

Perth & Kinross Council Open Data Strategy

2016-2020



In Partnership with:



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1 **Background**

1.1 **Purpose of this Strategy**

The purpose of this Open Data Strategy is to provide a framework for the development and use of open data in Perth and Kinross in both service and smart city planning. This Strategy presents the background to open data; sets out the principals of open data use by the Council; and outlines how Perth and Kinross Council will implement open data within the Council and in partnership with other organisations.

1.2 **What is Open Data?**

The Open Knowledge Foundation, a non-profit organisation dedicated to the open and transparent sharing of information, uses this definition of open data:

Open data is data that can be freely used, shared and built-on by anyone, anywhere, for any purpose.

The provision of data in open and linked forms is part of a global movement to create more innovative, accountable, efficient and effective government, communities and businesses. Locally, the availability of open data and its use by citizens and communities is also a key part of the Council's Transformation agenda seeking to develop more efficient and effective Council services.

Open data can apply to information from any source and about any topic. Anyone can release their data freely under an open government licence for use by and for the benefit of the public. Any organisation can open information including private businesses, universities, non-government agencies, charities, community groups and individuals.

The common reasons to open up data are:

- **Transparency:** In a well-functioning, democratic society citizens need to know what their government is doing. To do that, they must be able to freely access data and information and to share that information with other citizens.
- **Releasing social and commercial value:** In a digital age, data is a key resource for social and commercial activities. Everything from finding your local post office to building a search engine requires access to data. By opening up data, government can help the creation of economic and social value from it.

- **Participation and engagement:** Most citizens only engage with local government sporadically. By opening up data, citizens are enabled to be much more directly informed and engaged on an ongoing basis.

2 Legislation and Strategy Context

2.1 The Scottish Government Open Data Strategy

[The Open Data Strategy](#) published by the Scottish Government in February 2015 sets out an ambition for making data open and available for others to use and reuse. It sets out a number of national actions which will help to support public sector organisations as they implement their own open data publication plans. The Scottish Government encourages local authorities to have an open data publication plan in place and to publish their public data in a 3 * standard by 2017 (see Appendix A).

2.2 EU INSPIRE (Infrastructure for Spatial Information in the European Community) Directive 2007

At a European level, [the INSPIRE Directive of May 2007](#), establishes an infrastructure for spatial information in Europe. The Directive addresses 34 spatial data themes needed for environmental applications, with key components specified through technical implementing rules.

The Council has been participating in a national initiative, coordinated by The Improvement Service, which aims to develop a collective approach to spatial data sharing in response to INSPIRE.

2.3 Data Protection and Freedom of Information

There are several laws dealing with freedom of, and access to, information and the Scottish Information Commissioner is responsible for enforcing and promoting the following:

- [The Freedom of Information \(Scotland\) Act 2002](#) is an Act of the Scottish Parliament which gives everyone the right to ask for any information held by a Scottish public authority. The Scottish Information Commissioner now lists Open Data as a class of data within Scotland.
- The [Environmental Information \(Scotland\) Regulations 2004](#) (the EIRs) come from a European Directive on access to environmental information. The EIRs give everyone the right to ask for environmental information held by a Scottish public authority (and some other bodies).

- The [INSPIRE \(Scotland\) Regulations 2009](#) comes from the European Directive mentioned above, and create a right to discover and view spatial datasets (e.g. map data) held by Scottish public authorities.

Open data can act in tandem with this legislation to further enhance the Council's commitment to transparency, whilst also complying with existing data protection legislation. Where particular datasets raise potential issues in identifiability or commercial sensitivity, the Council will use case studies from other open data initiatives, along with the guidance of the Data Protection specialists within the Council to manage these risks.

2.4 The Scottish Cities Alliance Smart Cities / ERDF 8th City Programme

Open data is being developed as part of the **Scottish Cities Alliance's (SCA) Smart Cities Scotland** initiative and an associated **European Regional Development Fund (ERDF) 8th City Strategic Intervention**. The cities are also working together to identify common priorities and data sets, although each city will determine its own challenges and needs. A Data Cluster Working Group has been established by the cities and has begun collaborative working on four distinct work packages including data standards; data publishing platform; data analytics and community and capacity building.

2.5 Perth and Kinross Council Transformation Programme 2015-2020

An Open Data Review is one of the phase 1 projects of the Council's Transformation Programme for 2015-20.

Within the context of the Programme, the sharing and open access to datasets using common technical and data standards between council departments, and with other organisations, is seen as a vital part of the Transformation process. By turning data into intelligent and purposeful information and presenting it on an easily accessible Platform, there is the potential to accelerate innovation in service transformation.

