other quality related matters such as timeliness. This will include the existing feedback routes of the Transparency Board and data.gov. In addition the use of automated data quality checking tools will also be encouraged to identify non-compliance with standards and data formats.
- 6.6** In addition to driving up the quality and usefulness of individual datasets it is necessary to consider their compatibility and usability when combined with other datasets. In transport this will be important within modes, between modes and with datasets from other domains. This puts a premium on Core Reference Data such as location data, spatial definitions, naming and address data. Many of these datasets lie outside the direct transport domain but add considerable value to the understanding and display of transport data.
- 6.7** It also needs to be considered in the context of transport being an enabler of personal and business activity with data from land-use, industrial activity, urban and rural settlement and access to services such as health and education.
- 6.8** Finally the format and structure of data and information will be considered and where and when appropriate measures will be put in place to improve these with regard to the Tim Berners-Lee five star rating⁵. Most existing transport data is in the three or two star category, being available in XML or CSV format. It is usually also part of data standards and protocol structures that enable data to be combined and mashed within modes and sometimes between modes.
- 6.9** We will work pro-actively with our delivery partners to increasingly enable data from diverse datasets to be combined and mashed and also to further the use of common data structures and exchange protocols and finally to enable data to be exchanged between sectors. Enhanced data formats such as linked data and semantic web structures are likely to be most effectively achieved, subject to value for money analysis, at times of re-specification and procurement and this will be fed into the evaluation framework for new information systems. We will also encourage the wider industry to adopt enhanced data formats when their systems are renewed or enhanced.
- 6.10** In pushing for improvement to data quality, we recognise it is important to have regard to costs, benefits and affordability of the different options, particularly in relation to data which is owned by private sector operators.

⁵ Hyperlink to Open Government White Paper section

Case Study

Improving attendance at DWP benefit assessments by opening up the Transport Direct API to enable journey plans to be provided

The Department for Work and Pensions had an issue with people not turning up for medical assessments. One of the reasons given was that they did not know how to get to the place of their appointment.

An automated request function was drawn up between DWP and DfT's Transport Direct journey planning service that contains a home postcode, the assessment centre postcode and the time of the appointment. This enables a digitised public transport journey plan to be generated which is sent back to DWP and is automatically rendered into a readable itinerary. To date over 9 million requests have been received and processed.

7. Annex A: Key Open Data Releases 2012 - 2014

Table 7.1

Dataset Name	Description	Date of Release	Frequency of Publication	Open Government Licence ⁶ ?
Rail real-time	Network Rail TD.net dataset of train running	June 2012	Real-time	Network Rail Open Licence
Rail Performance	ORR to start publishing more detailed information about rail performance below Train Operating Company level. This change will be rolled out gradually as new franchises are issued	May 2012	Monthly	OGL
Bus Timetables	Traveline National Dataset of Great Britain Bus Timetables	April 2012	Weekly	OGL
Bus Stop Times	Traveline Next Buses API covering 350,000 bus stops showing next three planned or real-time departures	April 2012	Real-time	OGL
Rail Network	Network Rail's geographical description of the Great Britain rail network	June 2012	6 monthly	OGL
Road Network	The Highway Agency's geographical	June 2012	Monthly	OGL

⁶ <http://www.nationalarchives.gov.uk/doc/open-government-licence/>

	description of the English Strategic Road network			
Roadworks	Access to data via the ELGIN roadworks partnership API covering over 65% of local authorities	March 2012	Weekly	OGL
Roadworks	Data about accessing roadworks data from each English local authorities	December 2012	Quarterly	OGL
Road Condition	Data about the condition of the English road network	December 2012	Annual	OGL
Rail Fares	Consultation on providing more open access to rail fares data (as part of the Government's review of rail fares and ticketing)	End 2012	TBA	TBA
Air Travel	Civil Aviation Bill to extend the powers of the Civil Aviation Authority to cover collection of data on service quality and passenger experience issues	December 2013 (estimate)	Monthly	OGL
Driving Test	Breakdown of test data (e.g. by gender and age) nationally and by test centre	July 2012	Annual	OGL
Driving Licence	Driver licence by age, gender, geographical area, entitlement and penalty points	June 2012	Quarterly	OGL
Requests regarding Vehicles and Drivers	Data on the volume of requests for information about vehicles and drivers	April 2012	Quarterly	OGL

8. Annex B: Information Principles

This annex sets out the cross-government principles and shows how these have been applied across the DfT family.

