

Dumfries and Galloway Council Open Data Strategy

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1 Purpose of the Strategy

This strategy provides a foundation for the development and adoption of open data within Dumfries and Galloway Council ('the Council'). The document presents a background into open data, providing a definition and detailing the different benefits associated with the concept. It outlines how the Council will implement this initiative, including how we will gather, publish, present and govern the data we hold.

Fully recognising the limits placed upon us by the Data Protection and Freedom of Information Acts, we will protect our information but also look to be proactive in releasing data, where appropriate. Open data will aid us in supporting our Council's commitments to build the local economy, provide the best start in life for all our children, protect our most vulnerable citizens and to ensure we are an inclusive organisation.

The programme will comply with European legislation and the UK and Scottish Governments policies on publishing public data, by identifying, managing and making available non-personal and non-commercially sensitive data sets which are appropriate for anyone to access and use.

2 Open Data Definition

Open data is non-personal and non-commercially sensitive data, which is accessible to anyone, via the internet, free of restriction on use and, in a machine-readable format.

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

Data must be open legally, through being clearly licensed in a way that permits commercial and non-commercial use and re-use without restrictions.

Our Vision

'Transparency is key, by releasing the data that aids us in decision making and helps us deliver our services, we will allow the public to become more engaged, empowered and influence how the Council operates.'

To achieve this, we have identified four objectives, that will play a key role in the successful development and use of open data. The following objectives have been developed based on the Council's priorities, our own industries best practice and current legislation.

Objective 1: Become an open and transparent Council

Objective 2: Public engagement and empowerment

Objective 3: Share high quality information with third parties

Objective 4: Facilitate and support innovation and economic growth

Open Data's Usefulness and It's Main Consumers

Any data that is non-personal and non-sensitive in nature, can and should be published. As a result, there are a wide range of data sets that we can and should allow third parties, our local partners and the public to use and analyse.

Traditionally we have provided information to the public by publishing reports, through our website and by utilising tools such as 'find my nearest'. These methods allow the public to quickly find information about the Council, their local communities and the services available to them. However, with the use of open data we can publish the underlining data sets that are used to provide this information.

As a Council we need to understand that there will initially be a niche group of stakeholders, that will have an interest in the data we publish. As we are a local authority, our residents will be keen to know how we are performing and understand what evidence we have used, to make our decisions.

However, we may even find that our citizens are using this information for research or entrepreneurial purposes. By publishing the data we hold we are allowing the public to make more informed decisions. Decisions that could, for example, mean the success or failure of a new business venture.

Our Position on Open Data

The Council has developed a detailed Information Management Strategy and Records Management Framework. This Framework provides a clear description of the best practices we will use and highlights the key processes, that have been implemented to ensure the data we hold, is managed effectively.

By building upon our foundation of partnership working with Community Planning Partners and third parties, the open data project will develop innovative ways to identify and publish datasets. In doing so, we will ensure our publication plan is in line with our licencing and legal obligations.

However, we first need to promote open data internally, educate our employees and ensure they have the confidence to know what data can and should be publicly shared. We also need to ensure that they take responsibility for the accuracy, completeness and currency (how often it's updated) of any data sets they publish.

The open data initiative will develop the necessary resource to educate and guide staff in delivering our Council's ambitious open data initiative and look for more intuitive way to produce data in 5-star formats.

3 Benefits of Data Open

The list below summarises some of the common reasons to 'open up' our data and the benefits associated with it:

Transparency

The public have a right to know what their local authority is doing. Whilst not replacing the need for Freedom of Information (FOI) requests, open data can change the nature or reduce the number of FOI requests due to the widespread availability of the data.

Efficiency

By having data kept in one single location (our USMART portal). We will see a reduction in 'data silos' where departments keep information to themselves. By sharing information across the Council, the chances of duplicate data sets are reduced, as is the time taken to request and receive information.

Social and economic value

Data is very important for social and commercial actions. By 'opening up' data, the Council can increase the creation of economic and social value from it. It is reported that data driven innovation has an Economic Value of £20bn for the Scottish Economy and around £1bn in savings for Local Authorities.

Improved public services

Making data more open allows communities and individuals to gain a better understanding of Council services, know their own community and contribute to improving future services. EU studies have recognised that people are most interested in accessing information about their local area. This initiative can also encourage those delivering public services, to make better use of data themselves.

