

European Data Portal

Landscaping Method – Overview

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Table of Contents

1	Land	dscaping Method	2
	1.1	Objective of the landscaping within EDP	2
	1.2	Working Definitions	2
2	Wor	k approach and methodology	3
	2.1	Work Approach	3
	2.2	Methodology	4
	2.2.3	1 Overview of Indicators	5
	2.3	Expected Output	7
	2.4	Scoring	. 7
A	nnex I:	DCAT-AP data categories	. 8



1 Landscaping Method

1.1 Objective of the landscaping within EDP

Open Data has been identified as a fundamental resource for governments, businesses and society. For 2018, the direct market size of Open Data was estimated to be 64.6 bn. EUR for the EU28+. By 2020, the market size is expected to increase to a value of 75.7 bn. EUR, including inflation corrections. For the period 2016-2020, the cumulative direct market size is estimated at 325 bn. EUR.¹

The <u>European Data Portal</u> (EDP) was launched in November 2015 and represents ever since an important element in making open government data available across Europe. The EDP covers a full set of activities – that range from data publication to data reuse and demonstrating impact. In terms of data publication, the EDP's overarching objective is to improve access to Open Data from European countries and foster high-quality public data publication at national, regional, local as well as within specific data domains. In terms of reuse and impact, the EDP aims to bring a contribution to fostering reuse of Open Data across Europe and enabling data reusers to easily access Open Data published in Europe via one single gateway. At the same time, the EDP aims to capture the impact derived by Open Data reuse with its studies and sector-specific analyses.

Within the scope of the European Data Portal project, the annual Open Data maturity landscaping exercise is conducted. The landscaping exercise provides a benchmark for assessment of the statusquo on Open Data at country and EU-level. At the same time, the landscaping results provide the evidence on which both generic and targeted support activities for the Member States are based.

In the period 2015-2017, the Open Data maturity measurement was built on two dimensions: Open Data Readiness -- covering the level of progress in terms of policies and activities around Open Data and the level of maturity of national portals respectively. The results of the studies conducted in 2015 to 2017 can be found in the designated Open Data Maturity section on the European Data Portal². From 2018 onwards, the assessment will be based on four dimensions: Open Data Policy, Open Data Portals, Open Data Impact and Open Data Quality. Due to this update, only a limited comparability with previous results of 2015-2017 will be possible. Country progress will continue to be documented and compared over time, in the country factsheets, also available on the European Data Portal.

1.2 Working Definitions

This section provides a working definition of what is to be understood as Open Data:

Open (Government) Data refers to the information collected, produced or paid for by the public bodies (also referred to as Public Sector Information) and made freely available for reuse for any purpose.

Open Data cannot be considered open if it is not accompanied by a licence that ensures its free reuse. Depending on the type of licences data is published under, the licence might stipulate that:

- \circ Those who use the data must credit whoever is publishing it (this is called attribution)
- Those who combine the data with other data must release the results as Open Data (share-alike).

¹ European Data Portal, Creating Value through Open Data Study 2016.

² European Data Portal, <u>Open Data Maturity in Europe 2015</u>; European Data Portal, <u>Open Data Maturity in Europe 2016</u>; European Data Portal, <u>Open Data Maturity in Europe 2017</u>



 $\circ~$ These principles for Open Data are described in detail in the Open Definition. 3

Public Sector Information is information collected by the public sector. The Directive on the Re-use of Public Sector Information⁴ provides a common legal framework for a European market for government-held data (Public Sector Information).

The specific scope of Open Data used within the European Data Portal is data published by public administrations or on their behalf. The focus is not on community data.

The most common definition of a dataset: it corresponds to the contents of a single database table, or single statistical data matrix. Thus, referring to an organised collection of data that can be accessed on a data portal.

2 Work approach and methodology

2.1 Work Approach

Each year, the European Data Portal conducts an assessment to identify the maturity level of European countries in terms of their Open Data transformation.

To perform the landscaping exercise, following activities are conducted:

- Step 1: Refinement and updating of landscaping methodology and questionnaire
- Step 2: Presentation of methodology and questionnaire updates in a closed webinar for the European Member States and EFTA countries
- Step 3: Coordination and support to countries in filling out the landscaping questionnaire
- Step 4: Screening of submitted results and additional desk research
- Step 5: Analysis and validation of answers based on the submitted questionnaire and additional desk research
- Step 6: Compilation of country factsheets and validation of the results with each participating country
- Step 7: Drafting of an annual insights report with detailed analyses on each assessed dimension and a clustering analysis based on the overall scores achieved by the countries
- Step 8: Visualisation and publication of the results on the European Data Portal

Towards this end, the Open Data national representatives from the European Union Member States and the EFTA countries are invited to respond to the landscaping questionnaire.