In addition to sharing open data, the Open Data Platform will also include the provision for the internal sharing of data which may not necessarily be publicly releasable, but would still benefit from being opened up internally using the same organised, centralised data management principles behind the implementation of open data. A corporate review of data management is in progress within the Council which will assist with this process. The scope of the review includes Data Governance and Leadership, Data Quality, Business Intelligence and Master Data Management principles and techniques.

3 Implementing Open Data in Perth and Kinross

3.1 Open Data Principles

In 2013, the G8, the forum of eight of the world's leading industrialised nations, agreed to encourage open data in government, and established five principles by which this would be accomplished. The Scottish Government's Open Data Strategy published in 2015 is based on these G8 Open Data Principles, as shown in Figure 1 below:

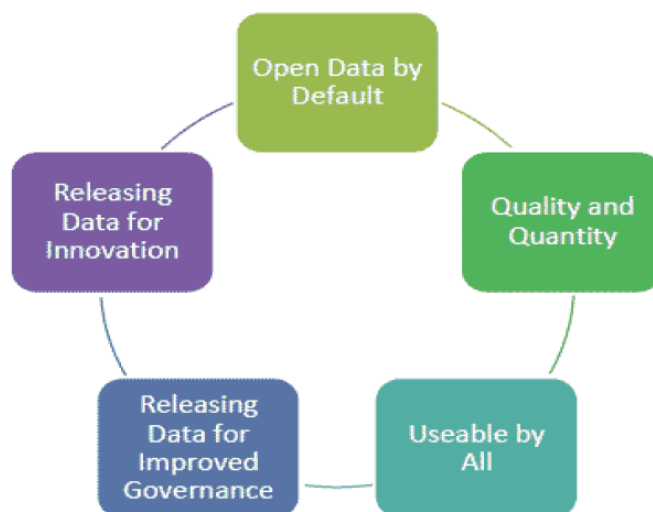


Figure 1: G8 Open Data Principles (Source: [Scottish Government](#))

Perth and Kinross Council endorses these principles as the basis of its own open data development, as follows:

Open Data “by Default”

There will be an assumption that data likely to be useful to the public or other users will be published in open data form by Council services, unless there are exceptional reasons not to and provided:

- The data is **non-personal data and aggregated or anonymised data** which cannot be used to identify individuals.
- The publication of open data should be authorised formally by the relevant data owner and to standards that will be set out by the Council which will be common across all Scottish cities.
- All data will be published under the [UK Open Government Licence v3.0](#).
- The Council will set out a timeframe for the release of data in open form in its Open Data Publication Plan by the end of 2017 as required by the Scottish Government.

Open data is still a relatively new concept and requires **organisational ‘culture change’** towards holding and releasing data. As such, buy-in at all levels from Council services and data owners will be absolutely essential to move towards a culture of ‘open by default’.

Engagement with internal and external data holders will be enabled through workshops and close cooperation with data holders. In addition, the Council will strive to make data on its website available under an open licence and in an open data-compliant format. In terms of staff awareness and training, the Council’s **Learn, Innovate, Grow** initiative will be utilised to inform the wider workforce of the potential benefits of open data.

Data Quality and Quantity

It may take time to prepare high-quality open data and it will therefore be necessary to achieve a balance between timeliness, quality and usability.

- The Council will aim to release good quality data with explanations and caveats to help any re-user understand the provenance (source) and limitations of data. The UK Open Government Licence provides legal protection for the data publisher.
- The Council will set out data quality standards as part of the Open Data Publication Plan
- The Council will **engage with the user community and set up procedures for reporting errors and receiving user feedback**, which will help improve the quality of our data.

Useable by all

All data will be published in formats which will allow easy reuse and redistribution. The Council will:

- Adopt the widely recognised 5 Star rating scheme of the Open Data Institute which provides a mechanism for assessing the maturity of the open data produced. (See Appendix 1).
- Where possible make data available in a 3 Star non-proprietary open format (e.g. Comma Separated Value (CSV) as a minimum).
- In the longer-term, the aim is to deploy datasets **using a commonly recognised set of identifiers called Uniform Resource Identifiers (URIs)** for important data items to allow bookmarking and linking, qualifying as 5 Star linked data under the above mentioned scheme.
- In addition to this, the Council will **provide informative and interactive visualisations** built with data from the platform to ensure that all, regardless of ability, can benefit from open data.

Key to this process is providing high-quality and informative Metadata (descriptive data about the datasets). The Council will aim towards complying with the [Dublin Core standard](#) as an intermediate solution, with an aim to comply with the [DCAT standard](#) for metadata in the longer term. DCAT is particularly suitable for '5-Star' linked data. Categories and tags to aid data discoverability will be added and the platform's data themes will also enable people to explore relevant data based on their interests.