Engagement

Most citizens tend to engage with local government occasionally. By 'opening up' data, citizens can stay more up-to-date and understand local government spending and the reasons for doing so. Open data can allow community groups to access information, that can be used when applying for funding or to raise awareness for a specific cause.

4 Our Open Data Objectives

In order for the open data initiative to be successful and for us to realise the full benefits of it, we need to achieve the following objectives:

Objective 1: Become an open and transparent Council

The more up to date data we make publicly available, the greater transparency we can offer our communities. As a Council we understand that to make the best possible decisions we need to utilise the data we hold. Whilst the public may not always agree with the decisions we have made, they have a greater chance of understanding why we have made them, if they have access to the data used and our conclusions from it.

Objective 2: Public engagement and empowerment

We can work together with the public to analyse our data. In doing so, questions, comments and feedback can be gathered that will allow us to improve our data quality and prioritise which data sets we publish.

Objective 3: Share high quality information with third parties

At times there could be data sets that we can't share publicly but we can share with our local partners.

As a Council we are often asked for information by the Third Sector and NHS. There can be delays in providing this information as we must gather the necessary data and then present it in a format that ensures data protection laws are followed. However, we can establish greater links with these partners, understand what data they need, when they need it and at what granularity it should be (high-level aggregations or low-level records). We can then prepare our data and make it available for our partners to access through a secure portal.

Objective 4: Facilitate and support innovation and economic growth

Open data can act as a motivator for economic growth and innovation. Information is essential for businesses to survive. If the public has access to our data about the local economy and our regions demographics they can make smarter, more proactive decisions. Not only could the data we publish help existing businesses, but it can also influence potential new start-ups.

5 Principles of Open Data

The Scottish Government Open Data Strategy 2015 adopted the G8 Data Principles to encourage open data in the public sector.

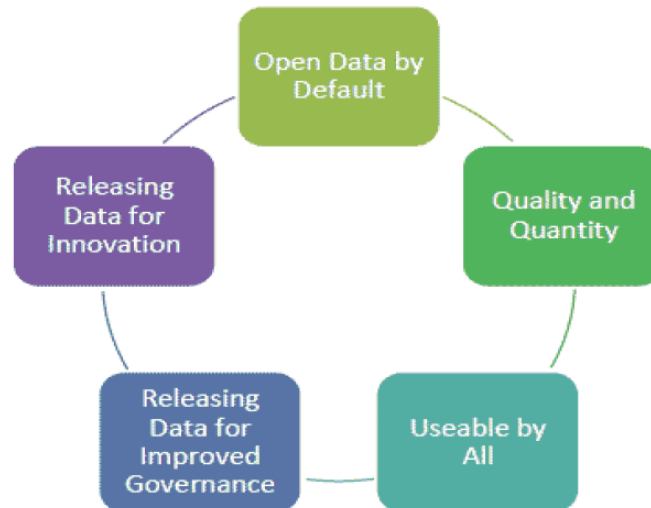


Figure 1: G8 Open Data Principles (Source: [Scottish Government](#))

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 that:

- The data is non-personal, aggregated or anonymised and 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
- The Council will set out a timeframe for the release of data in open form in its Open Data Publication Plan detailing what will be published, how frequently it will be updated, the format it will be published in and the status of the data

Open data is still a new concept and requires support from various Council departments to achieve its goals. As such, buy-in at all levels from Council services and data owners will be vital to move towards a culture of 'open by default'. Engagement will be supported through ongoing communications, workshops and training.

Quality and Quantity

It may take time to prepare high-quality open data and so it is important to achieve a balance between timeliness, quality and usability.

