

Open Data Strategy

2017 – 2022

Government Reform Unit

Department of Public
Expenditure and Reform

July 2017



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Ministerial Foreword



I welcome the publication of this Open Data Strategy 2017 - 2022. Openness and transparency is a key government priority and I believe that opening up government data will empower citizens, foster innovation and reform public services. Since the instigation of the Open Data Initiative in 2014 over 5,200 datasets have been linked to our national Open Data portal 'data.gov.ie' in areas such as transport, health, education, crime and the environment. People can now freely view, download and use crime statistics, house prices, real-time travel information and health statistics to name just a few.

This Strategy will build on the substantial achievements made in implementing the Open Data Initiative to date. It provides a framework for data to be used to ensure that public services are delivered in a more effective and efficient manner and in a transparent and accountable way. There are a number of examples in the Strategy which highlight uses, benefits and savings that have been delivered by Open Data.

Two core objectives of the Strategy are the publication of high value government data in open format, making it publicly available and freely reusable; and engaging with a broad community of stakeholders to promote use of the data for the benefit of all sectors of the economy. The necessary actions to achieve the objectives are set out in an Implementation Plan with specific timelines for delivery.

I would encourage all public bodies to fully engage in the process of opening up this valuable resource so that it can be used to deliver the vision for Ireland to develop as a country where the economic, social and democratic opportunities and benefits of Open Data are recognised and achieved by all stakeholders. I believe that implementation of this Strategy under the leadership of the Open Data Governance Board will deliver significant opportunities for Ireland over the next 5 years and beyond.



Patrick O'Donovan TD

Minister of State with responsibility for Public Procurement, Open Government and eGovernment

Mission and Vision



Open Data Mission

Our Open Data mission is to encourage and drive the uptake and use of Open Data and in doing so add value to the economy by increasing transparency, stimulating new business applications, building trust in Government and improving the lives of citizens by delivering better services.

This will be achieved by:

- Encouraging the release of all appropriate high value government data as Open Data by default
- Building a value driven economy by making it publicly available and freely reusable ensuring where possible a return on investment for the State.
- Engaging with a broad community of stakeholders to promote and encourage the use of Open Data



Open Data Vision

The vision is for Ireland to be a leader in the use of Open Data and to create an environment where the economic, social and democratic benefits of Open Data are recognised and realised.

Opening up Government data provides new opportunities for research, innovation, engagement and greater efficiency for all sectors of the economy with the potential to generate business opportunities, stimulate economic growth, and contribute to Open Government. The aim is to put an ecosystem in place to enable the potential of Open Data to be exploited and to develop niche areas for Ireland to develop core competencies and be a leader in Open Data.

Summary Overview

The concept of Open Data is about making data held by public bodies available and easily accessible online for reuse and redistribution. Published Open Data will not impact on the fundamental right to the protection of confidential personal and commercial data, and in these cases will not include any information that could allow an individual entity (person or business) to be identified.

There are drivers for Open Data at international, European, national and local levels. Ireland's Open Data Initiative is aligned with key Government priorities such as the [ICT Strategy](#), the [Public Service Reform programme](#) and the [Civil Service Renewal Plan](#) which increase the efficiency and effectiveness of the Public Service. It is also aligned with the [Open Government Partnership Action Plan](#), the proposed National Data Infrastructure and the [Re-Use of Public Service Information \(PSI\) Directive and Regulations](#). Data released under PSI without conditions is deemed the equivalent to being released under the Open Data licence. Open Data also complements the Publication Scheme requirement under the Freedom of Information Act 2014 which promotes wider publication of information as a matter of routine.

This *Open Data Strategy 2017-2022* will build on achievements since the launch of the Open Data Initiative in 2014. The Strategy sets out seven strategic themes which will guide the Open Data Initiative over the lifetime of the Strategy. These

include: broaden the range of public bodies actively engaged in the Open Data Initiative; improve the quality, quantity and range of datasets available and improve the range of services available on the national [Open Data portal](#); continued engagement with stakeholders to encourage the use of Open

Data; support and encourage various groups of Open Data users including public service bodies; evaluate the impacts, benefits and risks of the Initiative and ensure that effective governance structures are in place to implement the Strategy. The necessary actions to achieve these objectives are set out in an Implementation Plan which specifies the responsible body for each action and expected timeframe for delivery.

This Strategy is supported by the Open Data [Technical Framework](#) and [Foundation Document for the development of an Open Data Strategy](#) published in 2015. The focus will be on data which is not personal or commercially sensitive. A key output to date of the Open Data Initiative is the national [Open Data portal](#) which provides access to official non-

personal government data in open format. The portal was originally launched in July 2014 and has been significantly enhanced since then. By end Q2 2017, the portal linked to some 5,200 datasets from 96 publishers and recent enhancements include visualisations, a 'suggest a dataset' function and a 'showcase' function where developers can showcase apps, websites etc. created using data from the portal.

Implementation of this Strategy will be overseen by the Open Data Governance Board supported by the Public Bodies Working Group and the Open Data Unit in the Department of Public Expenditure & Reform. An Open Data Forum will provide advice and feedback to the Open Data Governance Board.

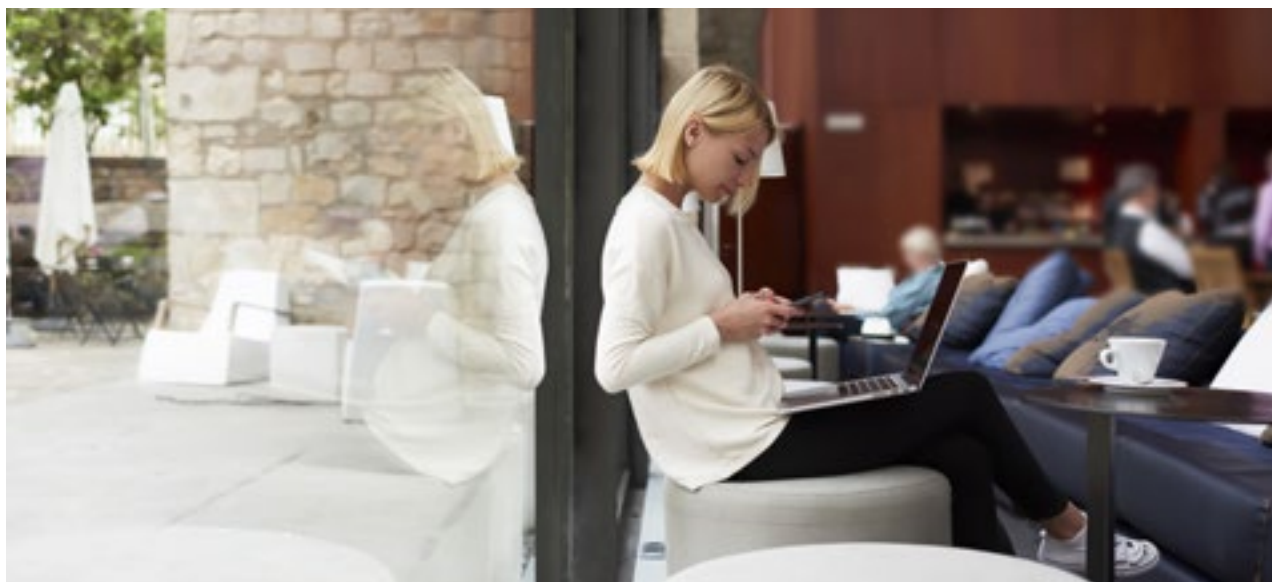


Benefits and Use of Open Data

Open Data has been identified as a fundamental resource for governments, business and civil society. The positive impacts of Open Data are wide ranging and cover political, social and economic spheres. These can range from improving transparency and efficiency of Government, potential for business innovation and a vast array of social and personal benefits.

In terms of political benefits, the release of increased amounts of governmental Open Data allows for greater transparency and trust in government as well as potential to increase efficiencies through better data governance. Improvements in policy making are possible by using Open Data to enhance evidence-based decision making. Open census data provides detailed information on demographic and socioeconomic trends and helps government to guide delivery of services.