Unless explicitly stated otherwise, datasets on the platform will be published under the [Open Government Licence v3.0](#), the widely adopted licence for UK public sector open data created by The National Archives.



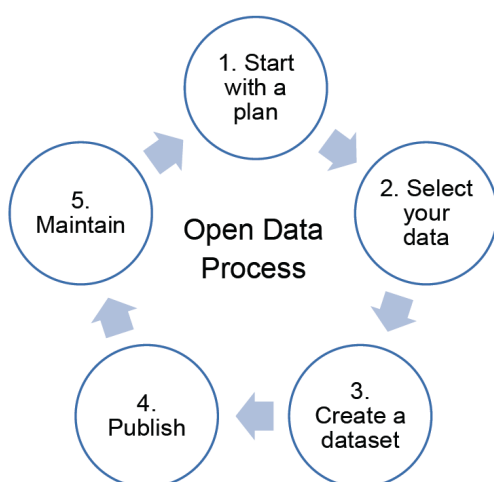
The Open Government Licence v3.0 allows the data user to

- Copy, publish, distribute and transmit the information;
- Adapt the information.
- Exploit the information commercially and non-commercially for example, by combining it with other information, or by including it in a product or application.

Improved Governance

Open data will contribute to improved governance and service delivery in the Council through:

- Encouraging better information sharing and management within and between public sector organisations, **reducing the tendency to 'silo' data in individual teams and services.**
- **Promoting analysis and discussion of the data with the public**, sharing time-consuming analysis for mutual benefit.



To assist with this process, Perth and Kinross will publish an **Open Data Publication Plan** to clarify what datasets will be released and to make any changes or limitations clear to the public. The Plan will be available through the Open Data pages of the Council's website, and will be periodically updated to reflect current and updated data available through the Open Data Platform, as part of a 'cyclical' process of planning, data selection, and publication. (Figure 2)

Figure 2: The 'Cyclical' Open Data Process: (Source: [Scottish Government](#))

- **A network of ‘Open Data Champions’** both inside and outside the Council will promote open data and encourage long-term cooperation on data publication and data quality.
- An **Open Data Publication Guide** will guide services through the process of data publication from selecting datasets to publication and maintenance.

Data for Innovation

Data will be published on the Perth and Kinross Open Data Platform with the specific purpose of encouraging innovative use of the data to help tackle issues faced by Perth and Kinross and the delivery of Council services. Tools including metadata will be provided to help users to access, understand and utilise the data and to foster innovation.

The Council will:

- **Seek to increase open data literacy** and encourage opportunities to allow citizens, academics, partner organisations and businesses to unlock the value of open, linked data
- **Encourage software developers to reuse the data**, generating further economic and social value.
- Aim to foster and encourage a **community of data users** through events such as ‘hackathons’ and continuous engagement, in order to create a sustainable environment for open data in the longer term.

3.2 Working in Partnership

The Council intends that the Open Data Platform should be a source not only for Council data, but also as a place where data from communities and partner organisations can be hosted and presented.

Working closely with our Community Planning partners through the emerging Local Community Planning Partnerships (LCPPs) and the ‘Stories of Place’ associated with them, the Council will:

- **Establish and maintain contact with external stakeholders** from the public, private and voluntary sector. The Council will encourage two-way cooperation by offering greater access to Council data and developing community-generated data.
- **Consult with a wide range of Council services and external partners** to ensure that the full extent of local expertise is being utilised in data selection.

3.3 Review and Monitoring

The availability of datasets on the PKC Open Data Platform will be advertised in the appropriate locations, including HM Government's register of open data at <http://data.gov.uk> and also at <http://www.pkc.gov.uk/>.

The currency and validity of the published data sets on the Open Data pages will be monitored through data governance mechanisms within the Council and in co-operation with the other Scottish cities.

Further details and updates on Perth and Kinross Council's open data work can be found on the Council's webpages for open data.

4 Action Plan

An initial action plan is shown below. It focuses on the development and publication of the Open Data Publication Plan by December 2016 with the aim of publishing all applicable Council data in at least 3* format by December 2017. The ERDF 8th City Open Data Project will deliver several of the key deliverables of the Open Data Strategy including the Open Data Platform, to be procured with the other Scottish cities. A review of progress on the implementation of the Strategy will take place in September of each year to 2020.