- The Council will aim to release good quality data with descriptions to help any re-user understand the source and limitations of data
- 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 error reporting procedures and receiving user feedback, which will help improve the quality of data

Usable by All

All data will be published in a format which allows easy reuse and redistribution. The Council will:

- Adopt the widely recognised 5 Star rating scheme of the Open Data Institute (see Appendix 3) which provides a device for judging the openness of the open data produced
- Where possible, make data available in a 3 Star non-commercial open format (e.g. Comma Separated Value (CSV) as a minimum)
- In the longer-term, the aim is to set up datasets using a commonly recognised set of identifiers called Uniform Resource Identifiers (URIs). This would upgrade our data sets to the highest possible ranking as mentioned in the above scheme

Releasing Data for 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 keep data within individual teams and services
- Promoting analysis and discussion of the data with the public; sharing time-consuming analysis for mutual benefit

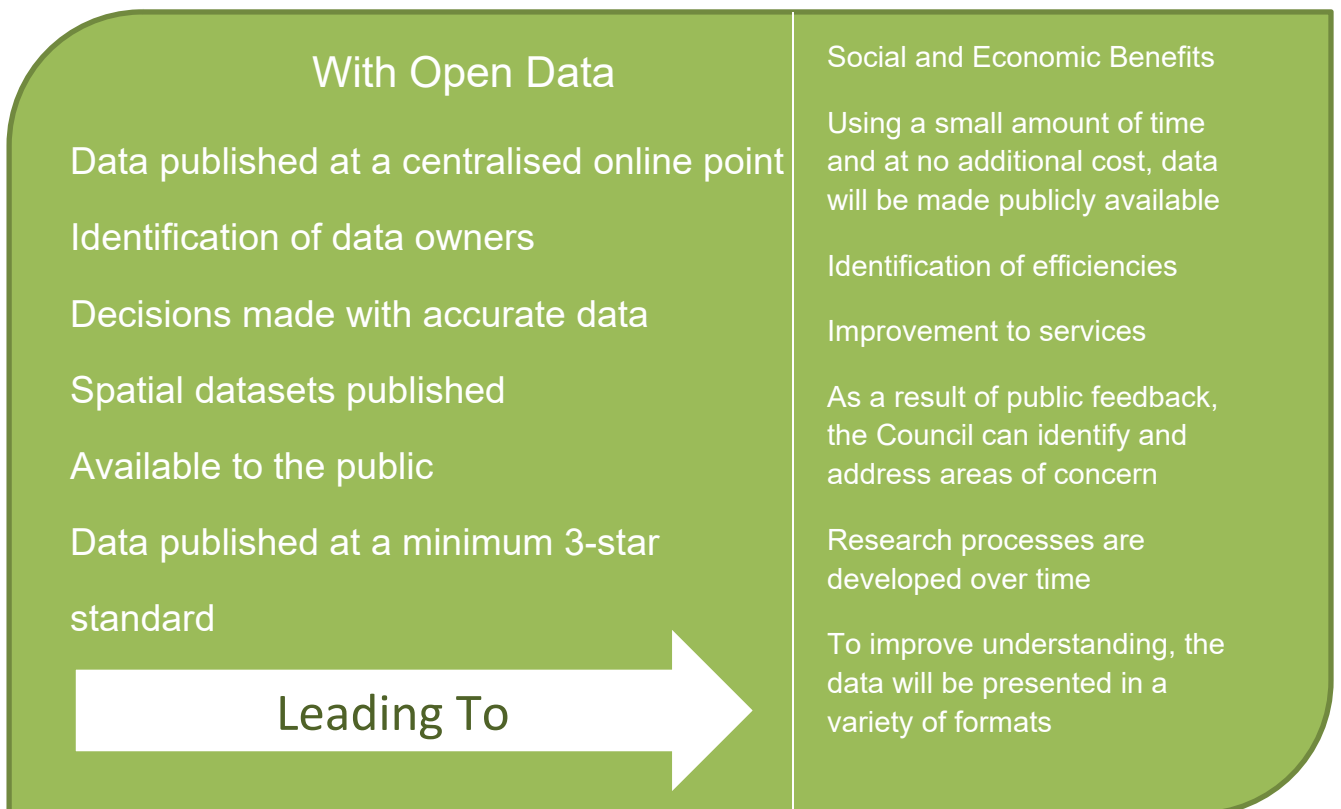
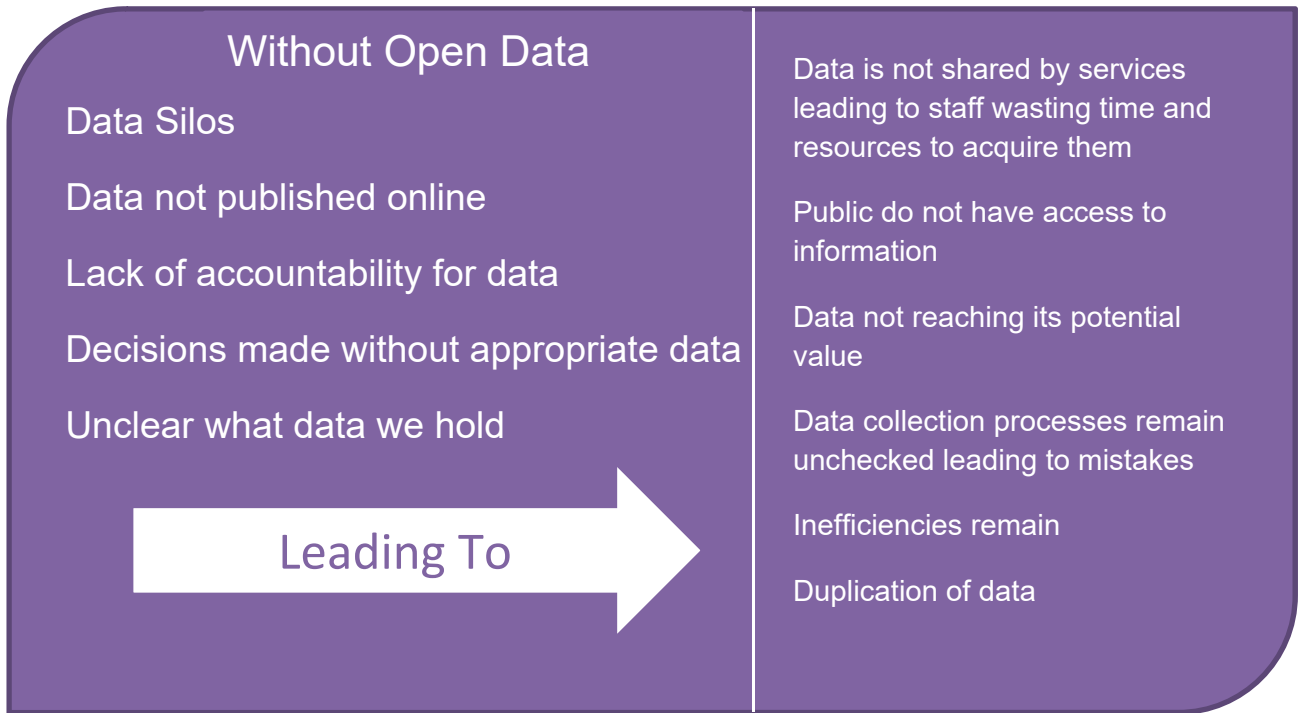
To assist with this process, the Council will publish an Open Data Publication Plan to clarify what datasets will be released and to make any changes or limitations clear to the public. The Council's Publication Plan will be available on the Council's website, and will be updated, to reflect the data available on the Open Data Platform.

