

The Open Government Data Digital Disconnect: Observations on Open Data Support by Local Government in Ireland

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Abstract—The 2019 European Union (EU) Open Data Directive requires that public sector data should be open by design and by default. The EU Digital Economy & Society Index ranked Ireland as second in terms of data maturity amongst the EU Member States. In Ireland, local government is administered by 31 local authorities. In light of the Open Data Directive being transposed into Irish law in 2021, this paper explores the commitment of local authorities in the Republic of Ireland to the provision of open data by examining their activity on data.gov.ie, the Irish national data portal, and the treatment of open data in local authority corporate plans and digital strategies. We find preliminary evidence of a disconnect between national policy and local government activities and a potential urban-rural divide with respect to local government open data provision.

Keywords—open data; Public Sector Information; PSI, open government; open government data; e-government; local government; local authorities

I. INTRODUCTION

Open data is defined as data that meets three conditions i.e., it is (i) accessible at no more than the cost of reproduction, without limitations based on user identity or intent, (ii) in a digital, machine readable format for interoperability with other data; and (iii) free of restriction on use or redistribution in its licensing conditions [1]. Open government data is concerned with making Public Sector Information (PSI) freely available in open formats and ways that enable public access and facilitate exploitation [2]. A wide range of political and social, economic, and operational and technical benefits have been ascribed to open data, and open government data specifically [3]. For example, the European Union (EU) [4] cite a number of reasons for supporting greater access to PSI and open data specifically including:

- stimulating economic growth and spur innovation: public data has significant potential for re-use in new products and services;
- helping address societal challenges with the development of innovative solutions such as in healthcare or in transport;

- enhancing evidence-based policymaking and increase efficiency in public administrations;
- becoming a critical asset for the development of new technologies, such as artificial intelligence (AI), which require the processing of vast amounts of high-quality data;
- fostering the participation of citizens in political and social life and increase the transparency of government.

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The economic value of PSI should not be underestimated. A 2018 study by Deloitte suggests that the total direct economic value of PSI is expected to increase from a baseline of €52 billion in 2018 for the EU28 to €194 billion in 2030 [5].

Driven by these potential benefits, the European Union (EU) has sought to encourage, promote, and regulate the provision and (re)use of PSI for over a decade. More recently, the EU has shifted its emphasis from PSI to open government

data. This support is reflected in the reframing by the EU of the 2003 Public Sector Information Directive as the 2019 Open Data Directive whose central principle is that public sector information data should be open by design and by default while ensuring a consistent level of protection of public interest objectives including the protection of personal data [6]. In effect, this means that public sector data in EU Member States should be considered open by default unless access is restricted or excluded [7]. It has been long-recognised that open data has little intrinsic value i.e., its value is created by its use [3]. A significant feature of the Open Data Directive is that the EU specifically recognises that not all data is equal.

Chapter V of the Directive specifically defines and prioritises high-value data sets. Article 14(2) defines high-value datasets as having the potential to (a) generate significant socioeconomic or environmental benefits and innovative services; (b) benefit a high number of users, in particular SMEs; (c) assist in generating revenues; and (d) be combined with other datasets [6]. Article 13(1) refers to six initial thematic categories of high-value datasets - geospatial, earth observation and environment, meteorological, statistics, companies and company ownership, and mobility. [6]. Article 17 required Member States to transpose the Directive into local laws, regulations, and administrative provisions by 17 July 2021 [6].

The EU Digital Economy and Society Index (DESI) ranks EU Member States based on their commitment to open data based on an assessment of the Member State's open data policy, open data impact, open data portal, and open data quality [8]. In 2022, Ireland was ranked second of the EU28 countries for open data maturity with a score of 95% of the maximum available score. The 2019 Open Data Directive was transposed into Irish law by S.I. No. 376 of 2021, the European Communities (Open Data & Re-use of Public Sector Information) Regulations 2021 and came into force on 22 July 2021 [7]. As well as promoting and encouraging the sharing of open data by public sector bodies and emphasising the principle of open by design and default, Irish law requires that where data is made available for re-use in open format, this data must be linked to the national open data portal, data.gov.ie [7]. These regulations apply to all public sector bodies including local authorities [7]. Indeed, the Department of Public Expenditure and Reform Open Data Strategy 2017-2022 and the Office of the Government Chief Information Officer's (OGCIO) Public Service Data Strategy 2019 – 2023 strategies both reinforce the general principles of the Open Data Directive.