In terms of economic benefits, studies have indicated that there is huge economic potential for Open Data. In 2013, McKinsey estimated a global market powered by Open Data from all sectors would create an additional \$3tn to \$5tn a year¹. Between 2016 and 2020 the cumulative direct market size for the EU 28+ is estimated at €325bn with some 25,000 jobs directly related to Open Data being created.² For Ireland this direct market size is estimated at



€966m and potential cost savings on government expenditure are estimated at €20m with an estimate of around 1,000 Open Data related jobs.

This Strategy recognises the potential for business impact in three key areas; business innovation, business creation and business efficiency. Broader and more rapid access to data will make it easier for researchers and businesses to build on Government research. This may boost innovation capacity in fields like pharmaceuticals and renewables. Opportunities may be created for Open Data inspired products or services to add value to the data generated by public bodies. Businesses and public bodies could benefit from Open Data by gaining more precise

and complete insights into customer preferences and needs, thus becoming more efficient in tackling those needs and at the same time contributing to smart growth.

Social and personal benefits can vary from the creation of Smart Cities to something as simple as improved journey times and passenger convenience via the use of real-time passenger information for public transport or mapping applications.

Some examples of the use and re-use of Open Data in Ireland and elsewhere are included overleaf.

¹ [McKinsey, 2013](#)

² www.europeandataportal.eu/sites/default/files/edp_creating_value_through_open_data_0.pdf

Benefits and Use of Open Data

Dublin Dashboard

The [Dublin Dashboard](#) is an interactive website and portal that provides citizens, public servants, and companies with real-time information, time-series indicator data, and interactive maps about all aspects of Dublin city. It is free to use and facilitates for example: citizens looking for information about current traffic conditions or parking spaces; companies wanting to access information about an area or the underlying data; or public servants interested in formulating policy. Users can examine how Dublin is performing on different metrics and compared to other cities and regions; see how local authorities spend their budget; view what is happening with transport and the environment in real-time; interact with maps of the census, crime, live register, companies, housing, and planning; find close-by city services or report issues in their area. Users can also download data to do their own analysis or build apps.



All-Ireland Research Observatory

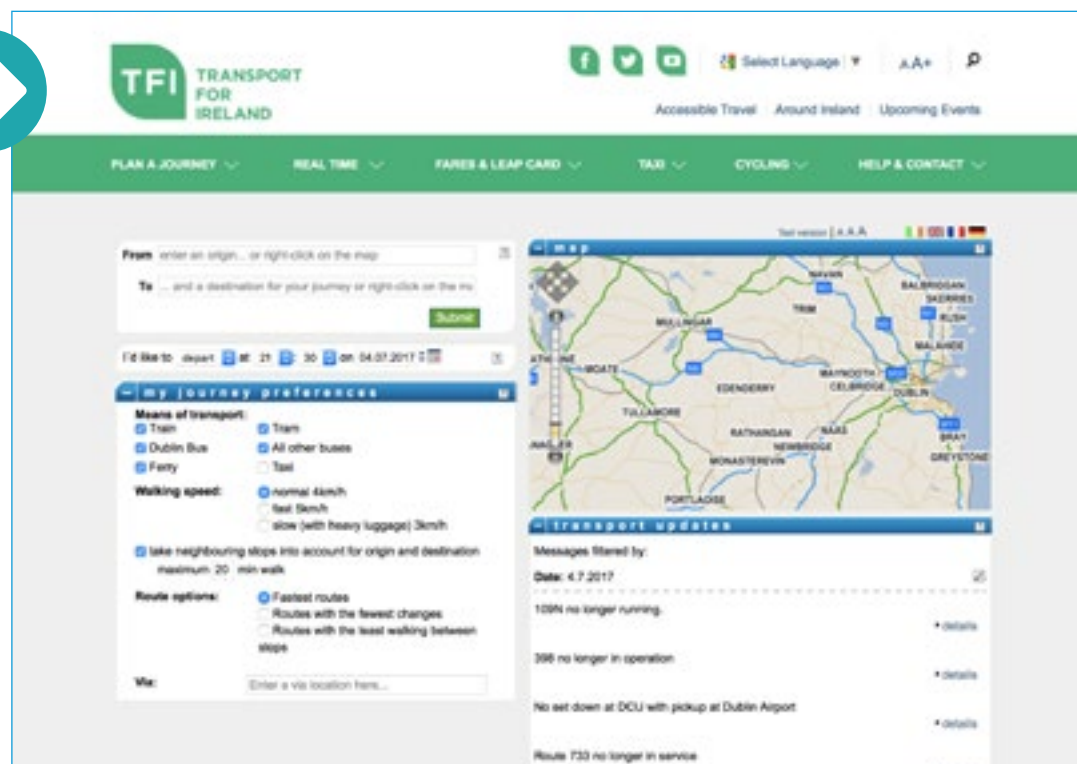
The [All-Ireland Research Observatory \(AIRO\)](#) provides mapping resources as public good information tools aimed at improving evidence informed planning in Ireland. The various modules are designed to provide support and assistance in understanding the dynamics of local areas, counties, regions and the cross-border area of Ireland. Census mapping forms a significant part of this work. AIRO mapping tools are now regularly used to support key policy development work such as County Development Plans (CDPs) and Local Economic and Community Plans (LECPs) in local authorities across Ireland. Recent collaborations between AIRO and statistical agencies in both the Republic of Ireland and Northern Ireland have also developed a number of cross-border evidence informed planning tools.

Benefits and Use of Open Data

Real Time Passenger Information

Real-time passenger information helps members of the public plan their journeys better. The National Transport Authority (NTA) 'National Journey Planner' provides Open Data on journey planning, timetable and travel information from all licensed public transport providers across Ireland, including information on train, bus, tram, ferry and taxi services. The Planner provides public transport departure times and allows whole journey planning including walk, bus, Luas, Irish Rail and ferry times. It can be accessed online via Transportforireland.ie or can be downloaded as an app. This Open Data has facilitated 3rd parties such as Google Maps, Bing Maps, Yahoo Maps and HERE in building a public transport planner in their products.

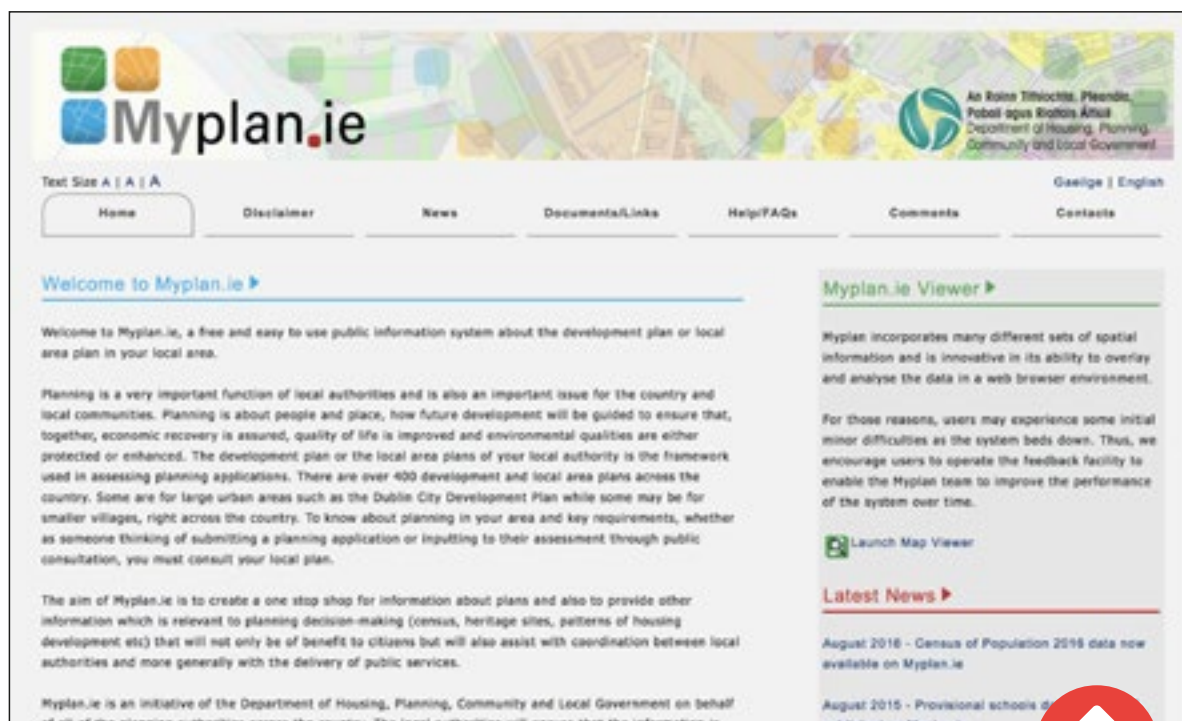
Dublin Bus has its own real time app and there are other apps for the Dublin bus network presenting the information in various ways. Open Data can be used to give the citizen details on parking availability and accessibility. The ParkYa mobile parking app uses Open Data to help cities make their parking information more accessible to the public.