- An Open Data Toolkit will be used to aid staff through the process of data publication (from selecting datasets to publishing and maintaining them)

Releasing Data for Innovation

Data will be published by the Council with the specific purpose of encouraging users to help us tackle issues facing our region and the delivery of Council services. Tools including metadata, will be provided to help users access, understand and utilise the data available.

6 Why is Open Data Important?



7 Challenges and Opportunities

Whilst the open data initiative has a greater deal of potential and offers us various opportunities, there are challenges we will need to address:

- **Publishing sensitive information** - One of the core principles of open data is that the data published is not personal and does not affect the commercial interests of the organisation. Despite the non-personal aspect being a central part of the open data process, mistakes can occur when there is complacency and a need to publish as much data as possible. It is imperative that we ensure there are stringent editorial standards in place when it comes to publishing data, as well as educating departments about what qualifies as open data. By ensuring that everyone understands their role in this process and that sufficient checks are in place, individual's data can be protected
- **Data quality** - It is important to ensure that the data published is accurate and easy to understand. Data that is factually wrong could lead to incorrect decisions being made, resulting in a wastage of our valuable resources. Additionally, if the data is presented poorly, then it could be misinterpreted by the public. These issues can be addressed through the data audit, where each dataset can be evaluated and approved for publishing. If necessary, direction can be given to improve the datasets and bring them in line with our publication standard. In addition, the creation of clear metadata is essential for describing the data, as well as pointing out any potential flaws
- **Using our partner's data** – Whilst we want to become more proactive and share our data with our partners. There is also an opportunity for us to capitalise on the benefits involved in using their data sets. In 2015 we created the Persons at Risk Database (which won several public service awards) using data from the NHS. There was an initial challenge in setting up the Data Sharing Agreement (this information could not become publicly available because of its sensitive nature). However once this was in place, we were able to combine their data with our own and create a solution that has helped save lives. Because of the success of this project, we would look to put in place further information sharing agreements or have access to their non-sensitive data on a frequent basis
- **Better understand our communities and the Services they need** – As an organisation we gather data about our citizens to ensure they are getting the correct levels of care and advice. By using open data from other organisations, we can create a more detailed picture of our local communities, and hopefully, better understand and predict their needs

8 Other Local Authorities and Agencies

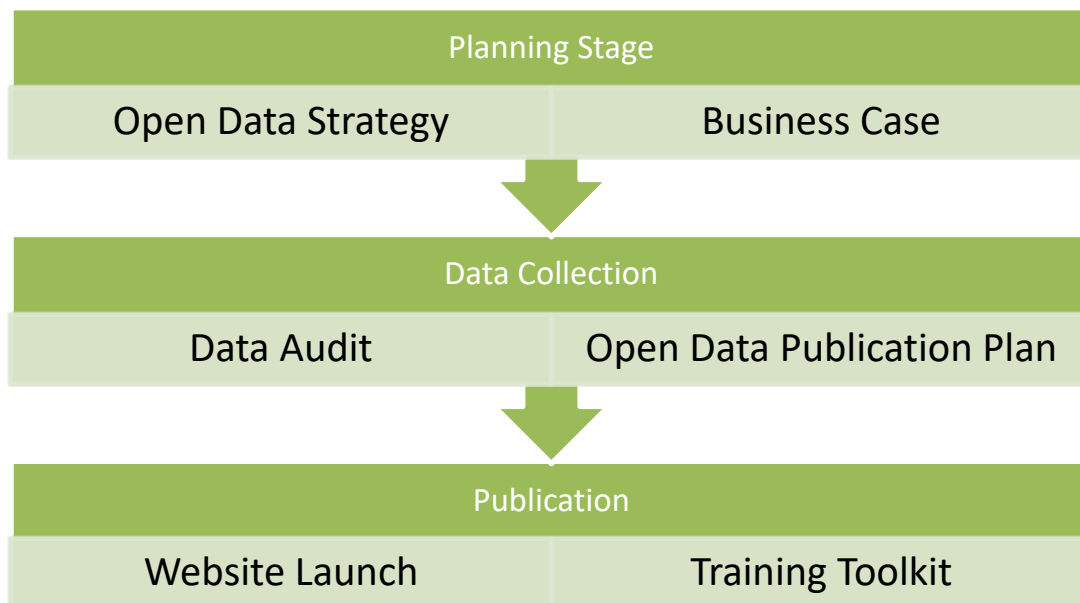
As an organisation, we will look to develop existing relationships with various partners such as NHS Dumfries and Galloway to gain a further understanding of their processes for open data collection. Whilst we aren't currently looking for data from external bodies, we are open to the possibility as our capability improves further down the line.

We will utilise the support available from agencies such as the Scottish Government, Urban Tide and other local authorities to enable staff to proactively publish open data and pass on the knowledge and skills gained to others.

The Council are already publishing data via the Improvement Service's Spatial Hub and through our Open Data Portal, USMART.

9 Action Plan

An initial action plan is shown below:



Data Audit

The first stage of the Council's open data process, following the publication of this strategy, is to form a data audit to identify what data the Council holds which could be released as open data. The data gathered, will be used to inform the Open Data Publication Plan.

This will require the cooperation of Heads of Service, Business Managers and data custodians to be proactive in identifying potential datasets and to plan out how frequently data will be updated and maintained. Each department would have an input in deciding which datasets will be initially published, depending on the value of datasets. Additionally, the Geographic Information System (GIS) team will be needed to assist in identifying the data custodians when required.