Principle 1: information is a valued asset

- B.1** *There is a declaration from the organisation to establish the importance of information to the business*
- B.2** DfT's Information Management Strategy (IMS) is clear that "DfT and its delivery partners need information in order to do their jobs and that the Department cannot function or meet its aims without the effective use of information".
- B.3** *The approach is defined for consistently identifying, categorising and cataloguing Information Assets and their usage*
- B.4** The information assets are recorded on an Information Asset Register (IAR) and managed under an Information Asset Management System (IAMS) that identifies Information Asset Owners (IAOs) for each asset who has responsibility for the asset.
- B.5** *A framework for assessing and recording the value of information assets is established*
- B.6** The Information Management Strategy sets out the need to maximise the value of each asset and to manage it appropriately, with all assets recorded in the Information Asset Register (IAR) and assured via the annual Information Assurance Strategy review process (IAS). The value of assets is established by using the Business Impact tables and assessing the Confidentiality, Integrity and Availability of the assets which is then recorded in IAMS. The Senior Information Risk Owner (SIRO) and the IAOs have responsibility for ensuring that information is protected and that its use is maximised.

Principle 2: information is managed

- B.7** *A framework for managing information through the different stages of its lifecycle is established*
- B.8** The IMS sets out the need to identify/gather assets, manage them effectively, re-use them where beneficial, share them where appropriate, ensure that they are adequately protected and that they are disposed of when no longer needed. The IAS process monitors compliance with the various aspects of information management.
- B.9** *The approach to digital continuity is defined*
- B.10** Each IAO is required to examine risks around digital continuity on an annual basis and record this in IAMS. Where issues are identified IAOs work with IT Services to identify solutions.
- B.11** *A framework for information risk assessment and risk management is established*
- B.12** DfT has a robust information risk management regime in place with a board level SIRO and a network of IAOs managing information assets, with regular risk assessments. The framework is reviewed annually and assessed against the Information Assurance Maturity Model (IAMM).
- B.13** *The approach to ensuring legal and regulatory compliance is defined*
- B.14** In addition to the IMS and IAS, specific legal and regulatory compliance issues have a nominated lead within DfT, for example in compliance with FOI, DPA, RPSI and INSPIRE, who is responsible for overseeing departmental compliance in their specific area.
- B.15** *The approach to Information Governance is defined*
- B.16** Information Governance requirements are clearly set out in the IAS. The Department has a clear line of responsibilities through IAO to Senior Information Risk Owner (SIRO) to the Accounting Officer. The governance is supported by expert information and security teams.
- B.17** *A skills framework and/or maturity model is established to develop organisational capabilities and culture for information management*
- B.18** The IAMM and IAS set out the need for and commitment to effective training and support of key staff, notably the IAOs to enable them to manage their assets and also to give the necessary assurance to the SIRO. All staff undertake mandatory information training on an annual basis.

Principle 3: information is fit for purpose

- B.19** *An approach is defined to determining the right quality of information to meet its purpose*
- B.20** Most data is created to meet an immediate operational or management requirement and therefore be deemed as being fit for its immediate purpose. DfT operates a defined Business Case and Value for Money regime that tests the appropriateness of expenditure prior to authorisation. More challenging with the advent of re-use and Open Data is the evaluation of suitability for more than the initial gathering purpose, for example the creation of timetables often needs to envisage the use of the data in real-time systems.
- B.21** *A consistent approach is established to describing, recording and communicating information quality*
- B.22** As above the initial evaluation of quality for the purpose for which the data is gathered is relatively easy, however the need to more fully describe data for re-users with different purposes in mind is more difficult. The use of standard metadata of the type used in data.gov or GEMINI 2.1 for spatial data encourages a more complete assessment of data quality and associated features and is being more widely adopted
- B.23** *Processes and governance are established to monitor and assure information quality*
- B.24** The quality of information and its assurance is part of the IAS process, however as data and information are increasingly shared and re-used the wider re-use community will also form a valuable tool in the assessment of quality and importantly in the identification and feedback of any inaccuracies. In determining the quality of data which can be provided, we will have regard to the costs, benefits and affordability of the different options.
- B.25** *An approach is defined to recording the relationship between information and its supporting technology platform and format*
- B.26** It is normally possible to discover the format and relevant supporting technology by examining the metadata records, however it may be sensible to consider extending the IAR to include records relating to formats and any technological dependencies