Earthquake response

In response to the Christchurch earthquake in New Zealand in 2011, volunteers and officials at the recovery agencies used Open Data, open source tools, trusted data sharing and crowd sourcing to develop a range of products and services required to respond successfully to emerging conditions including a crowd sourced emergency information web app that generated 70,000 visits within the first 48 hours after the earthquake.

Benefits and Use of Open Data



Myplan.ie

[Myplan.ie](#), an initiative of the Department of Housing, Planning, Community and Local Government, has helped local authorities to coordinate the publication of planning information in a standardised and open fashion, increasing the efficiency of planning data aggregation and management. The aim of Myplan.ie is to create a one-stop-shop for information about plans and also to provide other information which is relevant to planning decision-making (census, heritage sites, patterns of housing development etc.) that not only benefits citizens but assists this greater coordination.

Weather Data

In the US, opening up weather data through the [National Oceanic and Atmospheric Administration](#) (NOAA) has significantly lowered the economic and human costs of weather related damage through forecasts; enabled the development of a multi-billion dollar weather derivative financial industry dependent on seasonal data records; and catalyses a growing million-dollar industry of tools and applications derived from real-time data.

Check that Bike

[Check that Bike](#) is a UK application that utilises 35 sources of open data including records from police forces, bicycle insurers and stolen property registers which are aggregated so that searches can be carried out across them. The database has identified over 70,000 stolen bikes and gives guidance to users to avoid accidentally buying a stolen bike.

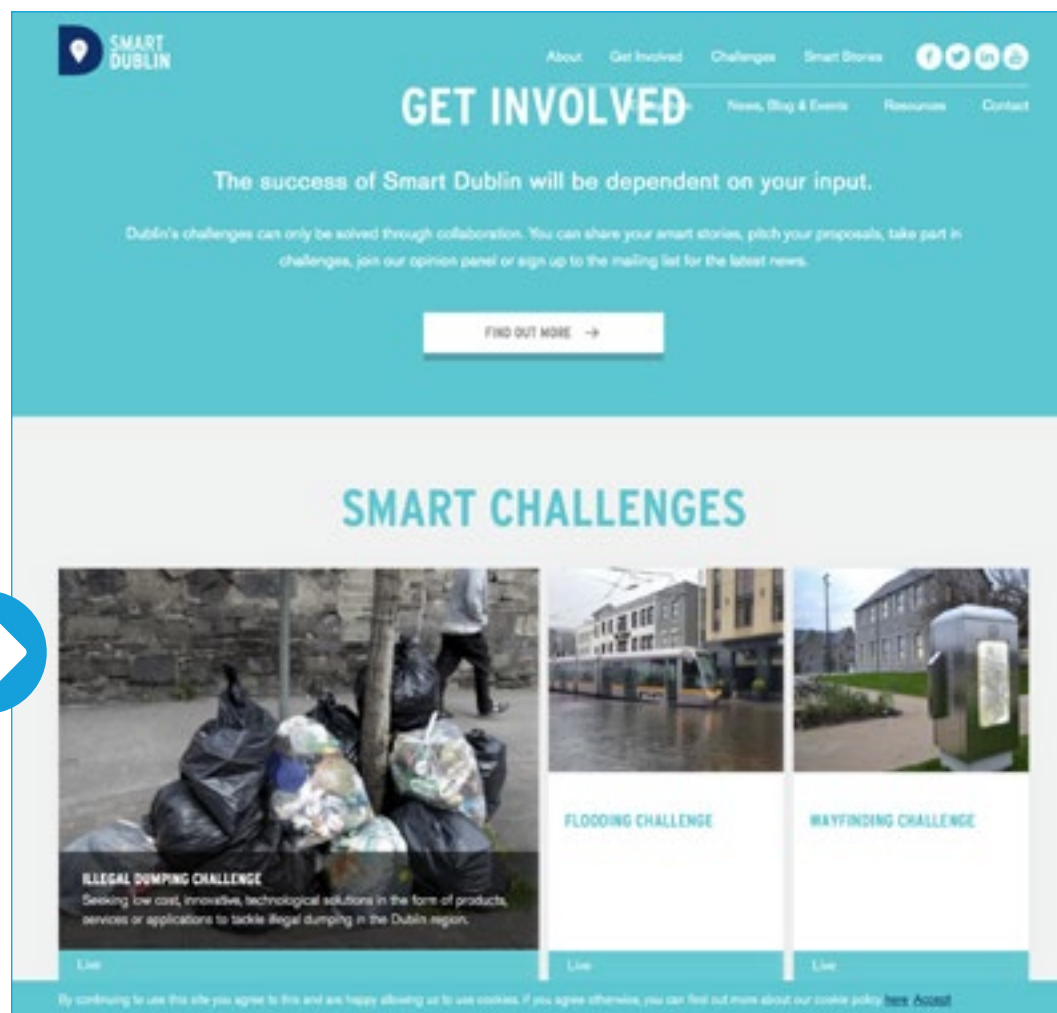
Benefits and Use of Open Data

PulsePoint

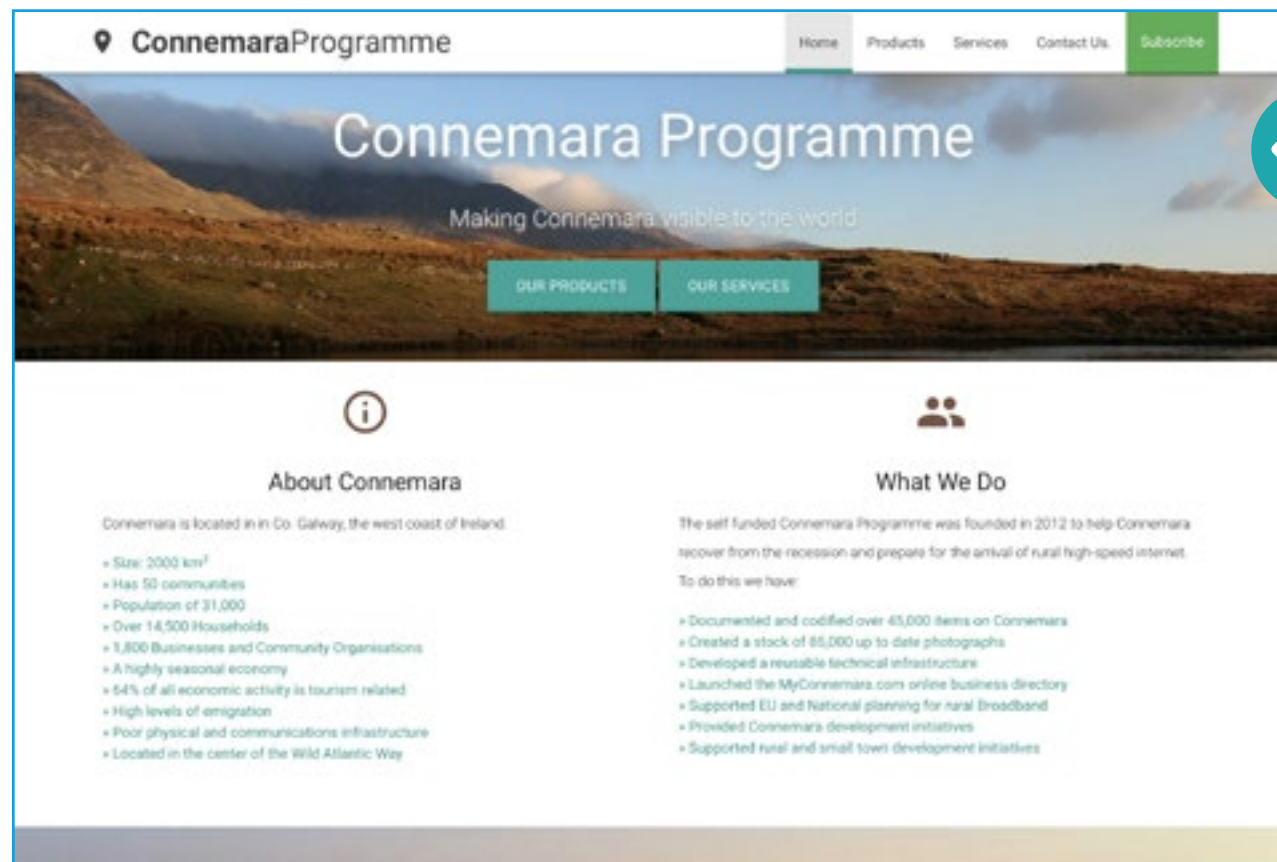
In multiple countries, an application (app) for mobile devices based on Open Data has been introduced that decreases the response time in case of a medical emergency and increases survival rates. Apps with the highest potential for saving lives are focused on preventing death by cardiac arrest. In the US the most popular app is called [PulsePoint](#) and combines 911 calls with location data. It is thereby not only able to direct people trained in CPR to the victim but also to the nearest publicly accessible defibrillator.