Each national representative is expected to coordinate the collection of answers with the different representatives at national and if applicable regional and local levels and submit one consolidated questionnaire to the European Commission and the EDP consortium. In addition to this, the respondents can provide further information regarding Open Data developments in their country that were not covered by the questionnaire.

³ http://opendefinition.org/

⁴ Directive 2003/98.



2.2 Methodology

The Open Data landscaping methodology has been updated from the iterations of 2015 to 2017. From 2018 onwards, Open Data maturity will be measured against four dimensions: Open Data Policy, Open Data Impact, Open Data Portals and Open Data Quality. While past methodology covered already Policy and Portal, the 2018 measurement is intended to give significant visibility and a stronger weight to Impact and Quality, by introducing them as stand-alone dimensions.

The four dimensions are described as follows:

- Open Data Policy ("Policy" for short) is a dimension focusing on the presence at national level of specific policies on Open Data, licencing norms, and the extent of coordination at national level to provide guidelines and guidance to national, local and regional administrations, and set up coordinated approaches towards data publication.
- Open Data Portal ("Portal") looks at the development and level of sophistication of national portals to feature available Open Data, and comprises considerations around functionality, usage (user analytics), variety of data available on the portal, and the approach to ensuring the portal's sustainability.
- Open Data Impact ("Impact") analyses existing methodologies and the strategic awareness at national level towards capturing and measuring impact and zooms in into the impact of Open Data at country level on four dimensions: political, social, environmental and economic.
- Open Data Quality ("Quality") explores the extent to which national portals have a systematic and automated approach to harvesting, the currency and reliability of featured data, and the compliance level in terms of the metadata standard DCAT-AP.

The updated methodology reduces the opportunity to compare directly the results of this iteration with past results of 2015-2017. The country progress is documented however in the dashboards of the respective year and the country factsheets available on the European Data Portal.

The Open Data landscaping exercise distinguishes between the following country categories, in line with the Eurostat classification of the EU28+, based on the population size⁵:

- Small countries: Austria, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Norway, Slovakia, Slovenia, Switzerland
- Medium countries: Belgium, Czech Republic, Greece, Hungary, Netherlands, Portugal, Romania, Sweden
- Large countries: France, Germany, Italy, Poland, Spain, United Kingdom



2.2.1 Overview of Indicators

The four dimensions and indicators are described below

Dimension Policy	Dimension Policy		
Indicator	Key elements		
Policy framework	 The policy framework in place at national level provides a long-term strategic vision on Open Data. 		
Coordination at national level	 Coordination at national level is strong and provides guidance for local/regional levels to develop their own Open Data initiatives. 		
Licencing norms	 Comprehensive guidelines and assistance on Open Data licencing are in place at national level. 		

Dimension Portal	
Indicator	Key elements
Portal features	 The national Open Portal shows features that ensure a coverage of both basic and more advanced needs of its users and enable the interaction between publishers and reusers.
Portal usage	 The portal owners systematically monitor the portal's use and prioritise updates to meet users' needs. Analytics tools are employed by portal team to enable further insights into visitors' profiles, percentage of foreign visits to the portal, and the traffic generated via the API.
Data provision	 The data featured on the portal comes from various data publishers and covers a variety of data domains. Actions are taken to ensure the promotion of real-time data on the national portal. The most and least popular data categories are known. The team is taking steps to promote the data featured on the national portal and enhance popularity of available data.
Portal sustainability	 A sustainable funding approach is in place. The funding model is known and other funding models for the national portal have been explored. The portal performs user satisfaction surveys regularly. The portal ensures the national portal is promoted on a regular basis at offline and online events (e.g. webinars).

Dimension Impact	Dimension Impact		
Indicator	Key elements		
Strategic awareness	 An approach and methodology are in place to ensure sustained monitoring and measurement of Open Data reuse and impact. 		



Political	 Various reuse examples can be provided and the reuse of the Open Data available in this field is systematically monitored.
Social	 Various reuse examples can be provided and the reuse of the Open Data available in this field is systematically monitored.
Environmental	 Various reuse examples can be provided and the reuse of the Open Data available in this field is systematically monitored.
Economic	 Studies that focus on the macro and microeconomic impact of Open Data are commissioned or conducted by Government. Other studies that focus on the economic impact of Open Data in a particular sector are available.