Principle 4: information is standardised and linkable

- B.27** *There is a commitment to Open Standards*

- B.28** DfT data and information is normally presented in common format such as XML and CSV. Transport information has conformed to pan-industry standards such as NaPTAN for stops, Transxchange for timetables and SIRI for real-time. These are open and published standards and are also aligned with the CEN Transmodel. Transport networks are referenced to lat/long and OSGR and operate with common identifiers of route sections
- B.29** *Corporate standards are established for the organisation*
- B.30** As set out above, the Department seeks to establish common standards that can operate successfully across the transport industry, across Government and with other key sectors such as ICT, business and social mobility.
- B.31** *A framework for linking information is established*
- B.32** Information is usually linked via core reference data that may be spatial, administrative or transport related. Data should where possible be geo-referenced, have an appropriate administrative (e.g. local authority) identifier and/or have a transport network reference (road number, rail route). These linking identifiers can be used to link the data with other transport or more diverse data and information sets.
- B.33** *A pragmatic approach for migrating to standardised, linkable data is established*
- B.34** The key approach to migration is that this will normally be a matter for consideration at procurement when the requirement can be an incremental cost rather than the potentially expensive refitting of a legacy system. We will also assess the prioritisation of dataset migration based on the use, usefulness and usability of the data in question so that we achieve maximum value for money. In determining the extent of the data migration which is possible, we will have regard to the costs, benefits and affordability of the different options.

Principle 5: information is re-used

- B.35** *Opportunities to proactively offer re-use are identified*
- B.36** The IAS requires that IAOs proactively consider the re-use of all datasets on a continuous basis. The creation of the Transport Transparency Board (TTB) has introduced an additional mechanism to identify areas for re-use and also to challenge instances where this is not being actively pursued

- B.37** *Mechanisms are established to understand and, where possible, overcome the constraints on re-use*
- B.38** Issues around confidentiality and the existence of personal data are exposed via the IAS process. These can be challenged via the TTB and the Department will make active use of the proposed Data Lab facility to test whether via anonymisation and other techniques, data can be re-used or if the danger of mosaic/jigsaw amalgamation of datasets precludes such re-use
- B.39** *An approach is established for promoting information that can be re-used*
- B.40** The IAR sets out all the datasets under DfT ownership and whether these are available for re-use currently. This register is published via data.gov and can be accessed by all potential data re-users. In addition the IAO community within the DfT family and other bodies such as the Transparency Senior Officials Group will assist in identifying and exploiting the potential for greater re-use
- B.41** *An approach is established for discovering information that can be re-used*
- B.42** As above the same mechanisms available to promote data that can be re-used should be effective in discovering relevant datasets for re-use. It is also important that relevant policy makers and service deliverers are aware of the mechanisms so that they can identify the potential resources available.
- B.43** *The approach to managing Reference/Master data is established*
- B.44** Core reference data for transport covers a wide spectrum from definition of services and networks to spatial reference data and business, demographic, land use etc. The Department is engaging in a process of defining agreed definitions in these areas and also liaising with colleagues in the areas outside the direct transport governance.

Principle 6: public information is published

- B.45** *A framework is in place for responding to legal obligations regarding public access to information*
- B.46** DfT has a publication scheme setting out what it is committed to publish, how this will be published and whether the information is free or charged for. There is also published guidance on how to request information

under the Freedom of Information Act and the Environmental Information Regulations.

- B.47** *Going beyond the legal obligations, a framework is in place for proactively categorising information in terms of its relevance and suitability for publication*
- B.48** The TTB is progressively considering the range of DfT family and wider transport industry information assets to identify datasets that can be released and a mechanism and timetable for achieving their release. The minutes and papers of the Board are published to ensure wider transparency. In determining which of the datasets should be released, we will have regard to the costs, benefits and affordability of the different options.
- B.49** *Channels and processes for publishing information are established*
- B.50** Information is published either by the data owner or via a central DfT procured hosting facility. Metadata is also lodged on data.gov to facilitate discovery and encourage re-use. The data is, where possible, made available without restriction in suitable machine-readable format.
- B.51** *A pragmatic migration for publishing data is established*
- B.52** Where it is not possible or prohibitably expensive to publish data currently, due to either technical or contractual blockers, we will adopt the approach of publishing any feasible or affordable data and then considering the wider and deeper publication at the time of renewal or re-procurement

Principle 7: citizens can access information about themselves

- B.53** *A framework is in place for responding to legal obligations regarding citizens' access to information about themselves and how it has been used*
- B.54** DfT publishes an Information Charter that sets out how we will respond to requests for personal information under the Data Protection Act and also outlines the data that we hold, why we hold it and how we use it.
- B.55** *Going beyond the legal obligations, opportunities are identified to proactively make information about citizens available to them by default*

- B.56** In line with the My Data initiative the DfT family is considering how it can widen and increase individual's access to their own personal data whilst maintaining the high levels of security that they can rightly expect.
- B.57** *The approach to discovering information about a person is established*
- B.58** Within the agencies and across the agencies the approach to common identification of a person's records is being evaluated and future approaches are being considered.
- B.59** *A pragmatic migration approach is established for enabling citizens to access information about themselves*
- B.60** As above should it be concluded that it is desirable and secure to improve coordination of a person's records and to simplify access to that person, in a secure manner, then this will be built into future system and business process requirements, primarily at the point of renewal or re-procurement.