Smart Cities

Smart Cities integrate information and communication technology (ICT) and Internet of things (IoT) technology in a secure fashion to manage a city's assets. These assets include local departments' information systems, schools, libraries, transportation systems, hospitals, power plants, water supply networks, waste management, law enforcement, and other community services. Cities around the world, including [Dublin](#) and [Cork](#), have adopted smart city strategies to deliver improved services, traffic management and to tackle environmental challenges, for example. Limerick and Galway have also done work on smart city projects.



Benefits and Use of Open Data



Connemara Programme

The [Connemara programme](#) offers a variety of Open Data based services and products in the Connemara region. Using digital information about the economic, social, physical, cultural and natural environment, Connemara businesses are supplied with ready to use tools to enhance their presence on the internet. To do this, the Programme has collected and categorised information about the whole 2000 km region. With this, they offer map based online directories, data sets and support services to organisations, individuals and policy makers. The Connemara Programme provides its services free of charge to community and non-profit organisations.

London Fire Brigade

The London Fire Brigade has developed a tool using public data allowing it to view emergency response times and fire incidents to better focus resources where needed most. They also use software that lets the fire brigade use a technique known as modelling regression to target places that register as at high risk for fire. In those areas they carry out home safety checks, educate people on fire safety and install smoke alarms.

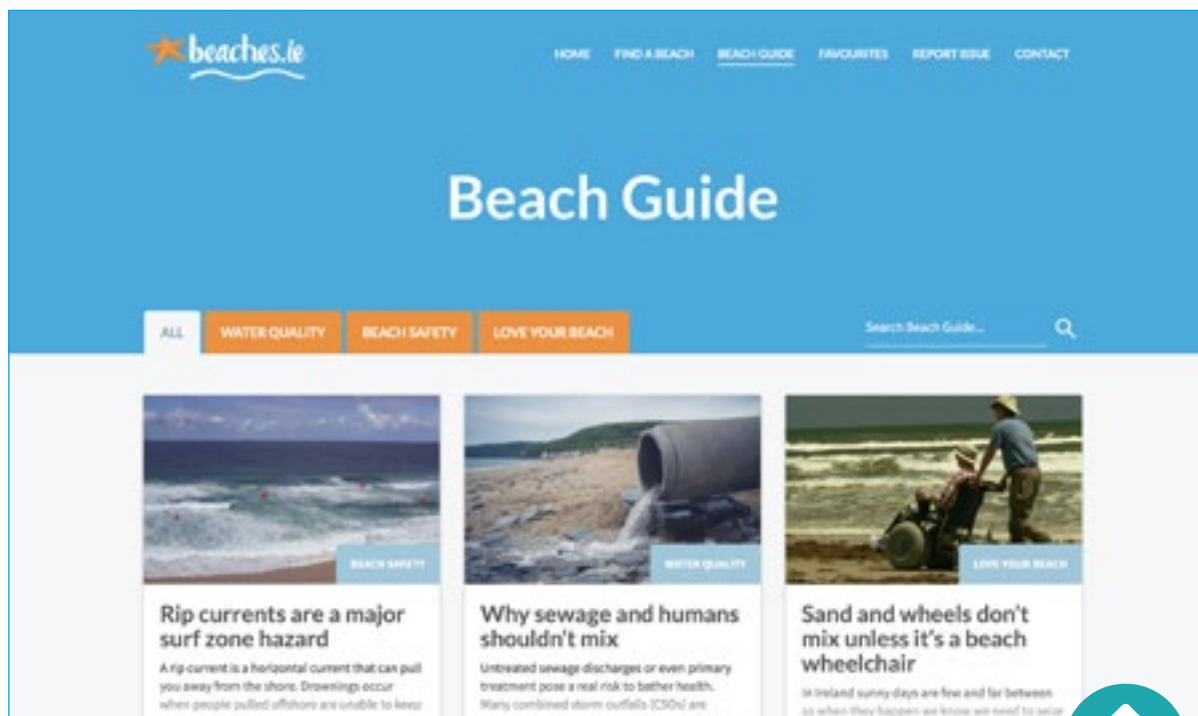
Benefits and Use of Open Data

eGovlab

[eGovlab](#), which is funded by the Swedish Government, brings together various stakeholders and means to jointly develop solutions for civil challenges. When successful, the solutions can then be transformed into an economic opportunity for the private sector. eGovlab applies unconventional research frameworks and methods to visualise the impact of ICT on government transformation towards inclusion, transparency, efficiency and effective change management.

Wripl Technologies

There are many examples of businesses based on Open Data which in turn provide value added services to other businesses and clients. One such is [Wripl Technologies](#), an online personalisation solution that allows businesses to personalise their offering using high-end engagement technologies to offer the right content to the right users at the right time and across devices.



Beaches.ie

[Beaches.ie](#) is the national bathing water information website developed by the Environmental Protection Agency (EPA). The bathing water monitoring results and information available from 190 Beaches are provided by 10 local authorities and data about tides from the Marine Institute is also included. This enables the public to plan visits at a safe time. Beaches.ie is mobile friendly and has an API for increased ease of data access.

Benefits and Use of Open Data

Heritagemaps.ie

A number of tourism applications (apps) have been developed using Open Data. These apps usually combine data on location, sites of interest, accommodation and other relevant information to provide a convenient and portable 'travel guide' for visitors. Heritagemaps.ie, for example, was developed to enable visitors to visualise heritage data. This 'one-stop-shop' discovery tool allows users to look at a wide range of built and natural heritage data sets in map form, and can be used to create customized maps, measure area and distance, identify points of interest and study local flora and fauna, as well as many other uses, both recreational and research-based.



FOI

At an operational level Government departments can substantially reduce the number of Freedom of Information (FOI) requests, Access to Information on the Environment (AIE) requests and Parliamentary Questions by ensuring that frequently requested data is made available as Open Data.