Dimension Quality	Dimension Quality		
Indicator	Key elements		
Automation	 Systematic approach to harvesting and updating of (meta)data is in place on the portal. 		
Data and metadata currency	 The available data and metadata are updated according to their type and on regular intervals. Data linked to the portal provides a good coverage of both historical and current data. 		
DCAT-AP compliance	 Materials are available on the portal to assist data publishers with filling out the metadata fields. Metadata compliance with the DCAT-AP standard is monitored and statistics on metadata quality are available. Main violations are known and steps are taken to eliminate them. Activities are conducted with data publishers to increase the quality of their metadata. 		

Additional questions with regards to best practices for Open Data publication and reuse, as well as barriers to publication and reuse are addressed to the country representatives. This information is used to complement the assessment results and is included in the country factsheets. This information is not scored and hence do not count towards the final country score.

Indicator	tor A. Best practices	
A1	Best practices for Open Data publication and reuse	
Indicator	B. Barriers	



2.3 Expected Output

As a result of the annual assessment, an insights report ('Open Data Maturity in Europe') detailing the country results on each dimension is published in Q4 of each year. The report is accompanied by country factsheets for each of the EU Member States and EFTA countries participating in the landscaping. The country factsheets showcase the results per dimension and indicator for the year 2018, and the progress year-on-year between 2015 and 2017. They also provide information on the barriers for Open Data publication and reuse and showcase best practices at country level for both publication and reuse.

The annual report and country factsheets are published in the designated Open Data maturity section, on the European Data Portal⁵. A validation step is included with each country.

Dimension	Key indicators	Scoring	Weight
Open Data Policy		680	27%
	Policy framework	180	
	Coordination at national level	350	
	Licencing norms	150	
Open Data Portals		650	26%
	Portal features	250	
	Portal usage	120	
	Data provision	160	
	Portal sustainability	120	
Open Data Impact		650	26%
	Strategic awareness	200	
	Political impact	130	
	Social impact	110	
	Environmental impact	80	
	Economic impact	130	
Open Data Quality		520	21%
	Automation	100	
	Data and metadata currency	210	
	DCAT-AP compliance	210	
Total		2500	

2.4 Scoring

⁵ <u>https://www.europeandataportal.eu/en/dashboard</u>



Annex I: DCAT-AP data categories

To use a European approach and help foster the uptake of the DCAT-AP across Europe, the consortium will be using the DCAT-AP data categories as listed below.

Data Category (alphabetical order)	Example data sets
Agriculture, fisheries, forestry, food	Farming, agricultural land means of agricultural production,
Agriculture, fishenes, foresti y, food	agricultural activity, forestry and fisheries policy, fishing resources,
	fishing grounds, plant production, processed animal and
	agricultural produce, food technology, food products
Education, culture and sport	Educational institutions, performance of schools, digital skills,
Education, culture and sport	cultural institutions, sport institutions
Environment	Meteorological/weather, natural environment, deterioration of
Livionnent	the environment, waste management, water management,
	pollution
Energy	Energy policy, coal and mining industry, oil industry, electric
Licity	industry, energy consumption
Transport	Transport policy, organisation of transport (means, modes,
Tansport	destination of transport), marine and inland waterway, air and
	space transport, public transport timetables
Science and technology	Research and intellectual property, genome data, educational
Science and technology	activity, experiments and research results
Economy and finance	Economic policy, economic growth, economic structures,
	monetary relations, financial institutions and credit, financing and
	investment, budget, taxation, trade and tariff policy, consumption,
	international trade
Population and social conditions	Demography, composition of population, census data,
	employment, social policy, housing, health insurance and
	unemployment benefits, family, social security
Government, public sector	Political structures and frameworks, electoral procedures and
	voting, election results, legislation and statutes, salaries (pay
	scales), hospitality/gifts
Health	Health care professions, illness, nutrition data, pharmaceutical
Health	Health care professions, illness, nutrition data, pharmaceutical data, medical science
Health Regions, cities	data, medical science
	data, medical science Regions and communities in Europe and the globe, economic
Regions, cities	data, medical science Regions and communities in Europe and the globe, economic geographies, political geographies, overseas territories
Regions, cities	data, medical science Regions and communities in Europe and the globe, economic geographies, political geographies, overseas territories Sources and branches of law, organisation of legal systems, legal
Regions, cities Justice, legal system, public safety	data, medical scienceRegions and communities in Europe and the globe, economic geographies, political geographies, overseas territoriesSources and branches of law, organisation of legal systems, legal professions