

An Roinn Oideachais Department of Education

2023 Open Data Publication Plan

Data Compliance and Support Unit February 2023

1. Context

The 2019 EU Open Data & Re-Use of Public Sector Information Directive (Open Data Directive) was transposed into Irish law in 2021. The rationale of the Open Data Directive is that the public sector in each EU country collects, produces, reproduces and disseminates a wide range of information in many areas of activity such as political, economic, legal, geographical, environmental, meteorological, touristic, business and educational areas. Data produced by public sector bodies constitute a vast, diverse and valuable pool of resources that can benefit society. Providing that data in a commonly used open electronic format allows citizens and legal entities to find new ways to use them and create innovative products and services.

Open data is generally understood to denote data in open format that can be freely used, re-used and shared by anyone for any purpose. The overall objective of the Open Data Directive is to continue the strengthening of the EU's data economy by increasing the amount of public sector data available for re-use, ensuring fair competition, and enhancing cross-border innovation based on data. The Directive lays down an obligation for public bodies to make all existing data available for re-use in open formats unless access is restricted or excluded.

The increased focus on open data reflected in the Directive has been evident for some years and many of the ambitions set out in the Directive are also echoed in Ireland's Open Data Strategy 2017-2022 and Public Service Data Strategy 2019-2023. DPER <u>Circular</u> <u>20/2021</u> provides an outline of the responsibilities of relevant public sector bodies with respect to open data. Amongst others, these responsibilities include:

- ensuring all data falling within the scope of the Directive is 'open by design and default' unless access is restricted or excluded;
- linking any data that has been made available for re-use in open format to the National Open Data Portal <u>data.gov.ie;</u>
- placing a statement on their websites to the effect that re-use of their data is subject to the terms of a Creative Commons licence without the need for users to make an application; and
- developing and publishing an Open Data Publication Plan.

To date, the Department of Education has been very proactive in making statistics and other information available to the public. The Department's current Data Strategy states intentions to use more effective data reporting methods and greater access to open data to provide more direct information to citizens, and to publish more data in open format to allow education providers, partners and industry consume our data for analysis and feedback purposes. This Departmental Data Strategy is currently being revised and will be closely aligned with national level strategies and will take cognisance of the Open Data Directive and related Implementation Acts.

The Open Data Directive now presents an opportunity to engage collaboratively with sections across the Department with respect to the data they hold and to determine how we can play our part in the realisation of the Government's open data ambitions.

2. Focus of This Document

This initial Open Data Publication Plan discusses factors to be considered with respect to meeting the Department's open data obligations. An overview of the current data landscape of the Department is then provided followed by proposed first steps to be taken in 2023 with respect to expanding, in a structured and collaborative way, the Department's publication of open data.

3. Considerations in Expanding the Department's Publication of Open Data

The Open Data Publication Guidelines, published by DPER in 2021, recommend practices that

- ensure the discoverability and accessibility of data,
- empower people to understand and use data,
- support increased public-service transparency,
- drive evidence-based decision making and innovation, and
- enable measurable impact.

It is important that any publication of data is compliant with the Open Data Publication Guidelines. Other key aspects of the Guidelines include the following:

- To ensure data interoperability, data should be published in open, machine-readable formats, using recognised data standards. The intrinsic value of open data is not only in using datasets in isolation, but in integrating data sourced from different systems, different organisations, and even cross-border.
- All data published as open data should be associated with an open data licence, so there is a clear understanding of the conditions under which the data can be reused.
- Metadata needs to be provided this is the summary information describing the data, including the availability, nature and constituents of the data.
- A number of timeframe elements are important for helping users understand what period of time a dataset covers and when the dataset was published and last modified.
- To build trust with users, datasets need to be kept current and all links should be working.
- Data formats that can be readily used by a wide audience of people and by a variety of computer systems should be used for publishing open data.
- As well as publishing up-to-date datasets, there is great value in publishing historical datasets.

- It is important that dynamic data is made available immediately after collection, or in the case of a manual update immediately after the modification of the dataset.
- Providing specific supports for non-technical users will improve the accessibility of the information and help a wide range of users to understand the data.

While all open data publication is encouraged, it is acknowledged that due to the resource implications of some of the obligations above public sector bodies may need to prioritise which datasets should be made available first. In prioritising data for open publication, both the <u>feasibility</u> and the <u>value</u> of such publication will need to be taken into account.

In the long term, any meaningful enhancement of the Department's open data practices will necessarily involve strategic alignment with other Departmental objectives, fostering enhanced data literacy and capabilities across sections and, in some instances, adjustment of workflows to allow open publishing to become a more widespread part of routine data publication. The recently established Research, Policy and Practice Steering Group within the Department will be central to the facilitation of such long-term change.

4. Current Data Landscape of the Department

Data held by the Department

In 2018, the Department compiled an Education Data Inventory which listed every dataset held by the Department and its agencies at that time. This Inventory was then used to develop an Education Data Map, available on the Department's Intranet. The Education Data Map application was designed as a vehicle to allow staff easily identify information on what data is held within the Department with a view to supporting better use and availability of data for policy development, implementation and evaluation. An update of this map is currently being considered.