Guiding Principles and Values



This Open Data Strategy is guided by the following principles and values:

- Data will be open by *default** and of high quality (accurate, authoritative, interoperable, maintained and updated at regular intervals), published on the national Open Data portal as 3* increasing to 4* and 5* (linked) over time
- The quantity of datasets will be grown over time and used to achieve, inter alia, improved governance and innovation in usage
- Open Data linked to the national Open Data portal data.gov.ie will meet the requirements of the Technical Framework (standards, formats, metadata, licence) to ensure interoperability
- As the Strategy is underpinned by values of openness and transparency, where requested datasets are not released as Open Data, the responsible public body will provide reasons why not
- A lifecycle approach to management of data will be promoted from creation to archiving to ensure continuity and availability of datasets
- Alignment with the G8 Open Data Principles and those of the International Open Data Charter
- Open Data will adhere to the FAIR principles (Findable, Accessible, Interoperable and Re-usable)

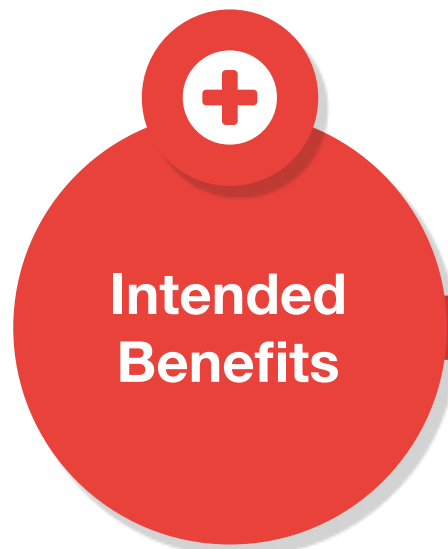
**with the exception of personal data, commercially sensitive or security/safety sensitive data or data otherwise exempted under FOI/PSI or where it is otherwise prohibited to disclose data and in line with Data Protection legislation and the General Data Protection Regulation (GDPR)*

Overarching Objectives



The overarching objectives are intended to set the direction for Ireland on Open Data over the lifetime of the Strategy and beyond by:

- Developing a data driven culture across the Public Service with a lifecycle approach taken to data management and publication of data in open format becoming a matter of routine
- Building a value driven economy around Open Data by making high value datasets publicly accessible and freely reusable ensuring, where possible, a return on investment for the State
- Stimulating innovation and economic growth, promoting transparency and efficiency in public administration through data usage and improving data quality informed by feedback from users
- Ensuring good governance structures to lead and drive the Initiative and ensure a consistent and coherent approach to Open Data is pursued by public bodies
- Ensuring that datasets are in line with the [Technical Framework](#) to ensure data on [data.gov.ie](#) is of high quality and free to use and ensuring Ireland ranks highly in international evaluations
- Engaging with a broad community of stakeholders including business, research and academics, civil society and citizens, media, library, information professionals and others to promote and encourage use of Open Data
- Promoting awareness of Open Data and creating an environment where stakeholders engage with public bodies to identify datasets with the potential to deliver benefits and demonstrate use made of such datasets
- Promoting good exemplars, use cases and champions of Open Data
- Engaging with appropriate bodies in the development of suitable measurements and metrics to assess benefits realisation
- Considering the potential for adding non-government data which is considered valuable over time
- Over the lifetime of the Strategy, Public Bodies will make specific commitments to the long term support and maintenance of released high value open datasets that stakeholders rely on

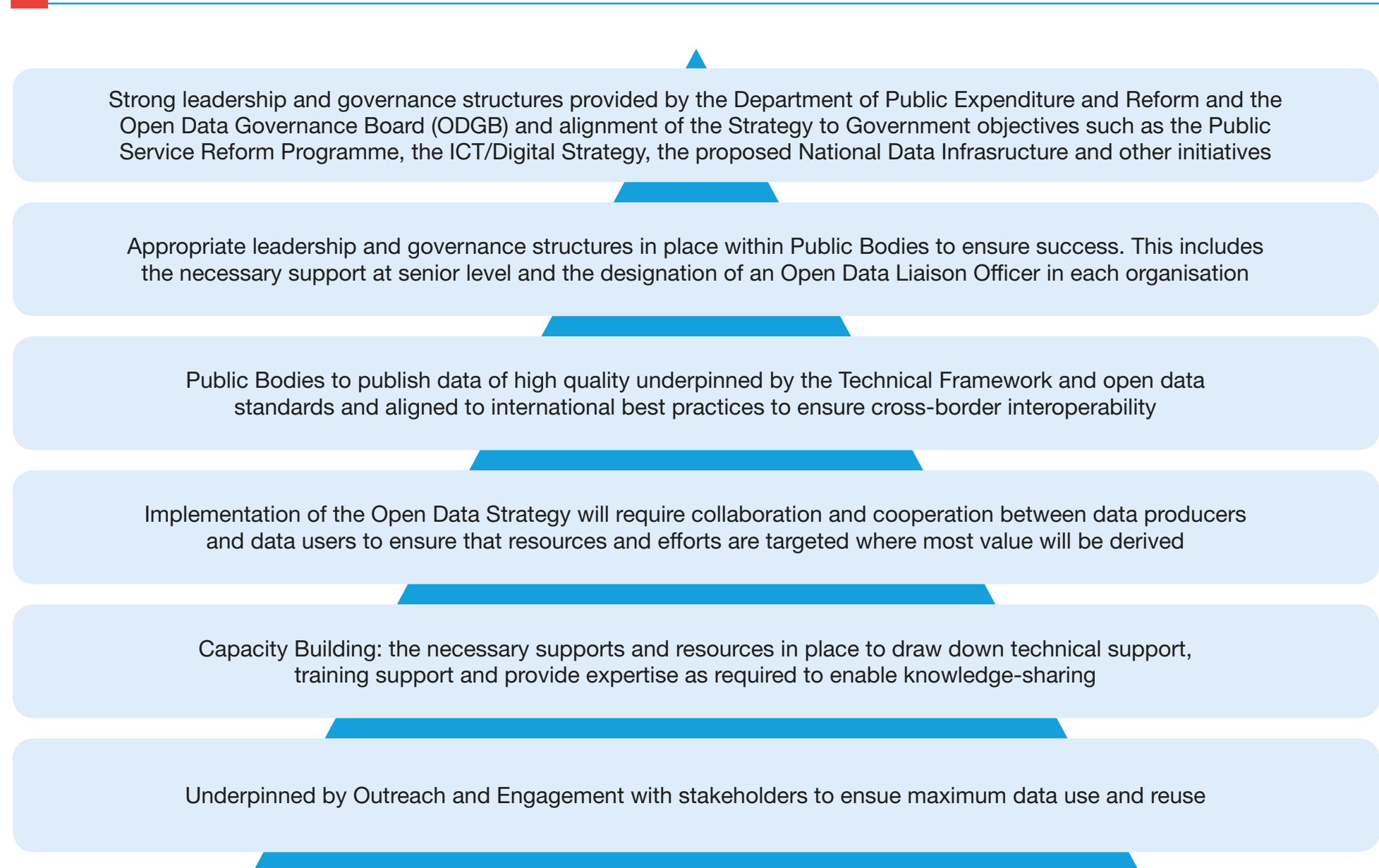


The intended benefits of the Open Data Initiative

Data is recognised as a strategic and valuable asset. Potential social, economic and political benefits include:

- More transparency and accountability of public bodies
- New opportunities for increased insights into data by combining open datasets, to provide evidence to inform policy and improve services
- Increased data sharing and use across the Public Service. Better data discipline and improved efficiencies within Public Bodies
- Facilitates meaningful citizen participation and informed input into decision making, policy development and service design
- Alignment with PSI and INSPIRE Directive and other relevant instruments
- Improve the quality of data available to public bodies for analysis and decision-making through the establishment of a lifecycle approach to Open Data
- Business innovation, creation and efficiency leading to economic growth
- Increase the international reputation of Ireland as a knowledgeable, progressive and data literate workforce, community and government
- Increased attractiveness of Ireland for investment by international and local data/information technology firms and organisations

Critical Success Factors



Strong leadership and governance structures provided by the Department of Public Expenditure and Reform and the Open Data Governance Board (ODGB) and alignment of the Strategy to Government objectives such as the Public Service Reform Programme, the ICT/Digital Strategy, the proposed National Data Infrastructure and other initiatives

Appropriate leadership and governance structures in place within Public Bodies to ensure success. This includes the necessary support at senior level and the designation of an Open Data Liaison Officer in each organisation

Public Bodies to publish data of high quality underpinned by the Technical Framework and open data standards and aligned to international best practices to ensure cross-border interoperability