Relevant Documents

- B.61** DfT Information Management Strategy – currently an internal DfT document
- B.62** DfT Information Assurance Strategy – currently an internal DfT document
- B.63** DfT Information Asset Register
<http://www.dft.gov.uk/publications/information-asset-register/>
- B.64** DfT Publication Scheme <http://www.dft.gov.uk/publications/dft-publication-scheme/>
- B.65** DfT Accessing Information Guide <http://www.dft.gov.uk/publications/dft-accessing-information/>
- B.66** DfT Information Charter <http://www.dft.gov.uk/publications/information-charter>
- B.67** HMG Information Assurance Maturity Model
<http://www.cesg.gov.uk/policyguidance/IAMM/Pages/index.aspx>

9. Annex C: DfT Transport Sector Transparency Board

Terms of reference and membership

Reporting to:	Theresa Villiers MP
Chaired by:	Steve Gooding
Permanent Members:	Christopher Muttukumar, DfT General Counsel
	Nick Illsley, DfT Transport Direct
	Helen Morris, DfT Agency Liaison
	Tim Stamp, DfT Statistics
	Richard Bruce, DfT Corporate
	Andrew Stott, Public Sector Transparency Board
	Hazel Lee, Cabinet Office
	Jonathan Raper, Open Data Community
	Miles Gibson, No.10
Guest Members:	Transport industry and Local Authority representatives
	Data users
	DfT modal representatives

Aim

- C.1** To be the focal point for the Transparency agenda in the transport sector and to act as an effective advisory and challenge body to ensure that transparency principles are incorporated into the business as usual processes of the Department. To achieve the benefits of transparency for end-users of public services, for public sector professionals and for businesses. To assist the Department and its delivery partners to achieve their wider objectives. To enable growth creation through the release of open transport data and to facilitate exciting new user-focused services and applications.

Scope

- C.2** The Board will steer policy and cultural change within the central Department and its Executive Agencies, and advise and influence as far as possible the Department's delivery partners and private sector relationships.

Responsibilities

- C.3** Ensure that DfT's existing public commitments on transparency in the Business Plan and PM's letter are delivered and evaluate wider Business Plan objectives for further transparency deliverables
- C.4** Take a lead role in assessing and making recommendations on any further data releases and on the scope of data and services that should be included within future DfT Business Plans
- C.5** Lead by example and seek to encourage and influence delivery partners in the transport industry to apply transparency principles in their delivery of public services where possible, by helping them understand the benefits to their business of doing so, and managing the risks.
- C.6** Ensure appropriate data is published by both the central Department and where possible by delivery partners, to enable comparative performance, efficiency and value for money of public services, to enable taxpayers to make informed choices
- C.7** Assess the effectiveness of our open data commitments and to look at issues such as the balance between free and charged for data services, appropriate charging and licensing regimes and the affordability of new commitments
- C.8** Provide an open and balanced forum where Government, public bodies and public service data suppliers and the wider data user community

can work together to embed Transparency throughout the transport sector

- C.9** Feed into and participate in wider cross-Government debate and policy development in this area, particularly in facilitating a better understanding of transport sector relationships and funding complexity, including coordinating the Department's response to the Open Data consultation
- C.10** Ensure all activities in this area are consistent with Better Regulation principles and reducing burdens on individuals and businesses, including acting as an effective gateway process to examine the Department's current and future data collection and holding activities both internally and its demands on delivery partners.

Approach

- C.11** The Sector Board will, over the coming months, examine areas of the transport industry in turn, assessing the issues and developing an action plan on the way forward. The Board will work with data suppliers to identify any blockers or issues that preclude sharing their data and data users to understand the demand side for transport data.
- C.12** The Board will consider the Transparency agenda under four broad headings:
 - The effect on the public purse
 - The imposition of any additional costs and burdens on the wider transport industry including operators and local government
 - The likely impact on end-users of transport services
 - The potential for the development on new, innovative user-facing services and the generation of growth across UK plc
- C.13** The already established Transparency Working Group will take forward some of the actions agreed by the Sector Board and the Chair of the TWG will report progress to the Chair of the Sector Board.
- C.14** The Sector Board will report progress regularly to the Department's Executive Committee/Board and Ministers and the Public Sector Transparency Board.

Success measures

- C.15** Meeting the transparency commitments already made within the proposed timescales

- C.16** Identifying new opportunities and data sets that can form part of this agenda, within the Dept and its delivery partners
- C.17** Championing the adoption of Transparency and Openness across DfT and the wider transport sector
- C.18** Identifying the key datasets that would be useful to the user community and the benefits that will accrue to real end-users of the transport network
- C.19** Balancing opportunity, cost, burdens and innovation in a manner that meets the wider Government objectives of deficit reduction, growth and localism