Perth and Kinross Council Open Data Strategy Action Plan

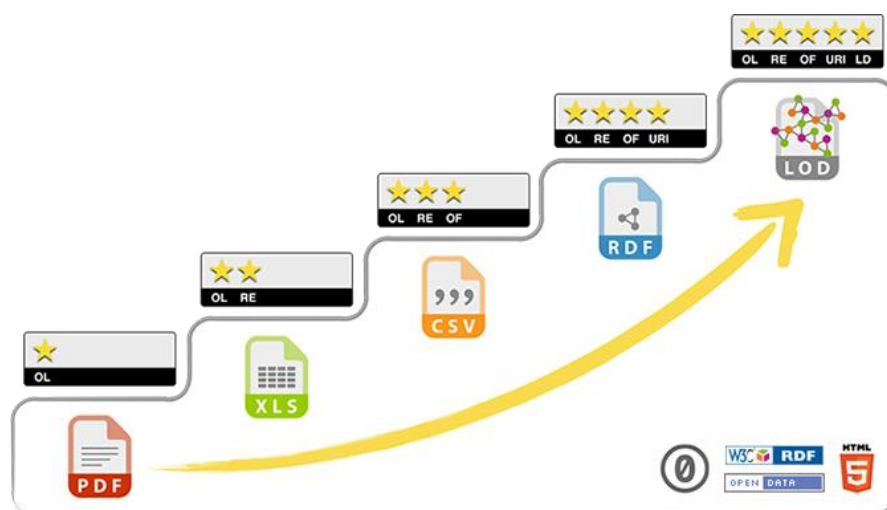
Activity	Milestones	Timescale	Outcomes	Responsibility
Open Data Strategy approval	Draft approved by EOT in June and SP&R Committee September 2016	September 2016	Approved Open Data Strategy to guide corporate work	Open Data Co-ordinator and Project Team
Open Data Publication Plan Approval and Publication	Drafts presented to SMTs during April/May, final drafts Sept/Oct 2016, publication Dec 2016	December 2016	Approved Open Data Publication Plan to guide publication of data sets	Open Data Co-ordinator and Project Team
Implementation of a governance structure and process for publication open data within the Council, including a project group and network of 'Open Data Champions'	Allocation of roles by SMTs in autumn 2016	December 2016	Identified role of 'Open Data Champion' in each service and Open Data Publication Guide for services to use	Open Data Co-ordinator and Project Team
Review of implementation of Open Data Strategy	Appraisal of progress in September annually	September 2017 / 2018 / 2019/ 2020	Assessment of impact and effectiveness of open data on the Council and area	Open Data Co-ordinator and Project Team
Aim to publish all applicable Council data as open data, at least at the 3* format (detailed in Appendix A)	Publication schedule for datasets approved Dec 2016	December 2017	Good range of data sets covering all service areas – data being used for service reform and city planning and management	Open Data Co-ordinator and Project Team/Board
Completion of deliverables linked to ERDF 8 th City Open Data Cluster work packages (Standards; Data Platform; Data Analytics; Capacity Building).	Milestones to be confirmed by cities	December 2018	Common standards and data platform established across cities. Shared approaches to data analytics and capacity building,	Open Data Project Team/"8 th City" ERDF Data Cluster and Programme Management Office

➤ 5 Star Open Data Scheme

[The 5 Star Data Scheme](#) is a widely-recognised method of categorising and ranking datasets by the level to their level of openness, based on factors including how effectively the data can be reused. Reaching three stars is relatively achievable for most bodies, while the four and five stars require additional capacity. Scottish Government's aim is for all bodies to publish to the 3 star standard by Dec 2017.

★	One star is the least open with data available under an open licence online, but not in a machine-readable format (e.g. PDF) limiting its use.
★★	Two star is data available online in a machine-readable , but proprietary format (e.g. Word, Excel/XLS) again limiting use.
★★★	Three star is data available in a machine-readable, non-proprietary format (e.g. CSV, JSON, XML) allowing data manipulation.
★★★★	Four star is where data complies with the Resource Description Framework (RDF) and has a Uniform Resource Identifier (URI), similar to a website's URL, allowing it to be searched for and found.
★★★★★	Five star is the most open data – where data has a URI, and is also Linked Open Data (LOD) with other sources creating context and assisting understanding.

Visualisation of 5-Star Data Scheme (Source: [5stardata.info](#))



Key	
PDF	– Portable Document Format is a widely-used file format but difficult to edit or extract data from.
XLS (Or XLSX)	– The standard Microsoft Excel format for spreadsheets.
CSV	– Comma Separated Values - A format for tabulated data, similar to an XLS, but with a lighter file size and a simpler structure with commas separating the data values. Can be opened and edited in Excel.
XML	– Extensible Markup Language is a file format that is designed to store and display complex data in a way that allows for it to be easily categorised and sorted by computers and humans.
JSON	– A similar format to XML, used for similar purposes, but with a less complicated layout.
RDF	- Resource Description Framework describes things and their relationships with other things.
LOD	– Linked Open Data is structured data so it can be interlinked to establish relationships.
OL = Open License. RE = Machine Readable. OF = Open Format. URI=Uniform Resource Identifier. LD=Linked Data	