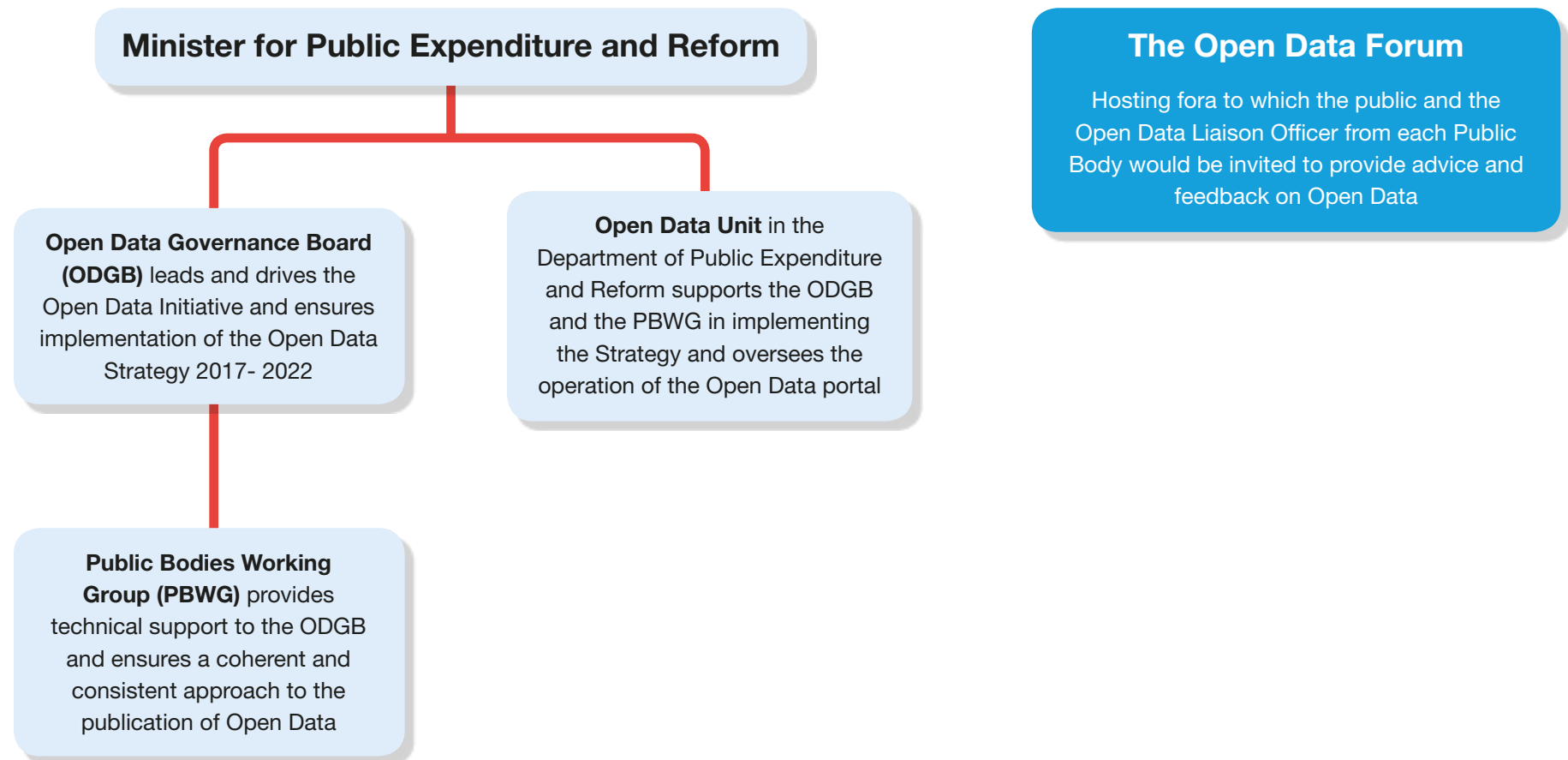
Implementation of the Open Data Strategy will require collaboration and cooperation between data producers and data users to ensure that resources and efforts are targeted where most value will be derived

Capacity Building: the necessary supports and resources in place to draw down technical support, training support and provide expertise as required to enable knowledge-sharing

Underpinned by Outreach and Engagement with stakeholders to ensure maximum data use and reuse

Governance of the Open Data Strategy

Implementation of the Open Data Strategy will be driven by the Open Data Governance Board (ODGB) supported by the Public Bodies Working Group and the Open Data Unit in the Department of Public Expenditure and Reform.



Stakeholder Engagement



Strategic Themes

The Strategic Themes guiding the Open Data Initiative over the lifetime of the Strategy:

Theme 1	Broaden the range of public bodies actively engaged in the Open Data Initiative – the ‘Open Data Providers’
Theme 2	Broaden the scope and improve the quality, quantity and range of Open Data and associated metadata (to be used internally and made available to the public). Improve the quality and range of services provided through the national Open Data portal
Theme 3	Continue to engage with all Stakeholders and encourage use of Open Data
Theme 4	Support and encourage various groups of Open Data Users
Theme 5	Provision of a framework to support and train all Data Providers and build capacity in the management and use of Open Data
Theme 6	Evaluate the impact, benefits and risks of the Open Data Initiative and benchmark against other jurisdictions
Theme 7	Ensure that effective governance structures are in place to implement the Strategy

The necessary actions to achieve these objectives are set out in the Implementation Plan, which specifies the responsible body for each action and a timeframe for delivery.

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
Theme 1: Broaden the range of public bodies actively engaged in the Open Data Initiative – the ‘Open Data Providers’			
1.1	Develop a comprehensive catalogue of all public bodies (government bodies, agencies and local authorities) and encourage them to participate in the Open Data initiative.	Year 1	Open Data Unit
1.2	Expand this catalogue of public bodies over time on a phased basis so as to widen the initiative further to include: other publicly funded bodies such as Higher Education Institutions (HEIs) and other bodies such as semi state bodies, Public Private Partnerships etc. over time.	Year 3-5	Open Data Unit
1.3	Introduce a programme of work including engagement and awareness raising to inform all such bodies of the benefits and necessity of Open Data and to engage them in the Open Data initiative.	Year 1	Open Data Unit
Theme 2: Broaden the scope and improve the quality, quantity and range of Open Data and associated metadata (to be used internally and made available to the public). Improve the quality and range of services provided through the national Open Data portal			
2.1	Explore the possibility to broaden the initiative to include Open Research Data, in line with the requirements of the Horizon 2020 research programmes, and with emerging policy in Irish research funding bodies. Where research is publicly-funded, make the research findings available in Open Data formats.	Year 5	ODGB, Open Data Unit, Researchers
2.2	Carry out a data audit of their existing data and make the results public (except where the data would be exempt under FOI) so that users can request their datasets. Publish an Open Data publication plan including high-value datasets and timeframes for publication. Repeat the data audit and update the publication plan every 2 years. Build trust in Open Data by ensuring that datasets are regularly updated and maintained.	Year 1-5	All Data Providers
2.3	Facilitate any request for datasets to be released as Open Data where possible. Ensure priority for release of those datasets that are recognised as ‘high-value’ (where use has been identified) as well as real-time data with options for access e.g. multiple format download, APIs etc.	Year 1	All Data Providers

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
2.4	Adopt best practice in data management with a view to ensuring that all appropriate newly created datasets are released as Open Data, released in a timely manner and are 'Open by Default' as a matter of course. Consideration may be given to Uniform Resource Indicators (URIs) in the context of the proposed National Data Infrastructure.	Year 5	Open Data Unit, All Data Providers, PBWG
2.5	Undertake an on-going programme of development and improvement of the national Open Data portal and Open Data Audit Tool and ensure that the portal is kept up to date.	Year 1-5	Open Data Unit
2.6	Ensure all datasets comply with the Technical Framework (licence, formats, metadata, standards) and are published to a minimum 3 star rating such as CSV, JSON or XML. It is encouraged to publish datasets in multiple formats such as PDF (1 star), Microsoft Excel (2 star) in addition to the required 3 star. Embed the publication of 3 star data into existing data processes of public bodies. Increase the amount of available 4 and 5 star data on the national Open Data Portal over time in collaboration with public bodies.	Year 1	Open Data Unit, All Data Providers
2.7	Consider ways/appropriate mechanisms in which public bodies can make specific commitments to long term support and maintenance of high-value datasets, such as agreements, good practice guides, etc.	Year 5	Open Data Unit, All Data Providers
2.8	Use Eircodes in address data so as to facilitate linking datasets together when sharing and utilising other open datasets.	Year 2	Relevant Data Providers
2.9	Review the Technical Framework on a regular basis to ensure that it is updated as required to reflect any new common standards/formats for the metadata information provided with all datasets.	Year 1-5	Open Data Unit/ PBWG
Theme 3: Continue to engage with all Stakeholders and encourage use of Open Data			
3.1	Identify new datasets to publish as Open Data. In particular: <ul style="list-style-type: none"> identify specific domains for particular attention to allow for release of high value datasets on a phased basis. These might include Environment, Health, Transport, Culture and Heritage, Flooding. Identify sectors where potential economic benefits can be achieved by wider availability of Open Data. These might include, for example: Tourism, Culture and Heritage, Transport, Energy and Environment, Health Planning, Education, Science and Research. 	Year 1 Year 1	ODGB, Open Data Unit, Relevant Data Providers