Open Data Publication Plan

This plan will be published on the external Council website to inform the public about what data the Council holds and intends to release as open data, as informed by the data audit.

Heads of Service and Business Managers will be required to assist with the prioritisation of datasets for publication. Colleagues from the Information Management Unit will also be utilised to ensure that we are meeting legislative requirements.

Open Data Platform Publication

The Council will publish its open data, in line with the publication plan, through our Open Data Portal on the USMART platform. We will also create an open data page on our external (public) website, this will list the all the data sets, that have been released.

Open Data Toolkit

We will create a resource for Council services and staff to access guidance and support on open data and its publication. It will be available on the Council Intranet providing information on how to identify open data, advice on maintaining data quality and how to publish open data via the Open Data Portal.

Open Data Training

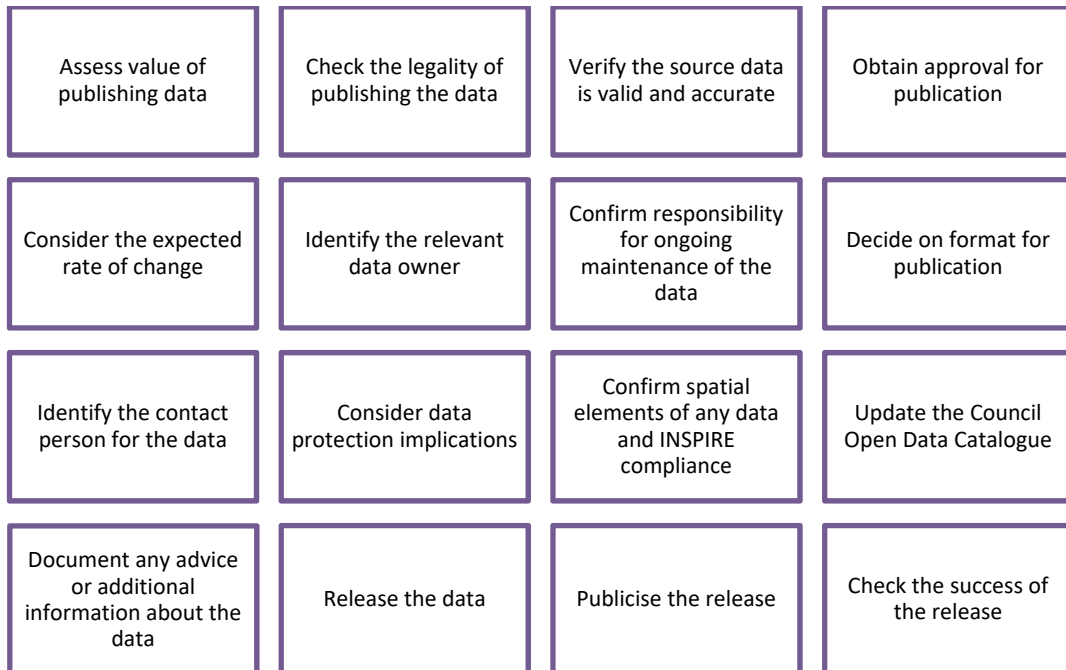
Throughout the process, training on open data will be offered to relevant Council employees. These workshops will help to give staff a sound knowledge of open data along with a clear understanding of their role and responsibilities in the open data process.

10 Publishing Standards

The Council will seek to publish data as CSV where appropriate, and when data is already in a GIS format to publish in a GeoJSON or ESRI Shapefile ensuring that we comply with the INSPIRE and Ordnance Survey guidelines. Furthermore, we will work towards publishing all data in at least a 3-star standard. Over time, as we develop, we will look to publish data in a higher standard where appropriate and possible.

11 Publication Process

Before any open data is ready for publication a robust set of processes require to take place:



The quality of the Council's pending and published open data sets will be reviewed regularly as the approach to open data develops. Thought should be given to open data publication needs when developing new data sets or purchasing new systems.

Metadata

A key element of open data is metadata (data that describes data). Metadata is important to assist in the discovery of data, and to ensure that the data is properly understood and used.