There are currently 31 local authorities in the Republic of Ireland - 26 county councils, three city councils (Cork, Dublin and Galway), and two city and county councils (Limerick and Waterford). This paper explores the commitment of local authorities in the Republic of Ireland to the provision of open data. The remainder of the paper is structured as follows; Section 2 outlines the data, methodology, results and discussion, and Section 3 concludes with the implications of the findings.

II. METHODS, RESULTS & DISCUSSION

The study involves all 31 local authorities in the Republic of Ireland. Data was collected in December and January 2023. Data on open data provision and public use was collected manually from data.gov.ie, the Irish national data portal. To assess the strategic commitment of a local authority to open data, corporate plans and digital strategies (where available) were reviewed for references to open data.

As of January 2023, data.gov.ie featured 14,812 datasets from 160 publishers. Our results suggest 20 (65%) of the 32 local authorities were registered as publishers on data.gov.ie although three of the registered local authorities had yet to publish a dataset. The 20 local authorities registered represent 12.5% of publishers on data.gov.ie. In total, the remaining 17 local authorities had published 1,152 datasets. Local authorities represent a mere 7.8% of all datasets on data.gov.ie. The average number of datasets published by the 17 active local authorities on data.gov.ie was 67. Only five of the 12 local authorities published more than the average. The 20 local authorities registered represent 12.5% of publishers on data.gov.ie. In total, the remaining 17 local authorities had published 1,152 datasets. Local authorities represent a mere 7.8% of all datasets on data.gov.ie. The average number of datasets published by the 17 active local authorities on data.gov.ie was 67. Only five of the 12 local authorities published more than the average. The local authority dataset average is significantly lower than the average for data.gov.ie as a whole, i.e., 93 datasets. Six local authorities account for over 84% (968) of the published datasets, four of which are associated with the greater Dublin area (Dublin City Council, Fingal County Council, South Dublin County Council, and Dun Laoghaire-Rathdown County Council) and a further two in Connacht located in the West of the country i.e., Roscommon County Council and Galway County Council. Six city councils and county councils located fully in the functional urban area of cities accounted for 56% (646) of all datasets suggesting a significant urban-rural divide with respect to open dataset availability. Of the remaining 506 datasets, one county council, Roscommon, accounts for 56% (284) of the datasets.

TABLE I
DATA.GOV.IE PUBLISHER STATUS, DATASETS AND VIEWS BY LOCAL AUTHORITY.

Local Authority	Registered Publisher	Datasets (No.)	Datasets (%)	Views (No.)	Views (%)
Carlow CC	No	0	0%	0	0%
Cavan CC	No	0	0%	0	0%
Clare CC	Yes	5	0%	212	0%
Cork CiC	Yes	26	2%	8407	4%
Cork CC	No	0	0%	0	0%
Donegal CC	Yes	1	0%	1533	1%
Dublin CiC	Yes	110	10%	137404	72%
Dun Laoghaire-Rathdown CC	Yes	61	5%	8075	4%
Fingal CC	Yes	271	24%	5637	3%
Galway CiC	Yes	27	2%	29	0%
Galway CC	Yes	91	8%	1242	1%
Kerry CC	No	0	0%	0	0%
Kildare CC	Yes	14	1%	4216	2%
Kilkenny CC	Yes	18	2%	476	0%
Laois CC	No	0	0%	0	0%
Leitrim CC	No	0	0%	0	0%
Limerick CCC	Yes	0	0%	0	0%
Longford CC	No	0	0%	0	0%
Louth CC	Yes	0	0%	0	0%
Mayo CC	Yes	2	0%	1547	1%
Meath CC	No	0	0%	0	0%
Monaghan CC	No	0	0%	0	0%
Offaly CC	Yes	0	0%	0	0%
Roscommon CC	Yes	284	25%	1147	1%
Sligo CC	Yes	8	1%	360	0%
South Dublin CC	Yes	151	13%	7037	4%
Tipperary CC	No	0	0%	0	0%
Waterford CCC	No	0	0%	0	0%
Westmeath CC	Yes	11	1%	61	0%
Wexford CC	Yes	22	2%	2455	1%
Wicklow CC	Yes	47	4%	9821	5%

Notes: CC: County Council; CiC: City Council; CCC: City and County Council.

TABLE II
SUBSTANTIVE REFERENCES TO OPEN DATA IN CORPORATE PLANS OR
DIGITAL STRATEGIES BY LOCAL AUTHORITY.