In 2022, as a further step in promoting optimal data practices, the Department published the Education Data Collection Calendar (EDCC) for internal use. The EDCC shows what data is already being collected from schools by sections in the Department and when it is being collected. It is designed to help sections avoid duplication of effort and to help schools by reducing the number of data requests issuing to them. The Calendar is a live document and is updated on an ongoing basis.

For the benefit of the wider public, key datasets held by the Department are also outlined on the <u>Public Service Data Catalogue</u>. The Catalogue aims to promote openness and transparency around the data held by the public service by cataloguing and describing public service data. Table 1 provides a list of the Department of Education datasets currently described on the Catalogue. Table 1 Key Department datasets outlined on the Public Service Data Catalogue

Database	Updated
Post-Primary Online Database (PPOD)	Annually
Pupil identity data and school enrolment data for all post-primary school learners	-
Primary Online Database (POD)	Annually
Pupil identity data and school enrolment data for all primary school learners	-
Teacher Payroll	Live data
Identity and professional data on teachers in primary and post-primary level	
All Open Schools	Annually
A database containing information on all open schools within the education sector	
Retired Payroll	Live Data
Identity and work history data on retired education sector employees	
Education Staff Payroll	Live Data
Identity and professional data on staff (not teachers) in primary and post-primary	
level	
Education and Training Board Shared Service Payroll	Live Data
Identity and employment data on employees of the Education and Training Boards	
(ETBs) participating in the education shared services system	

Although the Department datasets outlined on the Public Service Data Catalogue are not published openly, aggregate data from these datasets inform numerous publications and datasets published by the Department on gov.ie, as well as datasets published openly on the National Open Data Portal. As examples, aggregate data from POD and PPOD inform published student retention data, enrolment data and annual statistical reports.

Data published by the Department on gov.ie

A review of Department webpages on gov.ie was conducted in Q4 2022 to identify content of potential value from an open data perspective. The review was based on a list of Department webpages compiled at the time of the migration of content to the gov.ie domain in 2021.

Action 2.6 of the Open Data Strategy 2017–2022 states that all datasets should be published to a minimum 3 star rating such as CSV, JSON or XML. It is also encouraged to publish datasets in multiple formats such as PDF (1 star) and Microsoft Excel (2 star) in addition to the required 3 star format. As such, the 2022 website review prioritised those files that could potentially be published in such formats.

In all, 233 pages were searched, with 38 identified as potentially holding relevant content. From these pages, 830 files were reviewed, of which 491 were identified as data files. As outlined in Table 2, these included both Excel datasets and PDF data/technical reports.

File Category	Number	Format	Webpage Owners	Examples
Raw Data	125	Excel	Statistics	Enrolment figures; Class sizes; School completer stats; Interesting Facts - First Look at Data from the Primary Online Database (POD), 2016/2017; Report on Statistics and Special Education
Data/Technical Report	366	PDF	An tAonad um Oideachas Gaeltachta; Communications; Finance; Corporate Services; Minister's Office; RIRU; Statistics	Developing a Teacher Demand and Supply Model for Ireland 2021-2038: A Technical Report; Key Statistics; Ministerial Expenses; Prompt Payment Returns; Estimates; Projections; Retention; Teacher Retirement Statistics

Table 2 Data-related files published by the Department on gov.ie as of Dec 2022 (n = 491)

It should be noted that publicly funded research data held by research funding organisations was brought under the scope of the 2019 Open Data Directive. With this in mind, research published by the Department was also noted during the website review process, for potential future open publication.

Department data published on the National Open Data Portal

The <u>National Open Data Portal</u>, launched in 2014, is the central portal which provides access to all governmental open data. It provides easy access to datasets that are free to use, reuse and redistribute. The portal is operated by the Government Reform Unit in DPER and <u>Circular 20/2021</u> stipulates that where data is made available for re-use in open format, this data must be linked to the National Open Data Portal. Table 3 provides a breakdown of the 55 Department of Education datasets currently published openly on the Portal.

Table 3 Breakdown of datasets published openly by the Department on the National Open Data Portal as of Dec 2022 (n = 55)

Dataset Type	Number
Datasets related to retention rates	5
Datasets related to schools and pupils in early start/primary	18
Datasets related to schools and pupils in post-primary	9
Leaving/Junior Cert Results	3
Programme provision/update	4
Education expenditure	2
Datasets related to third level	3
Other general statistics	11

5. Proposed Steps for 2023

The following steps are proposed for 2023:

- Communicate to all sections the importance of open data publishing, its relevance to the objectives of the Department and wider Civil Service, and any potential impact on their data collection/publication practices. A number of options are available for this including, briefings to staff and senior management, workshops, participation in staff networks, etc.
- 2. Compare the datasets currently published by the Department on the National Open Data Portal with the 491 data files listed in the 2022 website review in order to identify datasets/reports that may be added to the Portal
- **3.** Engage with relevant sections to discuss the feasibility and value of publishing openly the identified datasets/reports
- **4.** Explore the Department's published research data and consider its potential for future open publishing
- 5. Hold discussions with relevant sections and stakeholders to inform open data aspects of the post-2022 Data Strategy of the Department. Similar to Point 1 above, this discussion could utilise a number of formats including briefings, stakeholder workshops, staff networks, etc.

6. Further Information

For further information please contact opendata@education.gov.ie