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
3.2	Host Open Data Fora – an advisory forum for all Open Data users to participate in and to provide advice and feedback on Open Data.	Year 1-5	ODGB, Open Data Unit, All Data Providers, Key Stakeholders
3.3	Collaborate with stakeholders to identify possible use and ensure that appropriate datasets are made available as Open Data. Through the development/publication of use cases, help drive the uptake of Open Data for research and development purposes.	Year 1-5	ODGB, Open Data Unit, All Data Providers, Researchers
3.4	Communicate Ireland's success in Open Data internationally to foster further investment and innovation using Open Data.	Year 1-5	ODGB, Open Data Unit
3.5	Develop and implement a stakeholder engagement/communications plan (which sets out engagement in outreach and collaboration activities with external users to promote usage and encourage data users to showcase their data usage on the national Open Data portal).	Year 1	Open Data Unit
3.6	Regularly engage in outreach and collaboration activities and events to raise awareness of Open Data, publicise Open Data progress and use, and seek input from business, researchers and citizens.	Year 1-5	ODGB, Open Data Unit, All Data Providers
3.7	Organise or participate in an annual conference on Open Data and other workshops and seminars. ODGB members to present at key Open Data events.	Year 1-5	ODGB, Open Data Unit, Relevant Data Providers
3.8	Use Open Data to support analytics internally in order to improve evidence based decision-making (in developing and implementing public policy).	Year 3	All Data Providers

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
Theme 4: Support and encourage various groups of Open Data Users			
4.1	Business: The Open Data Governance Board supported by the Open Data Unit will encourage Business to:		
4.1.1	<ul style="list-style-type: none"> Develop business strategies to exploit the potential of Open Data and develop products and services to improve quality of life and create jobs. 	Year 2	ODGB, Open Data Unit, Business
4.1.2	<ul style="list-style-type: none"> Identify data domains to be released where potential economic benefits may be delivered. Collaborate with public bodies and provide feedback on data quality and datasets to release. Report on use of datasets to assist capture of benefits realisation. 	Year 3	ODGB, Open Data Unit, Business
4.1.3	<ul style="list-style-type: none"> Promote Ireland's Open Data Initiative at home and abroad to foster investment and innovation. 	Year 1-5	ODGB, Open Data Unit, Business
4.1.4	<ul style="list-style-type: none"> Consider over time what own business datasets might be released. 	Year 5	Business
4.1.5	<ul style="list-style-type: none"> Build data analytics and usage capacity. 	Year 1-5	ODGB, Open Data Unit, Business
4.1.6	<ul style="list-style-type: none"> Consider ways to support SME/start-ups to use, or support the use of Open Data e.g. through Enterprise Ireland and the Local Enterprise Offices. 	Year 2	ODGB, Open Data Unit, Enterprise Ireland
4.2	Civil Society/Community: The Open Data Governance Board supported by the Open Data Unit will encourage Civil Society/Citizens to:		ODGB, Open Data Unit
4.2.1	<ul style="list-style-type: none"> Collaborate with public bodies to identify potential high value datasets for release and provide feedback. 	Year 3	Civil Society/Community
4.2.2	<ul style="list-style-type: none"> Use Open Data to hold public bodies to account on service delivery. 	Year 3	Civil Society/Community
4.2.3	<ul style="list-style-type: none"> Use Open Data to encourage citizen participation in decision-making and to generate innovative ideas for service improvements. 	Year 3	Civil Society/Community

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
4.2.4	<ul style="list-style-type: none"> Promote Ireland's Open Data Initiative at home and abroad to encourage uptake and benefits realisation. 	Year 3	Civil Society/Community
4.2.5	<ul style="list-style-type: none"> Participate in any evaluation of the Initiative. 	Year 3	Civil Society/Community
4.3	Researchers/Academia/Library & Information Professionals: The Open Data Governance Board supported by the Open Data Unit will encourage Researchers/Academia/Library & Information Professionals to:		ODGB, Open Data Unit, Researchers/Academia, Librarians/Information Professionals
4.3.1	<ul style="list-style-type: none"> Provide raw data for publicly funded research in Open Data format. Use and help drive the uptake of Open Data for research and innovation purposes. 	Year 3	Researchers/Academia
4.3.2	<ul style="list-style-type: none"> Identify emerging national/international trends for Open Data. 	Year 1-5	All
4.3.3	<ul style="list-style-type: none"> Develop metrics for benefits capture/evaluation. 	Year 3	Researchers/Academia
4.3.4	<ul style="list-style-type: none"> Identify future skills needs to ensure students succeed in a data driven economy. 	Year 3	Researchers/Academia
4.3.5	<ul style="list-style-type: none"> Identify how citizens might engage with and use Open Data. Identify opportunities for improving transparency and accountability through use of Open Data. 	Year 3	All
4.3.6	Promote best practice in archiving, curatorship and preservation of Open Data including research data including consideration of third party secure linkage and data access storage sharing and image models.	Year 3	All

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
Theme 5: Provision of a framework to support and train all Data Providers and build capacity in the management and use of Open Data			
5.1	Finalise and oversee current framework for Open Data training and technical support and oversee contracts. Evaluate success of frameworks (usage etc.) at end of contract.	Year 1- 4	Open Data Unit, Relevant Public Bodies
5.2	Provide training for relevant staff in public bodies: general Open Data training, data management, technical and operational as appropriate (through draw down from training framework or by other means such as qualified Open Data 'train the trainers'). Consider opportunities for the pooling of resources by public bodies in this regard.	Year 1-5	Open Data Unit, External Providers, All Public Bodies
5.3	Provide technical support for relevant staff in public bodies: data audit, development of publication plans etc. (through draw down from framework for technical support or through other means).	Year 1-5	All Public Bodies, External Providers
5.4	Use Open Data to achieve efficiency and effectiveness gains in their organisations. Consider the use of data analytics to improve the administrative functioning of the organisation through use of the data itself, and by making Open Data available to others.	Year 3	All Public Bodies
5.5	Advise and support public bodies in complying with the PSI Directive and regulations. Provide advice and support to public bodies in relation to the Open Data Initiative.	Year 1-5	Open Data Unit
5.6	Develop capacity and data analytical capability amongst potential Open Data users by promoting Open Data educational programmes at third level so as to ensure students acquire the skills necessary to succeed in a data driven economy.	Year 5	Third Level Institutions

Implementation Plan

No.	Action	Timeframe for delivery	Responsible
Theme 6: Evaluate the impact, benefits and risks of the Open Data Initiative and benchmark against other jurisdictions			
6.1	Encourage the development of metrics that allow benefits capture, for example, what contribution Open Data makes to improve efficiency and effectiveness of public service delivery. Carry out and publish an evaluation of the impact, benefits and risks of the Open Data Initiative. Consider evaluation frameworks in use in other jurisdictions which address benefits and return on investment.	Year 3	Open Data Unit, All Data Providers, Third Level Institutions, Researchers
6.2	Identify and monitor national and international trends to guide and ensure Ireland is at the forefront in its implementation of Open Data. Participate in International/EU reviews and surveys, for example OECD surveys on Open Government Data and European Open Data Portal Open Data Maturity survey with a view to ensuring Ireland performs well compared to other jurisdictions.	Year 1-5	ODGB, Open Data Unit
6.3	Engage with and develop synergies with Northern Ireland Open Data Unit.	Year 1	ODGB, Open Data Unit
Theme 7: Ensure that effective governance structures are in place to implement the Strategy			
7.1	Implementation of the Open Data Strategy will be overseen and monitored by the Open Data Governance Board (ODGB) who will meet at least quarterly. Terms of reference and membership of the Board to be reviewed/refreshed every two years.	Year 1-5	ODGB, Open Data Unit
7.2	Technical support to be provided to the ODGB by the Public Bodies Working Group (PBWG). Terms of reference of the PGWG and membership to be reviewed every 2 years.	Year 1-5	ODGB, Open Data Unit, PBWG
7.3	The Open Data Unit to provide secretariat and support to the ODGB and PBWG. This will include the development of an annual work programme and publication of an Annual Progress Report on implementation of the Open Data Strategy. The Progress Report will include progress made by public bodies in implementing Open Data in their respective organisations.	Year 1-5	Open Data Unit, All Data Providers
7.4	All Public Bodies will designate a senior person/team within their organisation who will act as Liaison Person in relation to Open Data. These will act as a point of contact with the Department of Public Expenditure & Reform in relation to Open Data and help support the initiative generally.	Year 1	Open Data Unit, All Data Providers