Local Authority	Corporate Plan	Digital Strategy
Carlow CC	N	NA
Cavan CC	N	N
Clare CC	N	N
Cork CiC	Y	Y
Cork CC	N	N
Donegal CC	N	NA
Dublin CiC	N	NA
Dun Laoghaire-Rathdown CC	N	Y
Fingal CC	N	Y
Galway CiC	N	NA
Galway CC	N	Y
Kerry CC	N	N
Kildare CC	N	NA
Kilkenny CC	N	NA
Laois CC	N	N
Leitrim CC	N	NA
Limerick CCC	N	Y
Longford CC	N	Y
Louth CC	N	NA
Mayo CC	N	NA
Meath CC	N	N
Monaghan CC	Y	N
Offaly CC	N	N
Roscommon CC	N	NA
Sligo CC	N	Y
South Dublin CC	N	Y
Tipperary CC	N	Y
Waterford CCC	N	Y
Westmeath CC	N	Y
Wexford CC	N	NA
Wicklow CC	N	Y

Notes: CC: County Council; CiC: City Council; CCC: City & County Council.

Dataset views was used as a proxy for utility. The 1,152 datasets published by Irish local authorities generated 189,659 views, an average of 6,118 views per dataset. Dublin City Council alone accounts for 72% of all local authority dataset views and the greater Dublin functional area accounts for over 83% of all local authority dataset views. The urban-rural divide is further emphasised when views from other cities are included rising to nearly 88% of views. Table I summarises our findings by website. In a recent study of 146 cities worldwide by the United Nations Local Online Services Index (LOSI) found that 46% of the city portals assessed for the LOSI 2022 study provide open data [11]. Against this backdrop, 17 active open data publishers representing 54% of local authorities may be viewed in a positive light. However, LOSI measure cities from a wide range of countries worldwide, most of which are outside of the EU where open data provision is regulated

To evaluate the strategic commitment and prioritisation of open data for local authorities in the sample, the most recent corporate plan and the most recent digital strategy (where available) were reviewed for references to open data.

Table II summarises our findings by website. First, while nearly all local authority corporate plans reference a desire to be open and transparent and a significant number listing the

national open data plan in their reports, only two local authorities include a substantive reference in their corporate plan. Second, as can be seen from Table II, eleven local authorities did not have a current digital strategy accessible on their website. Of the remaining 20 local authorities, 12 had a substantive reference to open data in their digital strategy. However, despite the widespread lack of documented strategy, this should not be interpreted as a lack of open data prioritisation. Both Dublin City Council and Roscommon County Council, for example, have significant presences on data.gov.ie (see Table I), and both have their own data portal, and its own data portal, data.smartdublin.ie. and data - roscoco.opendata.arcgis.com.

III. CONCLUSIONS

Our results suggest that there is a disconnect between the EU and national policies and plans for open data and local authorities. This surfaces both in a lack of strategic intent as evidenced by the dearth of references to open data in local authority corporate plans, by a lack of action as evidenced by the relatively small number of datasets being contributed by local authorities, and finally by a lack of impact as evidenced by the number of views per dataset. Extant research posits a wide range of implementation and barriers to use that impede open government data projects including an inability to extract value from the data, local government willingness to share data, task complexity and individual or institutional skills and capabilities, amongst others [3] [12] [13]. In sum, there are challenges in will and skill for both data providers and users that need to be understood and overcome if the much-vaunted benefits of open data are to be accrued.

Our results also suggest a potential urban rural divide with respect to the provision and re-use of open data. In our sample, the greater Dublin area accounts for 83% of the open data provided by local authorities on data.gov.ie. Even if high-value datasets that generate significant socioeconomic or societal value are provided and exploited, they are likely to be biased towards urban communities thereby exacerbating existing digital and societal divides.

In many respects while the Open Data Directive and associated regulations require local authorities to make PSI available by default and design, enforcement, and indeed exploitation, is effectively left to the public. Janssen et al. [3] note that merely publishing and providing open government data is not enough, open data is only value when used, not only citizens and companies but the public sector. Ten years ago, Bertot et al. [13] noted a lack of evaluative metrics for open government data. Today, international benchmarks such as DESI and LOSI, and to some extent this paper, are limited due to their continued emphasis on supporting policies, availability of open government data and input-related

metrics, such as the number of datasets, views, and downloads, rather than outcomes from the use of open data. To paraphrase Golding [14], open government data has “the potential to nourish and enhance the public sphere” but not without fixing the disconnect between national and local government policy and action, and the provision and exploitation of open data.

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