Metadata produced by the Council will include the following information, as per the Inspire (Scotland) 2009:

- The quality and validity of that data set or data service;
- The person responsible for the establishment, management, maintenance and distribution of that data set or data service;
- Any limitations on public access to that data set or data service, and the reasons for such limitations;
- Any conditions applying to access to, and use of, that data set or data service;
- Any charges payable in relation to access to, and use of, that data set or data service.

Risk Management

Throughout this project, there will be various risks that could affect its success. We will establish a risk management strategy which will give us a clear framework for handling potential risks and judge risks by the probability of them occurring. Here are some potential risks along with some detail about how we aim to prevent them from become a major issue.

- **Lack of departmental awareness** - It is vitally important to gain buy-in and cooperation from the various departments in the Council. Without datasets to publish, there can be no website. A failure to do so can happen through a lack of awareness in open data or unease in publishing information that has previously been kept private. To prevent such a situation, a constant dialogue is required across the Council from the Open Data Team to departmental contacts. We will provide ongoing training and awareness for staff to explain what open data is and the benefits of creating a culture of open data to alleviate the concerns that some staff may have about publishing data.
- **Absence of data consumers** - Finally, it is important to publish datasets that are of use to the public. Publishing datasets that are not relevant to the concerns of the public is a waste of time and resources. It is important to find out what the public want to know about. This comes from seeing which areas there are high amounts of FOI requests as well as engaging with the public to identify, demand and prioritise datasets.

Updating Data

The availability of datasets on the Council's Open Data Portal will be promoted on the Council's external website and in other appropriate locations. The currency and validity of the published data sets will be monitored through data governance mechanisms within the Council.

12 Governance

There are a range of inter-dependent activities and projects which will or are impacting on the effectiveness of information management within the Council. The Council, its reputation and the security of the information and data we hold are all significant risk factors and the effectiveness of our processes and activities should be scrutinised and coordinated.

- **Information Management Group** – This group oversees the development of information management and data protection measures and processes within the Council; assures the quality of relevant processes; considers information sharing requests and associated protocols; and ensures learning and action is identified and progressed for all Council services.

The Group provides oversight of the effectiveness of relevant information management processes, plans and projects, including open data.

- **Corporate Services Programme Executive (CPSE)** - The CSPE ensures that effective programme and project management arrangements are in place across all Services through adoption and deployment of the Council's corporate guidance. They are also responsible for scrutinising the progress and delivery, of any agreed programmes and projects.
- **Business Management Group** - The Business Management Group provides the operational lead on information management. The Business Managers act on the behalf of their Directorate to improve the use, distribution and quality of their data.

Appendix 1 - Legislative and Strategic Context

Scottish Government Open Data Strategy	The Open Data Strategy published by the Scottish Government in 2015 set out a goal for making data open and available for others to use and reuse. It sets out several national actions to support public sector organisations as they implement their own open data plans.
The Freedom of Information (Scotland) Act (FOISA) 2002	Under this Act, individuals are entitled to be given access to information held by a public body if they request it (subject to certain conditions).
The Environmental Information (Scotland) Regulations 2004	Under these regulations every Scottish public authority has the duty to make environmental information available on request in alignment with FOISA.
INSPIRE (Scotland) Regulations 2009	Based on EU INSPIRE (Infrastructure for Spatial Information in the European Community), a directive that seeks to create a European network of spatial information.
Re-use of Public Sector Information Regulations 2015	Encourages publication of data for uses other than its initial purpose. Requires organisations to: maintain an information asset register, provide quick responses to requests for re-use and ensure the cost of this process is kept to a minimum.
Scotland's Digital Future: Delivery of Public Services Strategy 2012	This strategy sets several objectives for the effective use and management of public sector data to improve service delivery and promote economic growth.
A Digital Strategy for Scotland 2016	The value of public data is recognised along with the actions taken to enable change and innovation across the public, private and research sectors. It focuses on the use of data, increasing its accessibility and building greater awareness of its usefulness.

Appendix 2 – Licensing

Unless otherwise indicated, the Council’s open data will be published under the Open Government License v.03 (OGL) for public sector information, Creative Commons Attribution Share-Alike Licence and OS INSPIRE End User Licence. The OGL “the Licensor”, grants a worldwide, royalty-free, perpetual, nonexclusive licence to use the information subject to the conditions below. The data may be:

- Copied, published, distributed and transmitted;
- Adapted;
- Exploited commercially and non-commercially for example, by combining it with other information, or by including it in another product or application.