Definitions & Glossary of Terms

Public Body For the purpose of this Strategy, a public body includes government departments and bodies under their aegis and local authorities. The expansion to other publicly funded bodies providing public services to the citizen such as Higher Education Institutions (HEIs), publicly funded hospitals etc. and other bodies such as Public Private Partnerships (PPPs) and NGOs etc. will be explored over the lifetime of the Strategy.

Open Data *“A piece of data or content is open if anyone is free to use, reuse, and redistribute it – subject only, at most, to the requirement to attribute and/or share-alike”* (<http://opendatahandbook.org/>). In line with data protection legislation, where datasets intended for publication contain personal data, they should be effectively anonymised and aggregated in an irreversible manner that does not allow an individual to be re-identified, singled-out or inferred, in which case they will not be considered to be personal data. Datasets in general are primarily non-personal and would be subject to release if requested under FOI legislation. Certain data may also be exempted under FOI legislation.

Lifecycle approach to Open Data: An approach whereby the processes and activities required to publish Open Data to the national Open Data portal are systematically followed. These include data audit, development of publication plans, data cleaning and preparation, data upload and maintenance, data curation, preservation and archiving. This approach

was first highlighted in the [Foundation Document for the Development of an Open Data Strategy](#) published in 2015.

Dataset A collection of data, published or curated by a single agent, and available for access or download in one or more formats. A source of a dataset may be a database, an information system, a spreadsheet, etc. A dataset could refer to both operational and administrative data. Datasets include registers, ongoing data collections and surveys, geospatial information, tabular, administrative, performance related, data collected in relation to organisation functions, etc.

High Value Data Data is defined as high value by reference to the publisher’s perspective, the re-user’s perspective and by its adherence to the 5 Star Schema of Open Data. From the publisher’s perspective, data may be considered high value if it meets any of the following conditions: contributes to transparency, benefits citizens, contributes to job creation, directly/indirectly relates to their public task, realises a cost reduction and by reference to the type and size of the target audience. From the re-user’s perspective whether data is high value or not depends on its re-use potential. Datasets should be published according to a set of best practices to maximise re-usability e.g. the 5-Star Schema and as a minimum 3-star.

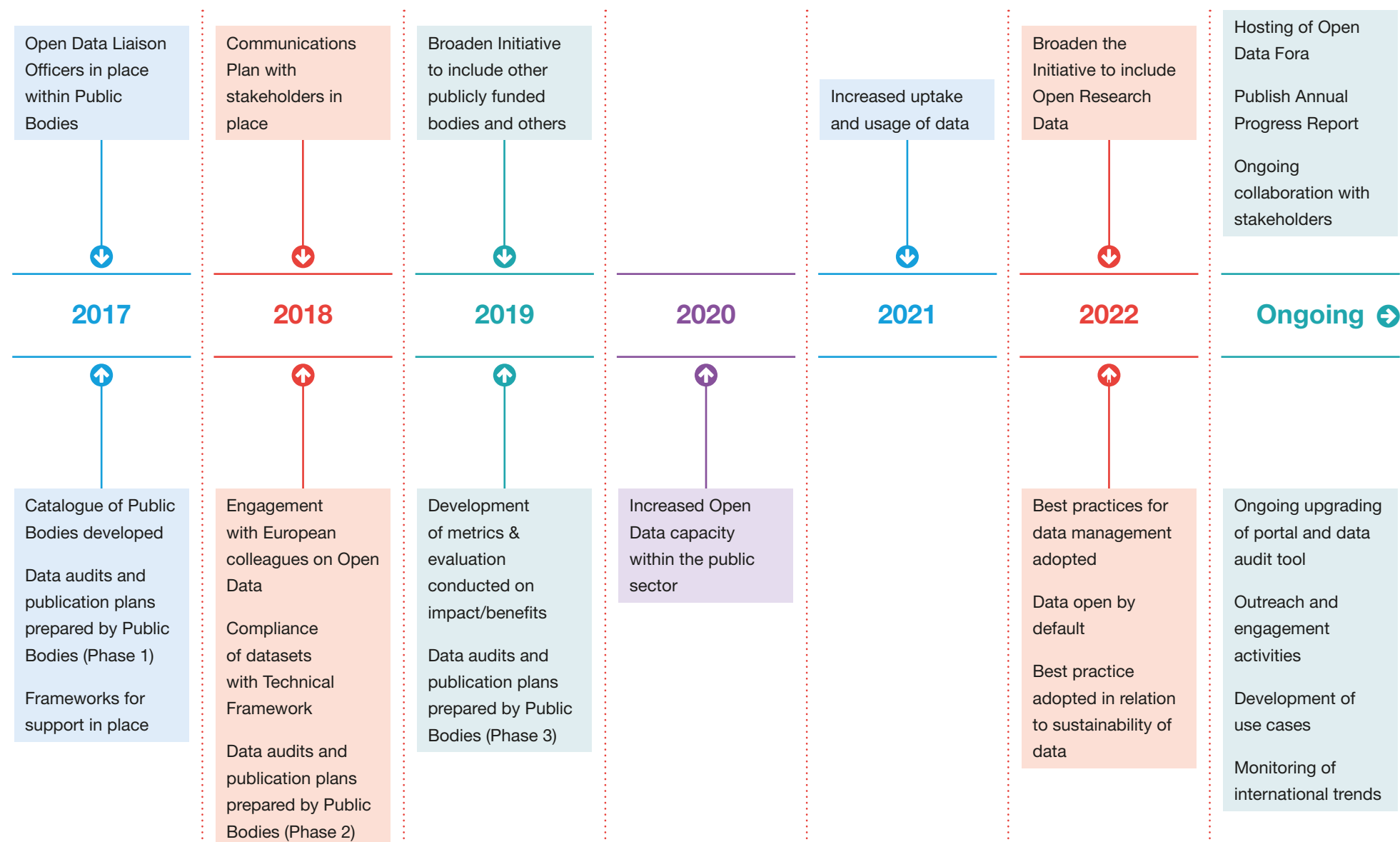
5-Star Schema of Open Data A rating system for Open Data proposed by Tim Berners-Lee. To score the maximum five stars, data must (1) be available on the Web under an open licence, (2) be in the form of structured data, (3) be in a non-proprietary file format, (4) use URIs as its identifiers, (5) include links to other data sources (linked data). To score 3 stars, it must satisfy all of (1)-(3), etc. See the [Technical Framework](#) for further information. A minimum of 3-star is recommended for data added to the [national Open Data portal](#).

Linked Data The term Linked Data refers to a set of best practices for publishing and connecting structured data on the Web. Crucial to support Linked Data are URIs (unique resource identifiers or character strings to identify datasets or resources).

Application Programming Interface An Application Programming Interface (API) is a set of routines, protocols, and tools for building software applications. Programs that use a common API will have similar user interfaces, making it easier for users to learn new programs. ([W3C eGov Glossary](#)).

Further common Open Data terms and acronyms are defined in Appendix 1 of the [Technical Framework](#).

Timeline for delivery of key Open Data Strategy Actions



Contact Us

The Open Data Unit values your feedback, questions or comments.
We are always delighted to hear from you.

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