The Council will acknowledge the source of the information including or linking to any attribution statement specified by the information provider(s) and, where possible, provide a link to this licence. If the information provider does not provide a specific attribution statement, you must use the following:

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This licence does not cover:

- Personal data in the information;
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- Departmental or public-sector organisation logos, crests and the Royal Arms except where they form an integral part of a document or dataset;
- Military insignia;
- Third party rights the Information Provider is not authorised to license;
- Other intellectual property rights, including patents, trademarks, and design rights;
- Identity documents such as the British Passport.

The Creative Commons Attribution Share-Alike license allows re-distribution and re-use of a licensed work on the conditions that the creator is appropriately credited and that any derivative work is made available under “the same, similar or a compatible license”.

Spatial data is currently published under an OS INSPIRE End User Licence (<https://www.ordnancesurvey.co.uk/business-and-government/public-sector/mapping-agreements/inspire-licence.html>). This license restricts the use of data to personal, non-commercial use only.

Appendix 3 - The 'five-star' Schema

★	Data available online with open license permitting re-use. Examples – Tables and charts in PDF document or scanned images
★★	Data available online in a machine-readable format, with open license permitting re-use. Examples – Excel tables and charts
★★★	Data is available online, in non-proprietary machine-readable format, with open license permitting re-use. Examples – Comma Separated Values (CSV) Extensible Mark-up Language (XML)
★★★★	Data is available online, in non-proprietary machine-readable format, with open license permitting re-use. Data is described in a standard way and uses unique reference indicators, so that people can point to your data.
★★★★★	Data is available online, in non-proprietary machine-readable format, with open license permitting re-use. Your data uses unique references and links to other data.

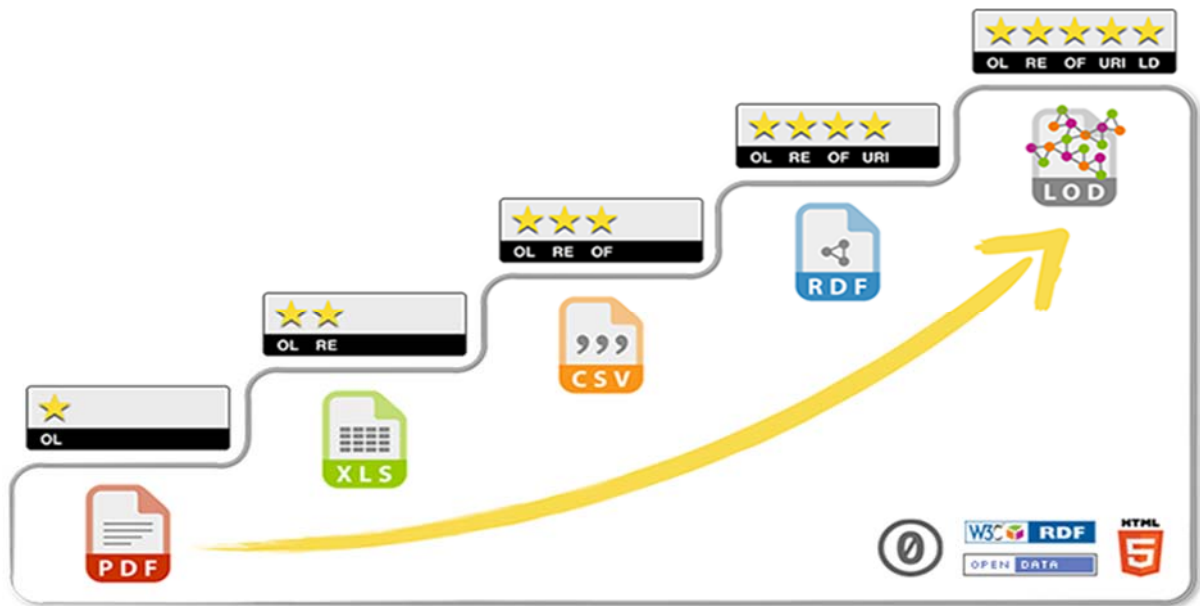


Figure 2: 5* Open Data (Source: <http://5stardata.info/en/>)